

University of Dundee

DOCTOR OF PHILOSOPHY

**Approaches to Understanding Values in Rural Communities and Rural Businesses
within the context of Design Thinking**

Lindsay, Rebecca

Award date:
2020

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**Approaches to Understanding Values in Rural
Communities and Rural Businesses: within the context of
Design Thinking**

Rebecca Lindsay

A Thesis submitted in fulfilment of the requirements of the University of Dundee
for the Degree of Doctor of Philosophy

The University of Dundee

March 2019

Dedicated

To

Aimée Nicole

x

Associated Publications

Lindsay, R. (2015) 'Design Approaches to Creating Social Metrics', *Design Management Journal*. 10: pp. 27-36. Doi: 10.1111/dmj.12020.

Lindsay, R. (2018) *Envisioning Values: An Adaptation*. Exhibition 'A Legacy of Art and Design in Dundee, The William Sangster Phillips Fund Bursaries'. The University of Dundee, [Exhibition catalogue].

Associated Exhibitions

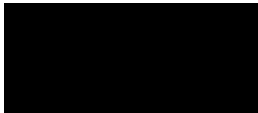
Lindsay, R. (2018) *Envisioning Values: An Adaptation*. Exhibition at 'A Legacy of Art and Design in Dundee, The William Sangster Phillips Fund Bursaries'. The Lamb Gallery, The University of Dundee. (14/4/18 – 24/6/18).

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Rebecca P Lindsay

Signature:



^a Appendices within this thesis are presented and referred to by set where appropriate. i.e. Appendix A, *a1-a3*; Appendix B, *b1*; Appendix C, *c1-c7 etc...*

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Abbreviations

AHRC	Arts and Humanities Research Council
Cs1	Case study 1
Cs2	Case study 2
Cs3	Case study 3
Co-I	Co-Investigator
CSR	Corporate Social Responsibility
CSV	Corporate Shared Values
DiA	Design in Action
ECA	Edinburgh College of Art
EDII	European Design Innovation Initiative
FE	Further Education
GDP	Gross Domestic Product
GNP	Gross National Product
GSA	Glasgow School of Art
GVA	Gross Value Added
HE	Higher Education
HEI	Higher Education Institutes
HMRC	Her Majesty's Revenue and Customs
KE	Knowledge Exchange
KEHDIA	Knowledge Exchange Hub Design in Action
KPI	Key Point Indicators
R&D	Research and Development
RGU	Robert Gordon University Aberdeen
RWR	Real World Research Inquiry
SME	Small to Medium Sized Enterprises
UK	United Kingdom
UoD	The University of Dundee

Glossary

TERM

DEFINITION

Community

Within this research body, the term community (and communities) indicates a group of individuals who live in close proximity to one another.

Cultural/Community Values

Values found to be prevalent and integral within and across communities. They can be influenced and shaped by local (and wider spread) cultural nuances. They can also be influenced by collective experiences shared by the community.

Community values are qualitative expressions of things such as behaviours, actions and attitudes that are held in high regard and importance. They can also be called, amongst other things: Collective Values; Cultural Values; Social Values; Community Values. Ethics, Value structures etc. Community values are collective reflections of the personal values of individuals found within the community. They express values of the collectivises which respond and align in reflection of each other to create societal stability. See the works of Modal (2018), discussed within Ch3.4). *See also Values: Human/Personal Values: Social Values.*

Design/design

Within this thesis, no differentiation exists between either capitalised or lower case versions of the word 'design'. This thesis acknowledges that there are considerable works surrounding 'design with a small d' and 'Design with a big D' being two distinct forms of design practice this particular argument does not play a role within this research body. Traditional and contemporary models of design practice are discussed within Chapter 2. *For further information around this area see the works of Brown, 2009.*

Design Thinking

Design Thinking in the context of this thesis is considered as the definition of a definitive model of practice, a process inclusive of creative thought which exists within the design domain itself. *See also Chapter 2, The Domain of Design.*

<i>Human Values</i>	Alternative term for the discussion of values, such as those discussed within the fields of Axiology. <i>See also Values/Personal Values/Social Values.</i>
<i>Immanent/Intrinsic</i>	Used to prefix 'values' (both in singular and plural form) to indicate values related to ethics, principles and beliefs. Immanent/Intrinsic values support the development of our individuality within social groupings. They affect the ways in which we aim to be perceived, understood and engaged with by others. <i>See also Values.</i>
<i>Instrumental</i>	A term prefixing value/values indicating materially or affordance based value. When an artefact or object has instrumental value, this indicates that value is afforded by the artefact, i.e. money has instrumental value - it facilitates exchange of products/services/etc. In itself it is simply printed paper with no significant value, but culturally we afford it instrumental value within our lives. Instrumental value is the value we give things for the results they give us. A car makes journeys quicker, thus saving our time for preferable activities; An umbrella keeps us dry in the rain and as such, its value emerges through its use. etc. <i>See the works of Hechter, (1987), Westacott, (2019).</i>
<i>Knowledge Exchange</i>	The mutual sharing of knowledge and/or information across multiple parties. Unlike knowledge transfer where information is communicated from one party to another, knowledge exchange is a reciprocal process during which information/skills etc are is exchanged.
<i>Micro Enterprise/Industry</i>	An enterprise or business with 0-9 employees and a financial turnaround of less than 2 million pounds a year. Can also referred to sole enterprise or sole trader (where there is only 1 individual).
<i>Personal Values</i>	Values held by an individual. They form the basis of morals, ethics and influence decisions. Can be personal societal values, values held by an individual which have bearing upon their perspectives, actions and beliefs with regards to their local community and/or wider society. See also Values/ Community values/Social values.

<i>Rural</i>	Whilst the term urban is used to describe centralised, highly populated and cosmopolitan living environments such as cities and towns, rural depicts areas more remote in location, more isolated from populated areas, more situated within the natural 'wild' environment. Main lines of employment in rural areas are connected with areas such as farming, agriculture, tourism. Factors of rurality are also discussed within Ch1. <i>See also Rural Scotland.</i>
<i>Rural Scotland</i>	Indicates accessible and remote rural areas in Scotland. Defined by the Scottish Government, a rural area/location or rural community is a population grouping of less than 3000 individuals which is located at least 30-60 minutes' drive from a settlement with a minimum population of over 10,000 individuals. <i>See also Ch1, Extended Preface.</i>
<i>Shared Value</i>	A model of value exchange developed by Porter and Kramer (2011). Also called CSV (Corporate Shared Value). A model through which profit creation and local cluster (community) survival are viewed in relation to one and other. Its driven by consideration of practical ways in which a business can support quality of life within its cluster area. <i>See Value and Ch3.3.2.4.</i>
<i>SME</i>	Small and Medium sized Enterprises. A specific category of businesses and industries determined by scale where employee levels are dictated by government boundaries. The range in employee levels varies from 0-249 people. (Small – 0-49, Medium – 50-249). Also included within this category are Micro enterprises where they are either ran by a sole proprietor or have employee ranges of 0-9. SME can appear as either SME and Micro or simply SME. In the latter case Micro enterprises are still implied.
<i>Social Value</i>	Social value implies benefits experienced by the local collective or community. Such as improved facilities, services, products, finance along with greater levels of connectivity, communication, engagement etc.
<i>Social Values</i>	Individual and collective values which relate to aspects of the community network they are a part of. Social values have bearing upon social cohesion and the maintenance and development of the cultural environment. In a business context, these are the human values expressed in order to cultivate relationships and markets with their

consumer body. *See also Values and Cultural/Community Values.*

Urban

Urban is defined by the Scottish Government as areas or settlements with populations of over 10,000 individuals. In Scotland urban areas only account for 2% of the available landmass but are home to 82% of the whole population. Urban areas are considered to be cities, towns and villages where the population levels exceed 10,000 individuals and where proximity to other settlements lies within specifically set distances. *See also Rural.*

An important note - This research utilises two very similar terms regularly, Value, and Values. Generally speaking, use of these terms is contextualised by the additional information presented. For clarity, definitions of both terms and other potentially ambiguous versions are provided on the following pages.

Value (in relation to quantitative, countable matters) is rarely presented in pluralised form, but Values (in relation to human values, i.e. ethics, beliefs, principles and more qualitative matters) can, dependent upon sentence structure appear in either singular or plural form. Often in this case, context provided in surrounding text offers clarity of meaning. In particular, values, presented in singular form (value) is a term which appears more regularly within Ch 5 & 6.

Valuable/Valued

To be of worth. In economic/fiscal terms this would refer to the monetary/numerical worth of an object/artefact etc. In the context of personal/social values (see ch 5 & 6), valuable/valued is used as an expression of personal and/or collective importance. *See also Values.*

Value (as quantitative)

Considered a 'countable' noun (Merriam-Webster, 2019), value is commonly used to express quantitative matters relating to numerical, fiscal, economic and monetary issues. It is predominantly (but not exclusively) presented as a singular term rather than plural. This term makes a strong appearance in Ch 3.3 where value relating to the above quantitative matters are presented.

Value (as qualitative)

Value is also used within the discussion and presentation of values (*see Values*) in the context of personal/social principles. It is used to express an appreciation, a benefit, a positive component, something of importance within a person or community's lived experience. This kind of value is related to those of ethics, morals and beliefs. That an experience / relationship/service/event etc, is perceived as being of worth. In this sense value does not relate to nor reflect fiscal/economic/numerical matters. This definition is particularly apparent and pertinent within Chapters 5 & 6 in discussion of the case study findings. *See also Values.*

Values

Also considered (and on occasion referred to) as: Ethics; Beliefs; Personal and/or Social principles; Morals and standards; Human values; Personal values; Collective values; Cultural values (Not an exclusive list). Values are perceived as representing an expression of things of importance in life. They are appreciated as being the way in which humans search for and express meaning and order in their lives. They are acknowledged as being reflective and responsive to factors of influence and can, and do, adapt and change over time. Within this research body, values indicate matters of importance to people. Also see work in the field of Axiology. In the context of business, values form their ethical and moral foundations, influencing the way in which they are structured, function and how they engage with the wider world. *A full outline of the interpretation and utilisation of values within this research body is available on page 10.*

Value Exchange

Communication and sharing of values between two parties (such as community members & local business owners, or government bodies and constituents, etc) aiding the creation of collective values and principles. Value exchange represents the discourse between parties and the resolution created through their expression of matters they perceive as important and worthy. (This does not include factors connected to financial transaction, fiscal growth or economics). *See also Values.*

Value expression

The communication (in oral or physical format) of values held by an individual or group with each other or external parties. *See also Values.*

Values Shift

People have multiple roles in life and as such, they hold a wide spectrum of values and motivations which are formed, shaped and influenced by these roles. Values shift occurs when the values and/or motivations expressed by an individual inadvertently and unintentionally shift perspectives, reflecting values they hold in relation to a different role in their lives. For example: A resident in a community, who also runs a business is both community member and business network member. Values shift symbolises and identifies moments where the expression of these values (be it through vocalisation or enaction) moves across their spectrum: They express personal values instead of professional, or vice versa. This can also occur in relation to external perspectives held by others. i.e. The community present an individual who is recognised as valuable for their contribution. The contribution they made however was not actually a personal act, it was a professional response to an identified need, want, etc. As such, the professional position of the individual loses out on gaining accreditation for their actions, while the personal position of the individual is accredited with value. This phenomenon carries further impact for both the professional and personal lives of individuals and community around them. *This area is discussed in more detail in ch 5.5.4.*

Value structure/structures

Implies the collection of values held by an individual/a community or a business. Often expressed in terms or priority or importance. Provide a code of conduct or set of rules people live by. Can also be called Value Systems, *See also Values.*

Value propositions

Intended actions/behaviours and plans of businesses. Often driven towards plans for societal benefit but can also be descriptive of economic/fiscal growth propositions.

Addendum

The process of sourcing and examining information for the contextual review phase of this research began in early 2013. Since this time, Scotland has experienced significant political shifts and developments across its governance and political structures at local, national, and international levels. Over the past 5 years Scotland as a nation has borne witness to 1 independence referendum, (determining the long-term future relationship of Scotland with the United Kingdom), 1 European Union Referendum (determining its long-term position with regards to membership in the European Union), and, following these, 1 snap general election determining the leadership structure and political team tasked with navigating the processes instigated. This thesis endeavours to present facts, un-impinged by economic, political or governmental upheavals. At no stage is any political discourse or leaning intended or implied. This thesis takes an impartial stance and no form of political allegiance or position is to be determined from the text included.

Acknowledgements

I would like to begin by offering my sincerest gratitude and appreciation to the community who opened their doors and provided me with such a very warm welcome. It was your kindness and willingness to engage with a stranger that enabled theories and ideas to become real research and practice. I will always appreciate your contributions, time, effort and interest. Thank you.

To the AHRC (Arts and Humanities Research Council) and DIA (Design in Action) for providing me the opportunity and funding to undertake this research. I will be forever grateful.

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Lastly, to my best friend, a man blessed with an abundance of patience, mad cooking skills and a never faltering confidence in my abilities, my husband Iain, thank you, for always believing in me.

Abstract

This thesis argues for the positive impact that Design Thinking may have towards instigating, supporting and developing relationships between small and micro rural businesses and their surrounding communities.

Described as the 'beating hearts of rural communities' (Frazer, in Freeman, 2015), small rural businesses provide inimitable levels of stability to our overall economic and social development. With 99.4% of all Scottish private sector enterprises classified as SMEs, they collectively provide employment for 1.2 million individuals (one fifth of the entire Scottish population) (The Scottish Government, *Businesses in Scotland, 2017*), but, with the number of failed small businesses in Scotland rising by 32% in the initial 3 months of 2018, which is approximately 679 businesses (McCance, 2018), there is a pertinent need to develop measures of support and mechanisms for resilience to aid their longevity and future success.

Supported by investigation undertaken across a triptych of sectors, Economics, Business and Rural Communities, contextualised and framed through Design Thinking and situated within a Scottish Rural Economic setting, this thesis identifies a communication gap between business and communities surrounding individual and collectively held personal values^b.

The basis of arguments towards understanding richer perspectives of 'value' which go beyond financial assets and numerical calculations and include qualitative values held by people are long standing and well established (Danson & Trebeck, (2011); Fitoussi et al, 2009; Gauntlett, 2011; Kennedy, 1968; Kuznets, 1930; Schmuecker & Wallace, 2012; Sen, 2003) and the role of design-led research

^b Given the similarity of the term 'Values' alongside that of 'Value' a brief definition of both is provided within the glossary (Pages xx – xxvi) . Where disambiguation arises please refer to the glossary for clarity and elucidation of meaning.

and design thinking in the development of approaches for businesses are well documented (Cross, 2006; Moggridge, 2007; Leifer & Meinel, 2011, 2018).

This thesis explores ways in which Design Thinking might be utilised to identify undetected and undisclosed values of people through engaging with individuals and the collective community and business networks, enabling the communication of richer perspectives of 'value' (which are not economically/ fiscally or financially reliant) to emerge which may be of benefit to future community and business developments.

Undertaken through a Real-World Research (Applied Research) (Robson, 1993; Robson & McCartan, 2016) approach, implementing case study as methodology, with data handling conducted through thematic analysis, this research generated proposals supported by both its literature review and primary research components of ways in which Design Thinking might be utilised to address this communication gap. It reflects upon identified values of designers, businesses, communities and individuals. It considers both the processes undertaken and the findings derived, (including the phenomenon of 'Values Shift' and how this may be addressed) through a model of case studies and culminates with a framework for novice to medium level designers who wish to conduct research of a similar nature in cognate areas. The line of questioning which shaped this research considered:

'How do we enable businesses and communities to better understand, share and communicate their individual and collective values through design-led approaches?'

1

Introduction

Chapter 1. Introduction

This chapter serves to provide background information and contextual positioning for this research. It begins with a brief personal summary before discussing the inspiration and motivation for researching this topic. The research questions, aims and objectives are then presented along with the thesis breakdown. An outline of the interpretation and utilisation of values within this research is then provided. An extended preface which serves to provide additional background information around the AHRC funded project, Design in Action, which formed the foundation for this PhD is then introduced. The chapter concludes with a short discussion on the contextual location of the research, that of Rural Scotland.

'The world belongs to humanity, not this leader, that leader, kings or religious leaders. The world belongs to humanity'.

(The Dalai Lama, 2012).

1.0 Autobiographical Statement and Thesis Inspiration

My childhood forged and shaped me into a rather wilful individual full of curiosity. Long summers spent exploring the outdoors of both urban and rural landscapes across Scotland and England, coupled with even longer winters ensconced in the local library encouraged my inquisitive nature and shaped the individual who I am today. I received my first library card when I was 4 and still remember fondly my first visit to that old Edwardian, red ashlar building nestled at the top of the road. Accompanied by my aunt, this visit signified my formal introduction to the world of knowledge and books, it was here that my life-long love of learning began.

I am fortunate to belong to a family who cherish both knowledge and creativity, one which nurtured inquiry and my curious nature from a young age. My creative streak was a response which emerged instinctively as I endeavoured to learn more about anything and everything. There were few subject matters which at one time or another I did not explore and investigate as I sought to quell my inquisitive nature. As such, I developed creative ways in which to support my learnings, crafting, making and disseminating the information as I went along in pursuit of happiness and a further understanding of the world around me.

My works focus has shifted and changed in response to experiences and influences I have encountered over the years, not least in response to having my own family. They inspire my work and have motivated me towards developing a greater appreciation and understanding of both my own personal values, and the personal values of others. Rather than being driven by the general inquisitive behaviours of childhood, areas of interest gained personal meaning and my studies became more directed. I worked my way through my previous degrees, focusing upon how I might contribute towards humanities' attempts to create peaceful, happy and positive environments for ourselves and future generations to experience.

Officially, my academic journey began at the local college where I studied Interior Design at National Certificate (NC) through to a Higher National Diploma (HND) level. These years prepared me for university and provided me with the required qualifications for entry onto the Interior and Environmental Design Bachelors' Honours degree at the University of Dundee, a course internationally recognised for its excellence in participatory and stakeholder engagement and design and creative practice. My final year project explored the impact and influence of space and physical environments upon the psychological and physiological wellbeing of children and vulnerable stakeholder groups, with particular focus given towards the design and creation of hospital and therapeutic spaces. This research body culminated with the development of two exhibitions, 'Design with Children in Mind' and 'The Unheard Client' which were presented within my final degree show work. These interactive exhibitions subsequently went on to be exhibited at The Scottish Parliament, The Victoria and Albert Museum London and The Lighthouse in Glasgow. (Appendix B, *b1*, offers a brief overview of these bodies of work).

In 2011 I was fortunate to receive a scholarship position on the Master of Design (MDes) course at the University of Dundee. This provided me opportunity to further develop my knowledge, skills and understanding of design practice, drawing specifically upon design theories, principles and approaches, such as, social innovation, design thinking, systems thinking, co-designing, to name a few. During this time, my appreciation of methodologies, methods and principles underpinning practices such as Co-Design, Design Thinking, Social Innovation and Strategic Design grew and developed, and I cultivated this knowledge and these skills into my repertoire. These practices supported my work in a number of projects over the years, enabling me to keep people central within my design process. Two such projects which provided excellent opportunity to gain further experience in these areas were The Fuel Poverty project, undertaken for a Scottish energy company, and Chatterbox, a project

conducted with DAPER, The University of St Andrews, The University of Dundee and the Dental Health Service Research Unit. Both projects engaged directly with a mix of professionals and members of the public.

The Fuel Poverty project considered ways in which fuel poverty might be reduced or better managed and the work was based around stories collected from families directly affected. Undertaken through a Co-Design approach, bespoke tools were generated through collaboration with professionals connected to participating families. The data collection phase focused upon facilitating honest communication and the visualisation and documentation of participants' very personal stories. The data gathered was then analysed and collated into a report, which following further participant input, was presented to the company. The final output included documentation of the processes undertaken, presented the ethical safeguards which were in place to protect participants and culminated with a series of recommendations around future actions which could be implemented for the long-term benefit of both the customers and the company.

Chatterbox granted the opportunity to further explore co-design and design thinking approaches through a project which explored the provision and uptake of dental health care for under-5's through considering and investigating the systems in place for supporting vulnerable families. This project resulted in the development of a co-designed toolkit and service delivery plan which aided professionals in having valuable conversations with parents. These conversations, like those conducted during the project 'Fuel Poverty' were facilitated through use of boundary objects (Griesmer & Star, 1989). These objects granted both parties (the families and the dental health workers) the opportunity to visualise complexities and problems faced within the home and throughout daily life, aiding the development of support strategies for the children's dental health management and identified areas of required additional support for the parents.

Over the years I gained further experience widening my perspectives and skills through working with several other private and public-sector clients from across the design industry and academia including: Hillcrest Housing, NHS Tayside, NHS Highlands & Islands, Alzheimer's Scotland, Scottish Borders Council, Scottish Social Services Council, Glasgow School of Art and The Scottish Blood Transfusion Service. Collectively these experiences fuelled my passion towards focusing upon ways in which to address societal, environmental and business issues across diverse sectors, communities and groups.

My background working in Design Thinking and participatory, stakeholder driven contexts drew me to this PhD role. Design in Action offered the opportunity to further explore my capabilities in new contexts and fields which was an exciting and interesting direction for my work. Previous projects and work packages which I had undertaken led me to explore and work within a number of areas connected to wellbeing and quality of life, but from very different perspectives and contexts. Situating my PhD in the context of the Rural Economy of Scotland with a wellbeing focus created opportunities to consider alternative ways in which wellbeing might be considered and obtained. The Masters programme had allowed me to broaden out from my background in interior and environmental design where my focus was highly specialised, into a more 'T-shaped' (McKinsey in Brown, 2009) design practitioner with an understanding of co-design, collaboration and interdisciplinarity. It gave me an appreciation of the bigger picture, how to apply design methods, and supported me in keeping people at the centre of my practice. Although the context of this PhD varied from my previous experiences, my ethos, mindset and inspiration towards contributing to improvements in quality of life experienced remained the same. This PhD provided an exciting opportunity to explore and diversify my capabilities in a new light, while my capabilities as a T-shaped practitioner enabled me in bringing these skills effectively into this new context of the Scottish Rural Economy.

1.1 Research Questions, Aims and Objectives

This research was framed around an inquiry of methods of value identification and communication with the aim to support the development of a framework for Micro and SMEs enterprises and their local communities through the question:

'How do we enable businesses and communities to better understand, share and communicate their individual and collective values through design-led approaches?'

Aim:

1. Through a design-led approach, develop a theoretical framework which could support the investigation, identification and communication of personal, social and professional values and motivations of rural SMEs and their local communities.

Objective:

1. Examine traditional and alternative economic models of value assessment.
2. Establish a context based upon literature at the intersection of business, community, economics, values and design.
3. Apply a variety of design led approaches, new and established, to gather data from a rural community's business and community members enabling the identification and communication of values from both perspectives.
4. Analyse the data, creating a snapshot from business and community perspectives to support the development of a framework for shared value propositions which may support and enable knowledge exchange and value identification to occur in areas where there is societal aspiration for change.

Table 1 provides an outline of where each objective is addressed within the thesis body.

Table 1. Thesis Map.

Objective	Location
1. Examine traditional and alternative economic models of value assessment.	Chapter 3 – Exploring Differing Value Theories across the Domains of Business, Economics and Communities.
2. Establish a context based upon literature at the intersection of business, community, economics, values and design.	Chapter 1.6 - A Contextual Positioning of Scotland and its Rurality. Chapter 2 – Understanding the Role of Design and Design Thinking in Society. Chapter 3 – Exploring Differing Value Theories across the Domains of Business, Economics and Communities.
3. Apply a variety of design led approaches, new and established, to gather data from a rural community's business and community members enabling the identification and communication of values from both perspectives.	Chapter 4 – Methodology Chapter 5 – Uncovering Immanent and Instrumental Values.
4. Analyse the data, creating a snapshot from business and community perspectives to support the development of a framework for shared value propositions which may support and enable knowledge exchange and value identification to occur in areas where there is societal aspiration for change.	Chapter 5 – Uncovering Immanent and Instrumental Values. Chapter 6 – Conclusion

1.2 Interpreting and Utilising Values

Based on an understanding derived from the works of Cannon (2007), Hechter (1987), Hedahl & Huebner (2015), Illyin et al (2016), Maslow (1943), Modal (2018), O'Brian (2009) Rokeach (1985), Schwartz (2012), Taylor (2012), Wright (1971) and others (as is discussed in Ch 3.1), this research positions and interprets values as being:

- Principles, beliefs and ethical standpoints which influence, contextualise and rationalise human priorities, shaping and influencing behaviours, actions, attitudes and responses.
- Human expressions of conscience and importance which form the ideals and rules around which we live our lives.
- They provide meaning and guidance to decisions we make and how we evaluate potential choices and actions. (They are negotiable but only to a point).
- They can be individual, collective, personal and professional and can relate to physical and psychological matter.
- They can change over time, adapting and shifting in relation to our lived experience and the development and growth of our personal knowledge.
- Can be an expression of factors in life which we feel are important, beneficial, and/or worthwhile for non-financially based reasons. i.e. We can understand and engage with an artefact as valuable, its value may not reside in its material worth, but in its sentimental value and symbolic importance.

Unlike value assigned to monetary, economic, material and fiscal matters where values and quantities are presented numerically (this is explored further within Ch3.4), these kinds of values are referred to by many axiological experts as being immanent or intrinsic values (Hechter et al, 1993; Hedahl & Huebner, 2015; Westacott, 2019). These values exist and are often expressed in relation to the lived experience and influence our behaviours, actions and emotions (Cannon, 2007; Hechter, 1987; Rokeach, 1973:2000; Schwartz, 2012). It is these qualitative kinds of values which lie at the heart of this thesis.

The proven inability of fiscal and economically based value assessment models to include immanent and intrinsic values provided the foundation for the development and direction of this research body. As is covered in Chapters 1.6.5, 1.6.6, 3.3.2.3, and 5.4.5 the economic crash (compounded by a number of other factors) destabilised and eroded trust between the public, businesses, governments and banks. There is a gap in communication lines between businesses and their local communities which needs addressed. Businesses speak to government; government speak to business and everyone talks *at* communities. There is room to develop greater levels of reciprocity between communities and businesses, (and indeed government), through sharing, understanding and appreciating each other's qualitative immanent/ intrinsic human values and their underlying motivations. There is a clear need for alternative ways in which to consider, understand, communicate and express values beyond those used in traditionally implemented numerical models.

It is the position of this research that Design Thinking, supported through a Real World Research (Robson, 1993; Robson & McCartan, 2016) approach offers unique opportunity to put people back at the heart of value assessment, understanding and communication. Current models of value assessment rely upon the analysis and communication of quantitative information generated by economic, fiscal and numerically based models. These models lack the capability to include or consider quality of life experienced or indeed any nuanced information regarding peoples personal values and needs. By investigating and uncovering immanent/intrinsic values held by individuals and communities, subsequent actions and conversations can be refocused to reflect the diverse and rich human values, needs and wants of people and businesses within complex systems (such as those found in rural communities).

Through a variety of approaches including workshop, interviews, interventions, boundary objects and observations, qualitative data was gathered from participants regarding their personal values and collective values. These values

were expressed in short and long statements, through conversations and, in some cases, submitted as single phrases. The data gathered was analysed through Thematic Analysis and then grounded against other contextually relevant information which had been gathered.

The values identified from the qualitative expressions submitted provided insights as to motivations, needs, wants and influential factors impacting the community. They provided a way in which to offer a deeper understanding of the lives of people, communities and businesses within rural settings. The findings generated also provide inference to similar positions which may typify other communities of similar scale.

The process from desk-side investigation, through to participant engagement, data gathering, analysis and conclusion finding, provided grounds to develop a framework for other designers to adopt who may seek to investigate qualitative values of this nature in different or similar communities in future.

1.3 Thesis Structure

The thesis is divided into six chapters. Chapters 1-3 set the background and context for the research study. Chapter 4 provides an outline of the strategy implemented. Chapter 5 discusses the findings and results derived from the research and Chapter 6 offers concluding findings, limitations of the research body and the framework developed for consideration. The thesis is structured as follows:

Chapter 1 - Introduction

This chapter serves to provide background information and contextual positioning for this research. It begins with a brief personal summary before discussing the inspiration and motivation for researching this topic. The research questions, aims and objectives are then presented along with the thesis breakdown. An outline of the interpretation and utilisation of values within this research is then provided. An extended preface which serves to provide additional background information around the AHRC funded project, Design in Action, which formed the foundation for this PhD is then introduced. The chapter concludes with a short discussion on the contextual location of the research, that of Rural Scotland.

Chapter 2 - Understanding the role of design and design thinking in Contemporary Society

In order to understand the aims and objectives of this thesis, this chapter begins by briefly discussing how the field of design has changed over the last two decades. It moves on to consider the role and benefits of utilising design in addressing complex problems and systems, paying particular attention to the scholarly work of Buchanan and others. With design practice spreading its

domain of activities into fields beyond design, this chapter takes a closer look at design thinking, drawing upon processes and methods that have emerged over recent years. The chapter concludes by discussing benefits of implementing Design Thinking as a strategic tool within societal constructs and organisations. In doing so, the chapter serves to position Design Thinking as an iterative process in supporting the generation of new knowledge and insights which may have applicability in modern society.

Chapter 3 - Exploring Differing Value Theories across the Domains of Business, Economics and Community

This chapter presents and reviews value theory concepts from the differing perspective viewpoints of Business, Economics and Communities. It begins by discussing concepts surrounding values as personal and social realities pertaining to their meaning, influence and position within and across our lives, and identifies the researcher's position. It then moves on to explore the role of values within business, how and why they are important, and what impact they have upon business models. Following on from this, the chapter considers the role of value as perceived and communicated through the field of economics and how this may have developed meanings beyond its original scope over the years, (where financial value is misinterpreted as reflecting social values). The focus then shifts to emerging alternative models of value assessment, exploring briefly their rationales and processes, and considering the role of values within community settings. The chapter concludes with a discussion on the potential role for design in supporting the communication of values between business and community groups providing examples of previous works where this has been attempted. Chapter 3 serves to address objectives 1 & 2 by examining traditional and alternative economic models of value assessment and establishing a context based upon literature at the intersection of business, community, economics, values and design.

Chapter 4 - Methodology

While chapters 1 to 3 provided the contextual and literary frames of this research body, chapter 4 provides discussion and insight of the methodological approach implemented, Real World Research (Applied Research) as defined by Robson (1993), Robson & McCartan (2016). This chapter begins with a brief discussion of definitions and differentiations between Design Methodology and Method, determining the researcher's position. It then provides the background and philosophical underpinning of Real World Research as an established approach followed by a brief discussion of the selected location. The three studies conducted are then presented, contextualising the actions undertaken by the researcher, offering insight to the methodological strategy and methods implemented for data gathering. Processes developed and employed for data handling and analysis are then discussed. This chapter culminates with a succinct review of the ethical considerations of this research and the capabilities and caveats of the work conducted. In presenting the methodological strategy and methods this chapter responds to objective 3 by providing the rationale and underpinning of the research conducted.

Chapter 5 - Uncovering Immanent and Instrumental Values

Chapter 5 presents the findings of the 3 case studies conducted. In line with the aims and objectives of this research, this chapter provides an overview of the findings which emerged from objective 3: *The application of a variety of design led approaches, new and established, to gather data from a rural community's business and community members enabling the identification and communication of values from both perspectives*, along with a response to objective 4: *The analysis of the data, in order to create a snapshot from business and community perspectives to support the development of a framework for shared value propositions which may enable knowledge exchange and*

the identification of values to occur in areas where there is societal aspiration for change.

This chapter works through the findings from each case study concurrently before presenting a discussion around the triangulation of the data gathered. The 14 themes identified are then re-presented with reference to pre-existing concepts and models with particular focus in this area given to the values identified in case study 2 and case study 3.

Chapter 6 - The Framework and Conclusion

This chapter provides the concluding components and features of this research body. A summary of the research conducted and a brief presentation of key findings and conclusions generated are presented. This is followed with a recap of the aims and objectives of this thesis and a discussion of how and where they were met. The framework created by this research is then presented and discussed and the original contribution to knowledge is then outlined. Limitations to the research which were identified, along with approaches adopted to address and navigate these limitations is then presented.

Finally, the chapter concludes with a brief discussion around potential future applications of research of this nature.

An Extended Preface

1.4 The Background of the KEHDIA PhD

The nature of PhD is changing and no longer is it solely conducted within the confines of academia. New models of PhD which embrace both academic and 'real world' environments are becoming more common place, with many PhD students working as part of larger research groups.

There is growing appreciation across academia, business and government of transferable skills such as: The ability to work with others in a variety of contexts; To communicate through verbal, written and visual formats; To be able to critically reflect upon your own learning experiences; To project manage and navigate complexities and have the ability to be both flexible and adaptable, with skills and competencies which a candidate develops alongside the refinement of their research capabilities (Bennett, 2018; Park, 2005). New models which expand beyond traditionally accepted PhD models^{1c} are appearing, especially across the domains of art and design. These models position research in live contexts, as efforts are made to generate actionable and understandable research surrounding processes, actions, methods and methodologies and outputs thereby creating environments of Knowledge Exchange (AHRC, 2017).

This PhD is one of a small portfolio of design research connected and directed by a major research grant funded by the Arts and Humanities Research Council called the Design in Action Knowledge Exchange Hub (DiA) which ran between 2012-2016. Design in Action was a 5-million-pound knowledge exchange hub which focused upon the application of design thinking as a strategy for business innovation. Of the four Knowledge Exchange hubs set up and located within the United Kingdom, DiA was the only one based in Scotland and it focused upon the creative economy² and how the strategic implementation of design and research into enterprise development might benefit the Scottish economy. Its

^c Numbers as superscript refer to notes at the end of each chapter.

team was comprised of staff and researchers from the following Higher Educational Institutes (HEIs):

- Duncan of Jordanstone College of Art and Design, The University of Dundee (DJCAD, UoD)
- Edinburgh College of Art (ECA)
- The Glasgow School of Art (GSA)
- Abertay University Dundee
- Gray's School of Art, The Robert Gordon University, Aberdeen (RGU)
- St Andrews University

With a predominant focus towards research driven outputs, Design in Action endeavoured to develop an understanding of the strategic implementation of design along with mechanisms for knowledge exchange in 'business and sector specific contexts' (Design in Action, 2016). This was achieved by bringing together Academics, Businesses and Designers at events called 'Chiasma' (2.5 day long residential workshops) with the ultimate goal of generating new insights for improved business outcomes. Through analysis of influential papers and government direction, DiA focused its attention towards 5 identified sectors of anticipated future growth across the Scottish economy. The Chiasma were assigned to their host universities via their institutes subject sectoral allocations (Appendix C^d, *c1 and c2: c1, Sectoral Allocations*³, *c2, DiA Chiasma Events*, hosted by University).

The core team was responsible for the overall growth, development and maintenance of the project, driving and directing the aims, objectives and Key Performance Indicators (KPI's). It was from here that each of the 6 universities involved was directed. Each individual team was comprised of 1 Co-Investigator, (Co-I) who directed the research stream within the allocated sector, 1 Post-

^d See Appendix C, *c1-c6*, for additional information which will be referred to shortly pertaining to Design in Action including *c1: Sectoral Allocations; c2: DiA Chiasma Events hosted by University; c3: DiA Network; c4: DiA Chiasma Outputs; c5: Route to Market Strategy Map; c6: U-an Wool Case Study. c7: DiA RA work timeline.*

Doctoral researcher and 2 PhD students. The only exception to this rule was St Andrews University which hosted 1 Co-Investigator and 1 Post-Doctoral researcher who gathered, analysed, reported and moderated findings from across the collective project and assessed the development of the business models arising (Appendix *c3*, DiA Network). During its tenure, DiA supported the generation and development of 17 new business models (Appendix *c4*, Chiasma Outputs), 4 of which amassed a collective gross annual turnover of £3,068,000 during 2015 (Design in Action, 2016). It engaged with over 5,172 organisations, businesses and individuals, and collectively contributed towards the creation of 113 Scottish jobs (Ibid, 2016).

The application of Design Thinking as a strategy for business innovation was a guiding principle to the whole Design in Action project. In my capacity as a PhD student, and related to my existing skill set, I was involved in a wide variety of actions including: Leading and managing interdisciplinary collaborative projects; Cultivating design-led innovation across broad domains; Designing and developing toolkits; Developing and facilitating workshops; The creation and refinement of route to market strategies for fledgling SME and Micro businesses (Appendix *c5*: Route to Market Enabler); The investigation, support and management of the integration of design approaches into successfully funded business ventures arising from DiA Chiasma events. And, as a result of the latter, the development and publication of reports and a case study reflecting the early development of one of the business proposals (Appendix *c6*: U-an Wool Case Study) which was developed in tandem to this research body. A timeline of DiA related research activities and events undertaken within the researchers PhD role is provided in Appendix *c7*.

Alongside these duties and responsibilities, I developed and cultivated my own PhD strand of research in line with my team's sectoral allocation of The Scottish Rural Economy. This provided useful boundaries around who, what, when,

where, why and how I would conduct my own investigations (for further information see Limitations within Chapter 6.5).

1.5 My PhD within Design in Action

From the outset, the contextual setting of this research was determined by Design in Action's sector designation. The University of Dundee's team, of which I was a member, was allocated the field of Scottish Rural Economics, specifically positioned to work alongside micro and Small to Medium-sized Enterprises (SMEs) (Enterprises with fewer than 250 employees, (European Commission, 2015). This positioning provided a grounding and foundation for the research body to be based within.

The initial stage of the research design involved developing an understanding of the overall Scottish landscape, its population and demographics, its business and entrepreneurial patterns, the role and impact of creative industries and exploring how and where Design Thinking may have applicability. Through undertaking a broad exploration of the area and inspired by both the information emerging and my own areas of interest, themes arose which shaped the research direction towards exploring values and the existence of a communication gap between businesses and their local communities about their values.

Varied ideas and understandings of value and different meanings of the term complicate aspects of communication. In each of the fields identified values existed, although they were communicated and expressed in different ways and often carried different levels of impact and influence. (As mentioned in the Glossary, (p.xx-xxvi) values associated with economics, fiscality and numerical details often framed by the singular noun 'value', even when discussion considers multiple factors).

When considering value as a concept capable of impacting quality of life experienced and societal and business wellbeing, lines of inquiry and

connections became evident. Through examining approaches and methods of value assessment currently implemented, it became apparent that a gap existed between communities and business around communication of their values. To simplify:

- Businesses communicate values to customers through marketing, advertisements and through communicating growth or profitability. They then communicate their value in financial worth through numerical models.
- Economists convey value to governments and society expressed through complex mathematical equations such as Gross Domestic Product (GDP) or Gross National Product (GNP), again, representing value as a quantitative factor presented in numerical format.
- Designers have breached the world of identifying personal, social and community values through various interventions, approaches and activities.

But there is a dearth of information available considering the communication and sharing of these kinds of personal, social and community values between SME and micro industries and their local communities. Further discussion around each of these types of value is presented throughout Chapter 3.

Calls for models of value assessment which can incorporate perspectives exceeding those considered in consumer and capitalist based models such as GDP and GNP are not a new phenomenon. Indeed, the basis of arguments towards understanding and communicating richer perspectives of 'value' which go beyond financial assets and numerical calculations is long standing and well established (Danson & Trebeck, (2011); Fitoussi et al, 2009; Gauntlett, 2011; Kennedy, 1968; Kuznets, 1939, 1955, 1966; Schmuecker & Wallace, 2012; Sen, 2003). These kinds of quantitative and financially and numerically driven value assessments have prominence and meaning, providing governments with insights around the financial status of each nation. However, as put by Kennedy (1968), they 'fail to convey what makes life worth living'. Reliant upon quantitative data sources, which lack the three-dimensional capabilities and

nuances found in qualitatively oriented data, traditional assessment approaches are focused towards figures indicating financial gains, losses and overall productivity. They negate inclusion of details which examine the quality of life experienced and values of the individuals who are generating the economies. Whilst this is notably useful information, it is not reflective of human experience. There has been a noticeable increase throughout the past 50 years of calls for alternative approaches to be developed: Approaches capable of reflecting and generating richer perspectives of values which include matters of importance to people at more localised levels. (This increase is presented in Ch 3.4.1, Fig.26 Developments in Economic and Societal Assessments 1880-2018). Perhaps, through developing a better understanding of these perspectives, it will be possible to identify future steps and actions to take, which may benefit growth and wellbeing of both businesses and communities in rural locations.

Schwartz discusses how an understanding of collective values found in communities offers opportunity to identify social structures, goals, ideals, classifying them as 'Universal Organisations of Human Motivations' (2006, p.1). It is these values which can potentially support SMEs and Micro industries to survive and thrive in turbulent times, (such as the global economic crash of 2008 discussed in Ch 1.6.5). By aligning local individuals' values with those of their local business communities, it is argued that greater financial and social wellbeing can be obtained (Kramer & Porter, 2011). This position carries significant credence for future development of the Scottish Rural Economy.

Considered to be fundamental components of the Scottish landscape, rural communities and their SME and Micro industries, although small in scale, provide inimitable levels of stability to our overall economic and social development. 99.4% of all Scottish private sector enterprises are SMEs and collectively they provide employment for 1.2 million individuals (one fifth of the entire Scottish population) (The Scottish Government, Business, Enterprise and Energy, 2018). Given the vital position that Micro and SMEs hold within the

Scottish economy, statistics and reports showing: 50% failure rates of all Scottish SMEs (Nesta, 2017; Nilsson, 2017); That within the first 5 years 3/5ths of Scottish SMEs will fail (Lobel, 2016); That the first three months of 2018 saw 679 registered businesses fail (32%) and that the rate of insolvencies increased by 19% (affecting 721 businesses) between January and August 2018 (McCance, 2018), indicate a pertinent need to develop measures of support and mechanisms for resilience to aid their longevity and future success.

The role of design-led research and design thinking in the development of approaches for businesses is well documented (Cross, 2006; Moggridge, 2007; Leifer & Meinel, 2011, 2018), as is the widely held belief and conviction in the capabilities of utilising design to address socially complex issues and uncover potential resolutions (Britton, 2010; Chang, 2013; Cross, 2006; Sanders & Liem, 2011; The Design Council, 2011). Design methods oriented towards empirical exploration as a form of real world enquiry such as sketching and visualisation (Roam, 2008; Leifer & Meinel, 2011, 2018), boundary objects for conversational investigation (Griesemer & Star, 1989), prototyping (Curedale, 2013; d.school Paris, 2009; Leifer & Meinel, 2011), and synthesis (Dorst, 2017; Kolko, 2011) are just a few examples of the ways in which new insights can be captured through less intrusive, and more creative and playful means during the investigation process which can then be developed and applied in context. The application of designer's skill sets, combined with 'unseen' knowledge held by stakeholders (Day & Parnell, 2003) can create and generate new understandings and awareness of potential routes of action which might be undertaken in attempts to address challenges and situations faced by society. Through implementing approaches such as these to identify non-financially oriented perspectives and values, options around ways in which to address the current situations found across economic and social climates can be identified.

It is this thesis' position that design thinking offers the opportunity to explore and consider alternative social values, accessing information and knowledge

which may be of benefit to both SMEs and Micro industries and their local communities. This research has focused upon Scottish Rural Communities and businesses, developing a framework which aims to support Micro and Small to Medium sized enterprises (SMEs) in utilising design thinking as a method to support growth and long-term sustainability by discerning underlying values of their community and customer bases.

Through scoping it became clear that while this study would be located at the interface of Business, Economics and Communities, through a design-led research approach it would aim to identify undetected and undisclosed values held by community members and local businesses. By engaging with individuals and collective community and business networks, it would endeavour to identify richer perspectives of 'value' which may be of benefit to future community and business developments and communication. This would provide insight around the kinds of values being expressed and support the identification of a framework conducive to undertaking research of this nature.

This thesis would adopt practices of a design thinking approach to innovation which would incorporate critical discourse around the following components:

- Values – considered as personal/social, business and, numerical/financial factors i.e qualitative and quantitative expressions.
- The Context (Rural Scotland) – small communities with populations of less than 3000.
- Business (SMEs and Micro Enterprises) – Enterprises with fewer than 10 employees.
- Community (Rural Communities in Scotland) – Groups of individuals who live within proximity of each other.
- Economics (Traditional and Alternative Models) – Models of quantitative and qualitative growth assessment.
- Design Thinking (Practice and Theory) – Fundamental strategies, practices and skills which have emerged in contemporary design.

Given the scope of areas included within this study, early on during the development of the research strategy a Venn Diagram was generated to provide

clarity and direction to the avenues of exploration through which secondary data (predominantly literature) might be identified. The Venn provided opportunity to develop a more extensive strategy around directions in which to explore relevant secondary data providing points of focus to consider from across the wide range of fields and sectors connected to the research body.

Fig.1 and Fig.2 usefully capture the triptych of knowledge and secondary sources central to this body of work. Relevant associated literature is provided in Appendix D, *d1 & d2*, *d1* - Venn Diagrams and their role in this research; *d2* – The researchers process.

It should be noted that this research did not seek to assess the viability, successes or vulnerabilities of one model of value assessment in comparison to another, rather it proposes, that through engagement with design thinking, implemented as a method to open a dialogue between business and communities which focuses upon expressing and sharing their values and motivations, positive repercussions such as increased communication and understanding of collective perspectives may occur. Neither does this research propose the development of a model of Corporate Social Responsibility (McWilliams et al, 2006), nor for philanthropic or altruistic behavioural patterns to be enforced within business structures. It appreciates that the focus and responsibility of business must predominantly lie within the generation of financial return in order to exist (Kramer & Porter, 2011).

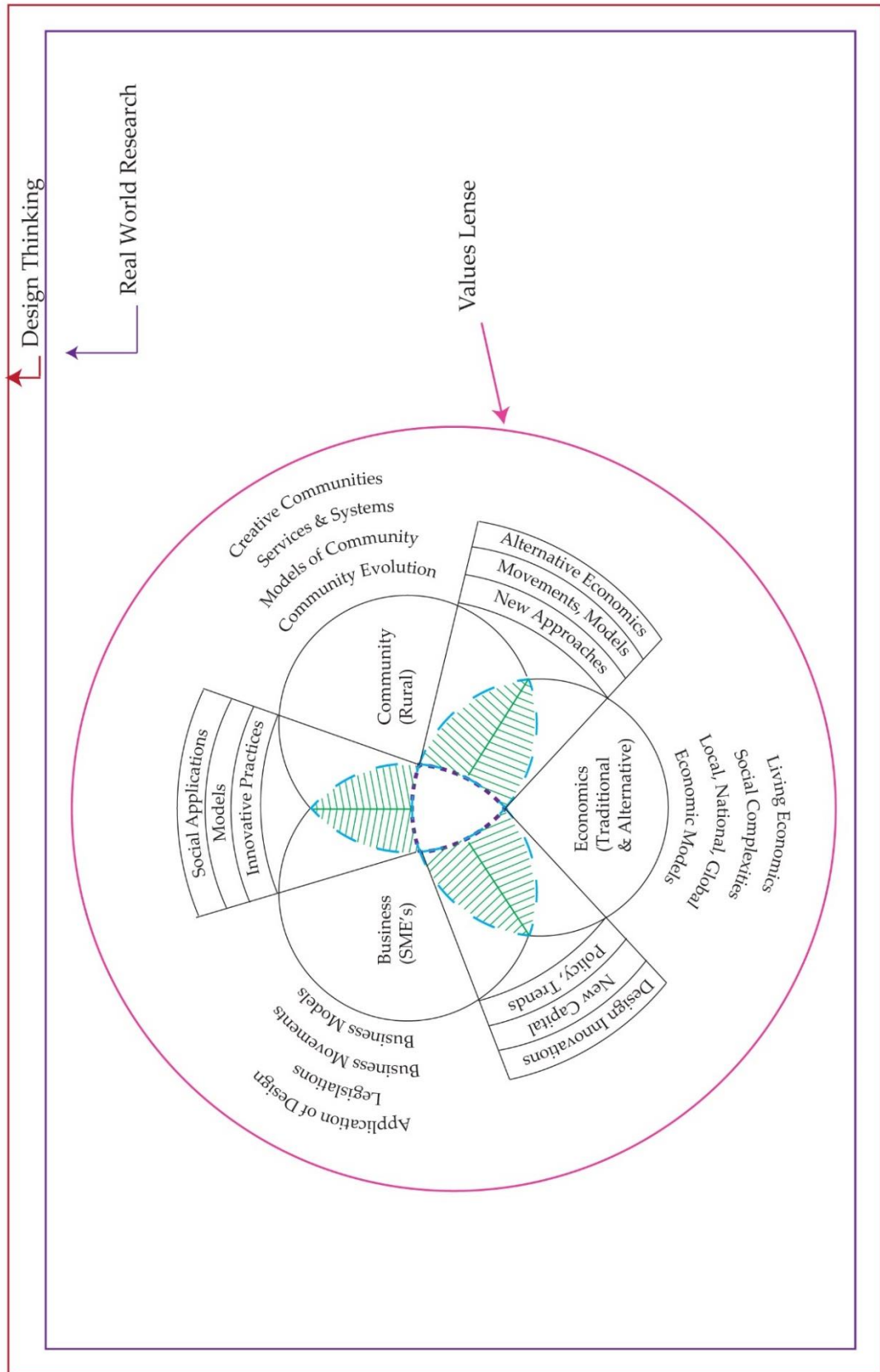


Figure 1. Venn Diagram

Source: Influenced by works of Venn (1866, 1880 & 1894).

TRADITIONAL	CONTEMPORARY	TRADITIONAL	CONTEMPORARY	TRADITIONAL	CONTEMPORARY	TRADITIONAL	CONTEMPORARY
B Business Business Models Traditional. Modern. SME. Micro. Multi-National. Traditional approaches & Design led. Projects. Models. Corporate. Smart Growth Business Movements Industrial to Creative revolutions. Consumerism Minimalism. Sustainability Environmental awareness Business Legislation Drivers & Developers Employment & Skills Finance & Trade Policy & Profit Application of Design Business, Design & Creative industries. Communication Branding. Marketing. Values EU projects. Design Council. Hyper Island. DiA.	BE Business & Economics Economic Models Historical. GDP. GNP. Capitalism. Socialism. New Capital. Theory. Practice. Democracy. Dictatorship Local, National, Global Scale. Local. National. Global. Hyper Local. Flux Markets. Diversification. Sync. Value of SME sectors. G20/G7/Nato/Brexit/Indy Ref Social Complexities Wicked Problems. Quality of Life. Complex Societies. Wealth Inequality. Rural Wealth Inequality. Marx/Picketty/McIntosh Living Economics Economic impact at local level. OECD. Legatum. Current Models. Q o L. Gallup World Poll. Maslow Hierarchy. Class statutes	E Economics Economic Models Historical. GDP. GNP. Capitalism. Socialism. New Capital. Theory. Practice. Democracy. Dictatorship Local, National, Global Scale. Local. National. Global. Hyper Local. Flux Markets. Diversification. Sync. Value of SME sectors. G20/G7/Nato/Brexit/Indy Ref Social Complexities Wicked Problems. Quality of Life. Complex Societies. Wealth Inequality. Rural Wealth Inequality. Marx/Picketty/McIntosh Living Economics Economic impact at local level. OECD. Legatum. Current Models. Q o L. Gallup World Poll. Maslow Hierarchy. Class statutes	EC Economics & Community New Approaches to Growth Other economic models. Indicator evaluations. Designing indicators & impact. Evaluation. Maslow Wellbeing. Health & Values. New Trade. Context & Environment. Movements. Models Index of values. R.S.A. Oxfam. GNH. Humankind Index. Changing Economies Alternative Currencies. Sustainability & Drivers. Social Modernism. System Design. Alternative Economics Circular. Sustainable. Creative Sharing. Global to Hyper local. GNH. Prosperity. Nesta	E Economics Economic Models Historical. GDP. GNP. Capitalism. Socialism. New Capital. Theory. Practice. Democracy. Dictatorship Local, National, Global Scale. Local. National. Global. Hyper Local. Flux Markets. Diversification. Sync. Value of SME sectors. G20/G7/Nato/Brexit/Indy Ref Social Complexities Wicked Problems. Quality of Life. Complex Societies. Wealth Inequality. Rural Wealth Inequality. Marx/Picketty/McIntosh Living Economics Economic impact at local level. OECD. Legatum. Current Models. Q o L. Gallup World Poll. Maslow Hierarchy. Class statutes	BE Business & Economics Policy Trends. Emergent approaches Alt business approaches Shared Values. C.S.R. Sharing Economy. Co-ops Circular Economy Creative Economy New Capital New models of capital Theory in practice New Capital. New Trade Social funding Fortune 500/Angel Investors Social Modernism New financial support Design Innovations Design Innovation. EU. Entrepreneurs. UX Design. Design and new business models. Governance. Horizon 2020. Design Council. Nesta. New hubs.	C Community Community Evolution How they develop. Definitions. Stories. Psychology. Communication. Location. Populations. Networks. Models of Community Types of Community Skills. Practice. Location. Cultures. Movement of People. Optimum/minimum levels for success Services & Systems Rural restrictions. Events. Produce Systems. Services. Growth & Reduction. Local Trade. Isolation. Creative Communities Engagement. Ownership. Open Innovation. Theories. Practice. Development. Skill/Time Sharing/Banking Design Activism	CB Community & Business Social Applications Systems & Services Co-Design. Participatory Models. Co-operatives and Projects. Local Environment and growth. Dott 7. Open Design. Environmental Awareness. Transitions. Models Open Design. Design Jams. Open Ideo. Totness. Transition Towns. HC Design. Co-Participatory Design. Service Design. Strategic Design. Circular Design. Environmental Design. Value Propositions. Innovative Practices Trade & Services. Social Innovations. Transitions. Citizen Science. Social Science. Research - Recycle. Upcycle.
Reformative Design	CONTEMPORARY	TRADITIONAL	CONTEMPORARY	TRADITIONAL	CONTEMPORARY	TRADITIONAL	CONTEMPORARY



Figure 2. Strategy for Secondary Data Exploration.

1.6 A Contextual Positioning of Scotland and its Rurality

1.6.1 Landscape and Geography

Scotland presents a diverse breadth of social structures and habitats. With a landmass of approximately 78,789 sq.km (7.8 million hectares) (The Scottish Government Agriculture and Rural Economy Directorate, 2015, 2018), and a current estimated population of 5,404,700 (The National Records of Scotland, 2017), it encompasses both densely populated urban environments and small remote rural communities. Of the 7.8 million hectares of land, 1.44 million are designated woodland area (Tatchell-Evans, 2016). Its coastlines, including those found around its 787 islands measure 10,000 km in length, making up 69% of the UK total (Scotland Info Guide, 2002).

It's a little known fact that although only 2% of the entire Scottish landmass is classed as 'Urban' it is home to 82% of the population, (approx. 4,431,854 people). Rural Scotland, which encompasses both accessible and remote rural areas, makes up 98% of the country's landmass and is home to only 18%, (972,846 people) (The National Records of Scotland, 2017). Fig.3 provides a visual overview of the population spread, with urban areas shown in red, and rural areas identified in yellow and green and blue dependent upon scale. Urban to rural classification in Scotland is defined by limitations set around population levels, settlement boundaries and accessibility. Table 2 presents the Scottish Governments Rural/Urban classifications.

(To provide some sense of scale: If you were to divide the landmass of Scotland equally amongst the population, each individual would have access to approx. 0.014 sq. km. Land enough to build 1 and a half international rugby fields per person, or space enough for each individual to build 36 four-bedroom houses all including large gardens).

Scotland

- Towns
- Cities and Urban areas
- Accessible Rural
- Remote Rural

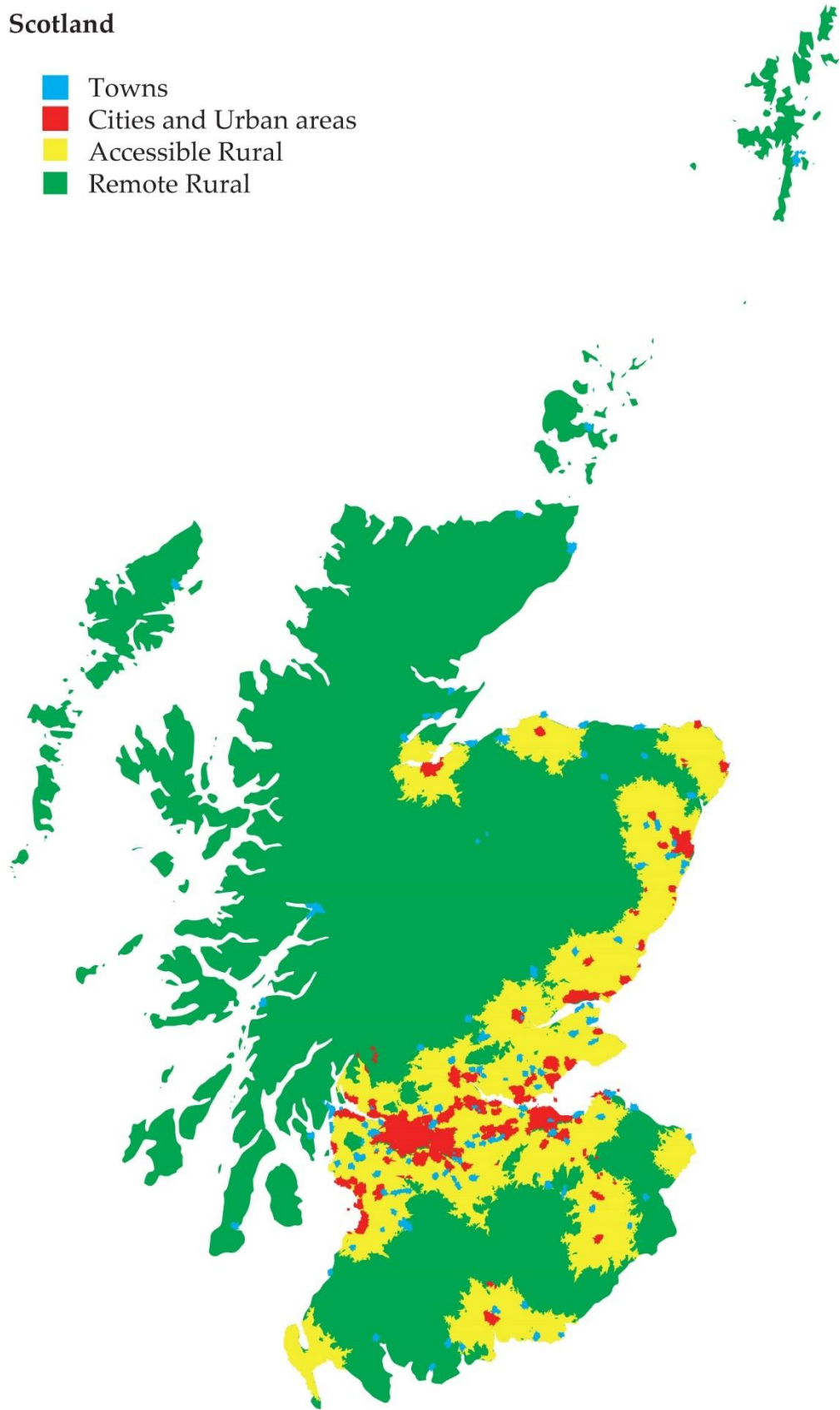


Figure 3. A Birds Eye View of Scotland

Source: Incorporating information from The Scottish Government Agriculture and Rural Economy Directorate, 2015,2018; The National Records of Scotland, 2017.

Table 2. The Scottish Government Urban/Rural Classification, 2017

	Definition	Population Level	Distance
1	Large Urban Areas	125,000	
2	Other Urban Areas	10,000 to 124,999	
3	Accessible Small Towns	3,000 to 9,999	30 min drive of 10,000 + people settlement.
4	Remote Small Towns	3,000 to 9,999	30 min + drive, less than 60 min drive time from 10,000 + people settlement
5	Very Remote Small Towns	3,000 to 9,999	60 min + drive time to a settlement of 10,000 +
6	Accessible Rural	Less than 3,000	30 min drive time to settlement of 10,000 +
7	Remote Rural	Less than 3,000	30-60-minute drive time to settlement of 10,000 +
8	Very Remote Rural	Less than 3,000	60 min + drive time to population of 10,000 or more

Source: Incorporating information from The Scottish Government Urban Rural Classification (2011-12; 2017).

1.6.2 The Scottish Population

Spread across these 8 defined categories (shown in Table 2) lies a rich, diverse multi-cultural nation of people with history and lineage from across the globe⁴. An increase in migration has served to provide some of the more rural areas of Scotland with much needed boosts to their local community populations⁵ (The National Records Scotland, 2017).

The population of Scotland is spread across 32 separate council constituencies. Population levels vary from 21,850 individuals in the Orkney Islands to 615, 070 individuals living within the boundaries of Glasgow City. Glasgow City is undisputedly the most densely populated area of Scotland closely followed by Edinburgh (507,170). This trend of high population levels in urban areas shifts towards rural areas with Fife's population being recorded at 370,330, followed by the Highlands with 234,770. (It should be noted that these areas, although presenting higher population levels, are in fact spread across significantly greater areas of land, so population dispersal is not as concentrated in these rural areas as in urban centres. (For further information around the individual

population levels across council constituency areas see Appendix E, *e1*, Scottish Populations).

The past decade has seen a noticeable shift within populations of rural areas in comparison to urban areas of Scotland (Randall, 2017; The Scottish Government Agriculture and Rural Economy Directorate, 2015, 2018). Scotland is witnessing transitions and cultural changes in urban and rural environments in response to social, environmental and economic problems as individuals, communities, Micro enterprises, SMEs and large businesses generate innovative approaches to rebuild and stabilise situations. The human values that underpin and drive these manoeuvres will play a role in how well Scotland survives another economic decline in the future.

Current data released from the National Records of Scotland (2018) indicates positive growth across the national population has been occurring since 2009. There are a number of reasons for the population increase, not least of which includes the recent migrant crisis, but there are also other explanations available for the growth patterns seen. For example, 2015-16 brought a 52% increase in migration and movement of individuals aged between 18-32 (The Scottish Government Advanced Learning and Science Directorate, 2018; nrscotland, 2017). This is believed to reflect the large number of students who travel to Scotland each year for further education opportunities. There have also been increases in internal migration with individuals moving to Scotland from other UK locations for purposes of employment, education and retirement and for economic and lifestyle factors (Randall, 2017; Nrscotland, 2017, The Scottish Government Agriculture and Rural Economy Directorate, 2015, 2018; The Scottish Government Social Research, 2010).

Nationwide, between 2011-17 the highest levels of population growth can be seen in accessible rural areas at 5.3% (The Scottish Government Agriculture and Rural Economy Directorate, 2018). Unlike the growth seen in the 18-32 pool, this increase is attributed to the migration of older adults away from urban centres to

rural settlements and to the natural aging of the populous (Randall, 2017; The Scottish Government Agriculture and Rural Economy Directorate, 2018). Fig.4 below shows the largest population groups in both remote and accessible rural areas as being residents aged 65+ with lower levels of those aged between 16 – 34. It is believed that many of the younger generation leave in order to seek employment or higher educational possibilities (Randall, 2017).

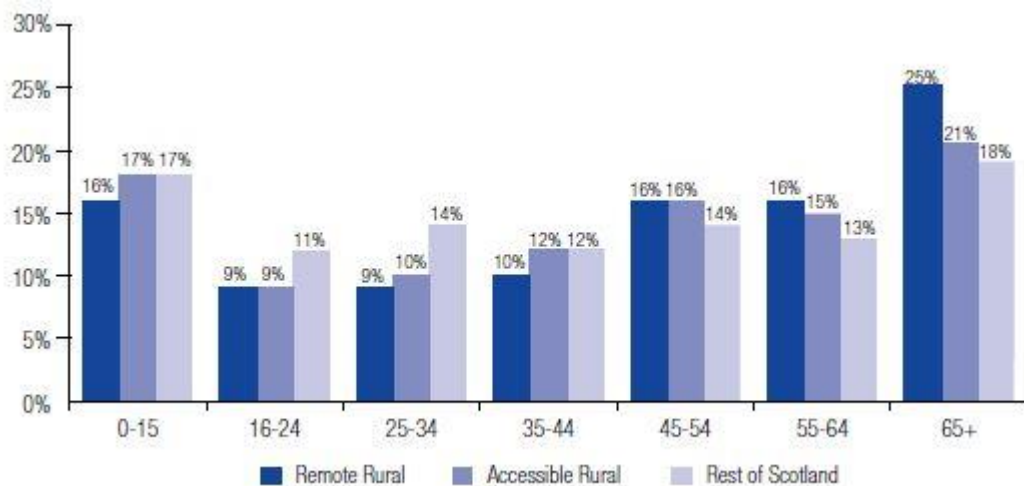


Figure 4. Age Distribution of Population by Geographic Area, 2017

Source: The Scottish Government Agriculture and Rural Economy Directorate, 2018. p.8.

Living situations across Scotland vary between urban and rural areas. Nationwide roughly 889,000 people live alone in Scotland. (This very nearly matches the collective population of rural Scotland). A further 846,000 live in two-person households (1,692,000 individuals) with 699,000 households having 3 or more people, which accounts for approximately 2,823,700 individuals. (nrscotland, 2017).

The higher rate of single person households are more commonly attributed to being located in urban areas rather than remote or accessible rural areas. Accessible rural areas show trends for both small and large family households, and across rural Scotland, there is a consistently higher level of the populous aged over 64 along with smaller numbers of single person households (Fig.5) (The Scottish Government Agriculture and Rural Economy Directorate 2018).

	Remote Rural	Accessible Rural	Rest of Scotland
Single adult	15%	15%	21%
Small adult	19%	19%	19%
Single parent	4%	4%	5%
Small family	11%	14%	13%
Large family	5%	6%	5%
Large adult	9%	11%	10%
Older smaller	21%	17%	12%
Single pensioner	17%	15%	14%
Total	100%	100%	100%

Figure 5. Household Type by Geographic Area, 2017

Source: Scottish Household Survey, 2017, p.13. The Scottish Government Agriculture and Rural Economy Directorate, 2018.

1.6.3 Employment Models and Sectors

As Fig.6 identifies, rural areas of Scotland have lower rates of unemployment than the rest of the nation. They also have higher levels of self-employment (double those found in urban centres) and homeworking (22% in remote areas and 17% in accessible areas) (The Scottish Government. Agriculture and Rural Economy Directorate, 2018. p.63).

	Remote Rural	Accessible Rural	Rest of Scotland
Percentage of Employed Males who are:			
Self-employed	28%	22%	14%
Working part time in main job	15%	11%	12%
With a second job	6%	3%	3%
Homeworkers ²	28%	22%	11%
Percentage of Employed Females who are:			
Self-employed	16%	14%	7%
Working part time in main job	46%	45%	42%
With a second job	6%	6%	4%
Homeworkers ²	19%	14%	7%
Percentage of All employed who are:			
Self-employed	23%	18%	11%
Working part time in main job	29%	27%	27%
With a second job	6%	4%	3%
Homeworkers ²	24%	18%	9%

Figure 6. Patterns of Work by Geographic Area, 2017

Source: The Scottish Government Agriculture and Rural Economy Directorate, 2018.

Beyond self-employment and homeworking, employment avenues in rural areas are often seasonal or part-time, responding to specific needs of the business

(Employability in Scotland, 2012; National Delivery Rural Employability Sub-Group, 2012). However, sectors in which to seek employment across the nation are rich and diverse. There is a perception, particularly for rural areas that employment must fall into the traditionally perceived and predominant lines of trade for these areas, such as:

- Tourism
- Retail
- Hospitality
- Agriculture
- Food processing and primary food production (Employability in Scotland 2012).

Over the years, as technology and knowledge have advanced, a wide range of new activities and sectors have emerged which, (for purposes of data gathering) the Scottish government groups into the following categories:

- Arts, entertainment and recreation; Other service activities
- Education; Human health and social work activities
- Administrative & support service activities
- Professional, scientific and technical activities
- Real estate activities
- Financial & insurance activities
- Accommodation and food service activities
- Transportation & storage; Information and communication
- Wholesale, retail and repair
- Construction
- Manufacturing
- Mining & quarrying; Utilities
- Agriculture, forestry and fishing (The Scottish Government Businesses in Scotland 2017, 2018).

Fig.7 offers an overview of the number of SME and Micro enterprises working across the identified sectors and gives indication of their geographic location.

	Remote Rural	Accessible Rural	Rest of Scotland
Agriculture, forestry and fishing	35%	27%	2%
Mining and quarrying; Utilities	1%	1%	1%
Manufacturing	5%	5%	5%
Construction	10%	11%	11%
Wholesale, retail and repair	10%	10%	15%
Transport, storage and communication	5%	7%	10%
Accommodation and food services	8%	5%	8%
Financial, insurance & real estate	2%	3%	5%
Other activities¹	21%	29%	36%
Education, health & social work	3%	3%	6%
Public	0%	0%	0%
Total	100%	100%	100%

Figure 7. Percentage of Small and Medium Enterprises by Industry Sector and Geographic Area, 2017

Source: The Scottish Government Agriculture and Rural Economy Directorate, 2018.

From within these sectors, 6 key areas were identified by the government as being essential for future development and growth (McCall, 2017: The Scottish Government, Growth Sector Statistics, 2017).

- Food and Drink
- Creative Industries (including digital)
- Sustainable Tourism
- Energy (Including renewables)
- Financial and Business Services
- Life Sciences (SCRU, 2016. p.25).

All of these avenues are essential for the future development of the Scottish economy and environment. For example, if we consider Scotland's Creative Industries, we see that they play a fundamental role within the country's economy and its Micro and Small to Medium Enterprise sector (The Scottish Government, Growth Sector Briefing, 2018). An assessment undertaken by the Scottish Government in 2014 showed that Scottish Creative industries contributed £5.8 billion towards the economy (House of Commons, Scottish Affairs Committee, 2016; The Design Council, 2015). Within this assessment it was also found that at that time, the 13,825 registered Scottish enterprises were predominantly SME and Micro enterprises making up 97.9% of the group. (Ibid).

As of 2015, 73,600 individuals were recognised as being employed within this specific sector, a growth of 1,800 from the previous year. (This figure was not inclusive of students or freelance workers within the field).

Each of these key areas have huge diversity within their industry capabilities. For example, Table 3 offers insight into the 16 categories of work recognised by the Scottish Government to belong within the Creative Industries.

Table 3. Jobs within the Creative Industries Sector.

Advertising	Architecture
Visual Arts	Crafts
Fashion and Textiles	Design
Performing Arts	Music
Photography	Film and Video
Computer Games	Radio and TV
Writing and Publishing	Heritage
Software/Electronic Publishing	Cultural Education

Source: The Scottish Government Arts, Culture and Sport, Business, Industry and Innovation (2015).

Within avenues for employment found in rural areas, these are generally considered to be outliers, but in fact, they form an intrinsic and valuable part of a complex system which make immeasurable contributions to the economy and to the wellbeing of the whole population.

An additional key component within the employment sector is that of the Scottish export market. As a nation, Scotland is heavily reliant upon both its rural economy and the distribution of rural products across international markets (The Scottish Government Economic Development Directorate, 2015; The Scottish Government, Economy and Labour Market, 2016). Excluding oil and gas, the financial value of Scotland's international and internal exports are currently estimated to be worth of around £75.6 billion (The Scottish Government, Economy and Labour Market, 2016) with International exports making up £29.8 billion of the collective market sales. Considering the figures presented in 2016, this breaks down as follows: (43%) £12.7 billion in European Union exports and (57%) £17.1 billion in Non-European Union Exports (Ibid, p.11). Internal trade across the United Kingdom generated approximately £45.8 billion.

For the purposes of export, industries in Scotland are catalogued within one of 100 available sectors (Prosser, 2007a, 2007b; The Scottish Government, Economy and Labour Market, 2016). Of these, 5 sectors account for approximately 50% of all exported goods that the nation produces (£29.8 billion internationally):

- Food & Drink (of which Whisky Industry plays a large role), (5.5 billion).
- Professional, Scientific and Technical (Approx. 3.7 billion).
- Petroleum and Chemicals (Approx. 2.6 billion).
- Mining and Quarrying (Approx. 2.0 billion).
- Wholesale (Approx. 1.7 billion) (Ibid, p.8).

The Scottish business sector, across local, national and international markets brings a rich array of quantitative and qualitative values to the nation, spanning from fiscal benefits and profits through to experiences and skill development, not to mention the support this sector provides maintaining and preserving traditional craftsmanship capabilities, historical heritage sites and supporting the continuation of rare skill sharing and education. However, it is often perceived that the economy is created and maintained by large scale and conglomerate scale businesses (they are similarly perceived as reaping the financial benefits of this situation too) when in fact, the majority of Scottish businesses which contribute to both the financial (and unseen social) economy of the nation fall within the category of Micro and Small to Medium sized enterprises. As Van Gogh wrote: 'Great things are done by a series of small things brought together' (1882). The SME and Micro enterprise sector as will be discussed, is a fundamental component to Scotland's lasting wellbeing, both socially and fiscally.

1.6.4 Micro, Small, Medium and Large Business in Scotland

Scotland's rural businesses and communities play a key role in the financial viability and long-term sustainability of the Scottish economy (SRUC, 2016; The Scottish Government Rural and Environmental Analytical Services, 2010).

'Small and Medium Enterprises (0-249 employees) account for two thirds of businesses in remote rural areas [...] [and] 59% in accessible rural areas [...] Micro businesses (0-9 employees) are

particularly prevalent in remote rural and accessible rural areas (37% and 31% respectively). This compares to only 13% in the rest of Scotland' (The Scottish Government. Agriculture and Rural Economy Directorate 2018. p.57).

Figures from March 2018 (Fig.8), identify the prominence of SME and Micro industries across the Scottish business sector, showing Scotland as home to 345,915 (registered and unregistered) private sector enterprises, of which 343,535 are SMEs or Micro in scale. They now make up 99.3% of the business sector and provide employment for 1.2 million individuals. The remaining 2,380 enterprises are considered as large businesses (The Scottish Government, Businesses in Scotland Publication, 2018).

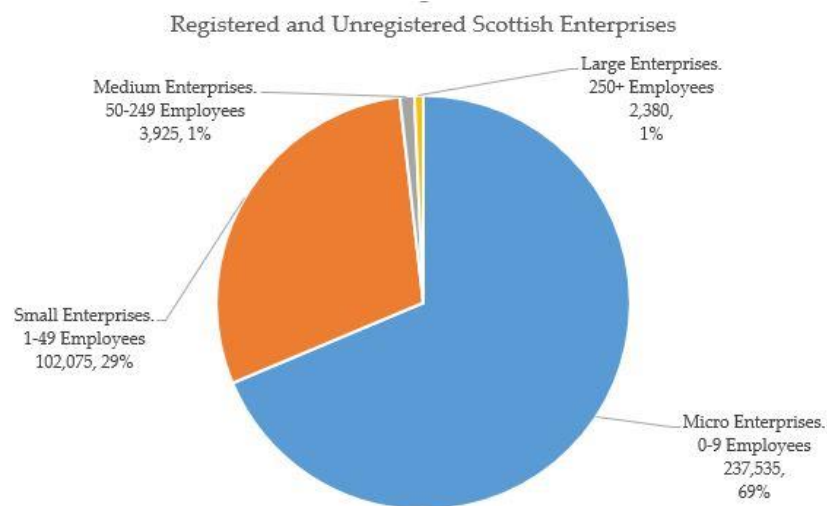


Figure 8. Businesses in Scotland (2018) Registered and Unregistered Scottish Enterprises

Source: The Scottish Government. Businesses in Scotland Table 9, 2018.

Factors which define micro, SME and large businesses in Scotland match those laid out by the European Commission. This allows for comparability at national and international levels to occur.

'The category of micro-small and medium-sized enterprises (SMEs) is made up of enterprises which employ fewer than 250 persons and which have an annual turnover not exceeding 50 million euro, and/or an annual balance sheet total not exceeding 43 million euro' (European Commission, 2015. p.3).

Within this, SMEs are grouped as either;

- Autonomous – independent or with minority partnership.
- Partner – with an allowance of 25% - 50% holdings shared
- Linked Enterprise – holdings with additional enterprises above 50%.

Employee figures, turnover and annual balance also help to determine where within the SME and Micro Enterprise categories an industry or enterprise sits (Table 4).

Table 4. Business Size Classifications

Model Type	Classification Categories (no of employees)	% of all Scottish Businesses	No of Businesses
Sole Proprietor/Partnerships	0	70.6% of Private Sector turnover	
Micro	0-9		
Small	0-49	98.3 %	359,384.8
Medium	50-249	1.1 %	4021.6
Large	250 +	0.6%	2193.6

Source: Incorporating information from The Scottish Government, *Businesses in Scotland* (2017) and The European Commission (2015).

Micro and SME businesses are found all across Scotland, from remote rural areas all the way through to urban centres. Collectively these industries provide employment for 1,939,900 people and generate turnover of approximately £261,523 million per year. As can be seen from Fig.9 and Fig.10, Micro and SME enterprises are the predominant business model types found in both urban and rural environments.

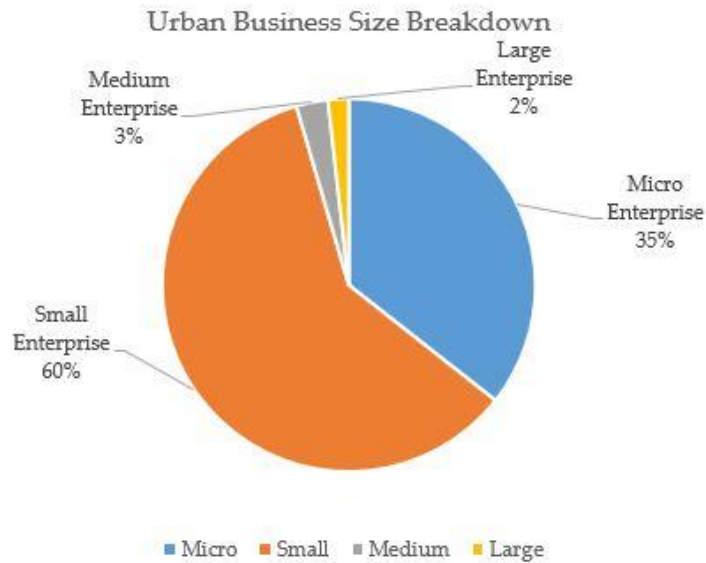


Figure 9. Urban Business Size Breakdown

Source: The Scottish Government. Businesses in Scotland Table 9, 2018.

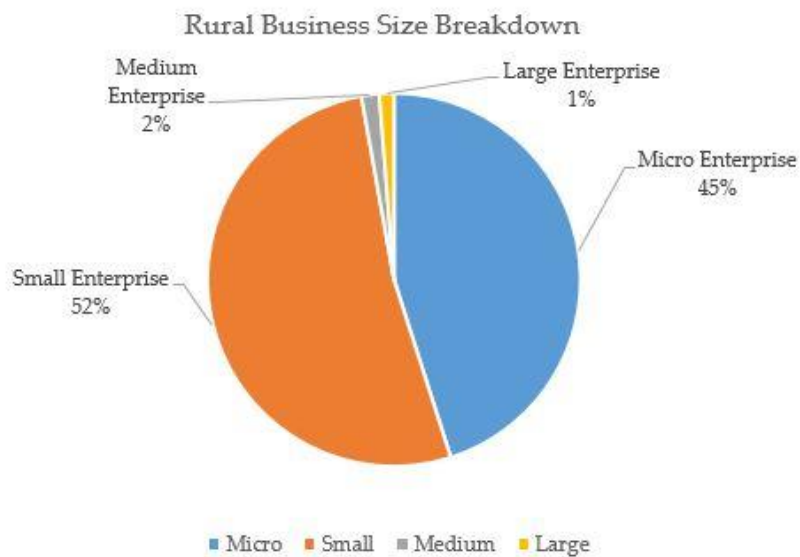


Figure 10. Rural Business Size Breakdown

Source: The Scottish Government. Businesses in Scotland Table 9, 2018.

As can be seen, Micro and SME make up 98% of businesses within urban centres across Scotland and 99% in rural areas, providing an invaluable avenue of employment for many of the population. Fig.11 and Fig.12 present ratios of employment found across business scale in urban and rural areas.

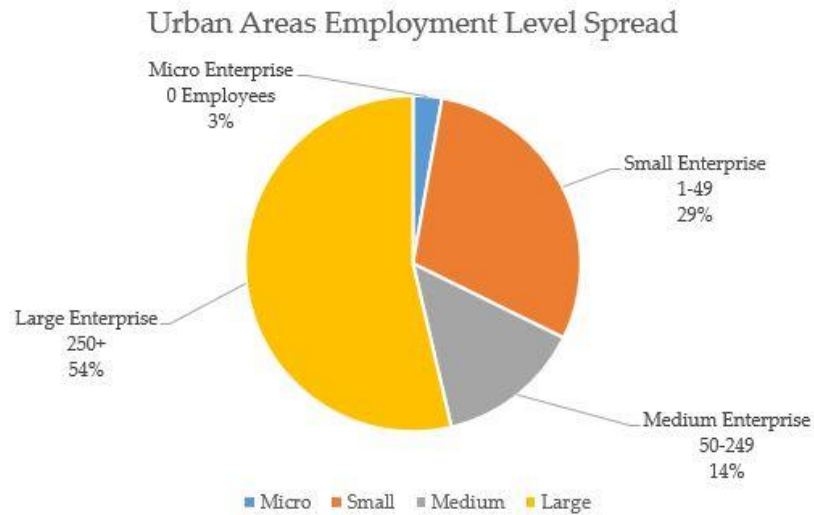


Figure 11. Urban Areas Employment Level Spread

Source: The Scottish Government. Businesses in Scotland Table 9, 2018.

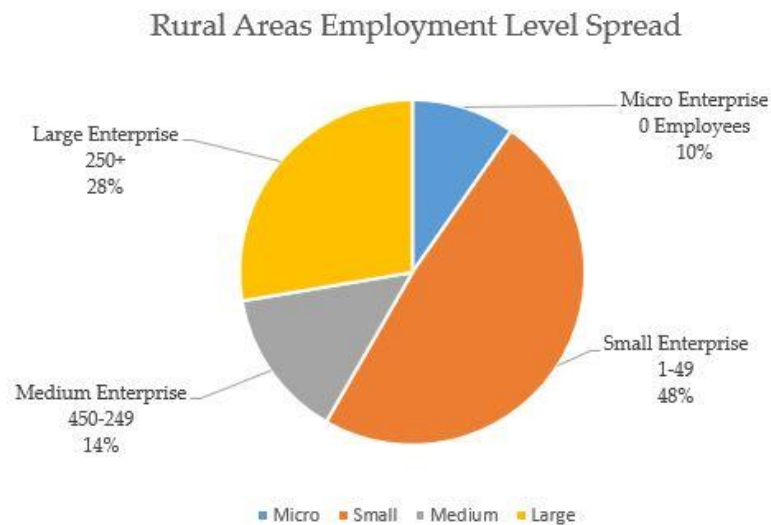


Figure 12. Rural Areas Employment Level Spread.

Source: The Scottish Government. Businesses in Scotland Table 9, 2018.

While 98% of urban businesses are Micro or SME in scale, current figures indicate that they provide 46% of all urban avenues of employment (excluding government positions). In rural areas, where Micro and SMEs make up 99.3% of the business market, they create 72% of all employment. It is understandable then, given the prevalence of SMEs and Micro businesses within the Scottish

business market, across both urban and rural environments, to appreciate why these models are often described as the 'engine rooms' of economies (House of Commons, 2005, p.163.) and are considered as crucial to both Scottish, and wider European markets (European Commission, 2015).

SMEs hold a vitally important role within creating and maintaining a stable economic environment for Scotland which is conducive towards both financial and social levels of growth. There is a clear prevalence of Small and Micro businesses in areas of rural Scotland than in urban areas (The Scottish Government, Rural and Environmental Analytical Services, 2010) and this plays a fundamental role in the survival, longevity and wellbeing of rural communities across the country.

Within remote rural areas, self-employment accounts for nearly one third of employment (29%) and one quarter (20%) within accessible rural areas. Home working accounts for a further 27% in remote rural areas and 21% in accessible rural areas. These results sit in stark variability towards the 13% and 11% respectively found within the remainder of Scotland (The Scottish Government, Agriculture and Rural Economy Directorate, 2015).

There are drastic variations and differences found between life experienced in rural communities to those encountered in Scotland's urban centres. According to the 2018 Office of National Statistics (ONS) report (The Scottish Government Agriculture and Rural Economy Directorate, 2018), although living in rural Scotland has its challenges, including significantly higher rates of fuel poverty, lower levels of accessible healthcare, poor access to public transport, higher cost of living, reduced service provisions and educational possibilities to mention a few, it is actually rated as being a 'Very Good' place to live in relation to the rest of the nation.

SMEs hold a vitally important role in creating and maintaining a stable economic environment for Scotland that is conducive towards both financial and social

prosperity. Given the current severity of the situations being faced by the nation's economy, it is imperative that it is a sector functioning with the full support of the population if social wellbeing is to be restored.

[Scottish SMEs] They generate the income, create the employment, maintain the presence of young families and young adults and justify and attract the private and public sector investment in amenities that keep these communities alive and thriving' (Fraser in Freeman, 2015).

As has been shown, the SME sector within Scotland is largely rural based and the diversity of Scotland's environmental and societal structures lend themselves to be subject to factors that impact multiple aspects of life to varying degrees (Dunlop et al, 2012; Edwards & Wilson 2008; Hirsch et al, 2010, 2013; SCRR, 2013; The Scottish Government, Department of National Statistics: SIMD, 2012). Wide variables across factors such as: Lifestyle; Service Provision; Accessibility; Internet connectivity; Poverty; Higher Costs of Living; Employment; Affordable housing; Fuel access and cost; Planning and Regulations can be discovered between urban and rural development and sustainability (Dunlop et al, 2012; Edwards & Wilson, 2008; SRUC, 2016; The Scottish Government, Department of Finance, Employment and Sustainable Growth, 2012; The Scottish Government, Department of National Statistics: SIMD, 2012; The Scottish Government, National Records of Scotland Statistics, 2012). Many of these factors influence rural development posing substantial but not insurmountable barriers towards future growth (Edwards & Wilson, 2008; The Scottish Government, Finance, Employment and Sustainable Growth, 2012).

The network of Scotland's rural SMEs is integral to supporting both the financial and social wellbeing of the nation. Clearly then, there is potential for utilising this sector as an avenue to support and cultivate future growth and positive social impacts. Micro and SME enterprises hold a role of particular vital importance within the Scottish economy. They provide enormous levels of employment and are a keystone in Scottish economic and community survival.

It has been seen previously, that through times of turbulence, resilient behaviours can be supported through expression and action upon shared goals and values within communities (Coutu, 2002). This reality around sharing values and ideals is particularly pertinent given the current economic and environmental challenges faced across society today.

1.6.5 Scotland, The Economy and Poverty

Current reports portray Scotland's present economic and societal climates as being a direct reflection of the impact and effects of the financial crisis of 2008/2009 (Clarke, 2017; Kollwe, 2018; Picken, 2019)

'The impact of the financial crisis is still reflected in economic data. For example, average Scottish earnings, in real terms are still below their level in 2008' (Office of the Chief Economic Adviser, 2019, p.18).

Since the crash, Scotland, (along with many other countries), has faced an extended period of economic turmoil and uncertainty and been subjected to enforced austerity measures as steps to stabilise the situation were enacted.

The financial crash, precipitated by a crisis across the US sub-prime mortgage market, triggered mass failings throughout the global banking sector. Events began to unfold in America as the Federal Reserve was called upon to provide a bailout for The Bear Sterns Bank. This was closely followed by the subsequent collapse of The Lehman's Brothers Bank (Burkhanov, 2011; Financial Services Institute, 2009). These events set off a number of very serious ramifications and impacts across the global platform, not least of which within the UK included the collapse of the UK bank 'The Northern Rock' (Milne, 2008). These events collectively signalled the beginning of a period of extreme economic instability and unpredictability, the effects of which are still being felt over a decade later.

Across all of Scotland the crisis had a number of impacts including:

- The Royal Bank of Scotland, which at the time was considered to be largest company in the world (in relation to its assets) had to be bailed out and taken over by the British Government when it experienced ‘The biggest [financial] loss in British history’ (Beckett, 2009).
- Halifax Bank of Scotland (HBOS) which initially required to be refloated by government funds then to be rescued was subsequently taken over by Lloyds TSB (Ibid, 2009).
- Levels of employment fell by 154,000, and lengths of unemployment experienced rose (Beckett, 2009; Campbell et al, 2013; The Scottish Government Equalities Groups and the Recession, 2010).
- Rates of part-time employment increased with categoric shifts occurring across employment models (Hirsch, et al, 2010, 2013) with individuals adopting models of working which incorporated taking on multiple avenues of part-time work to make ends meet (Campbell et al, 2013; Scottish Council Voluntary Organisations SCVO, 2012; The Scottish Government Economy Energy and Tourism Committee WiSE, 2013).
- There was a visible rise across levels of self-employment and entrepreneurial and innovative ventures also occurred as the population sought to sustain and maintain their income levels (The Scottish Government National Statistics Publication, 2013; Nesta, 2012):
- Income inequality increased; Public sector funding and public services were reduced (The Scottish Government Equalities Groups and the Recession, 2010)
- The number of evictions and foreclosures on homes rose across the nation with the poorest in society particularly affected (Leask, 2018; The Scottish Government Repossessions Group, 2009; Shelter Scotland, 2009, 2012; Hirsh, et al, 2011).
- The ‘unprecedented fiscal retrenchment’ (Gibb & Leishman, 2011) implemented by the wider UK government as the attempted as an attempt to stabilise the economy and reduce the amount of national debt had a significant and negative effect upon the Scottish Governments fiscal capabilities and responsibilities to its constituents.
- National output shrank by 6% during 2008-9 (The Scottish Government Economic Strategy, 2015).

The UK government instigated several actions to re-stabilise the economy including austerity measures such as cuts across public spending allowances and funding⁶. These cuts, combined with many other austerity measures enacted by the government, have had considerable impact upon service provisions across the nation, and the societal and business implications of such reductions on funding have lasted far longer for Scotland than anyone initially anticipated. The lack of a living wage⁷ in proportion to minimum wage has served to further aggravate financial situations driving households in both urban and rural areas into situations of in-work poverty (Oxfam, 2013).

Controversially, 10 years on from the initial point of financial collapse, government communications from the Office of National Statistics now indicate that the period of instability is over. GDP although still fluctuating, is portrayed in government reports and papers as having returned to moving in a predominantly positive direction (Clarke, 2017). This perceived recovery must however be viewed in context, for example, the data considered is viewed from a UK wide perspective. Technically, and statistically speaking, full recovery has only occurred in specific cities, all of which are in England. Scotland and Wales remain in a position of notable and significant loss following the 2008 crash (Ibid, 2017). This loss becomes highly visible through examining the lack of significant shifts in wages earned by the population. Currently wage rates are still lower than those pre-recession. This impacts on all aspects of daily life for individuals and communities.

This failure in recovery provides some explanation towards appreciating and understanding why levels of poverty and financial stagnation experienced by individuals and communities across the population of Scotland have actually increased (BBC, 2018a). Wages have not risen but inflation and interest rates have. This has created an environment where everything costs more, but people's earnings don't stretch as far. These inequalities also serve to highlight inabilities in the current models of assessment (such as GDP) to accurately reflect life as is

experienced by the people who actually create the economy through their labours.

Portraying the recession as being over and indicating that the country has returned to a more positive position negates acknowledgement of the bare facts which show for example:

- That year on year poverty levels in Scotland have grown (BBC, 2018a).
- The number of foodbanks across the country have increased (Green, 2015).
- Homeless numbers have risen exponentially (BBC, 2018b; Leask, 2018).
- Child poverty is now at its highest rates (CPAG in Scotland, 2018).
- Unemployment rates have risen (BBC, 2018c).
- Industries have collapsed (Gallagher, 2018).
- Business failure rates and insolvencies have risen (McCance, 2018).
- Public spending, which is already stretched to the limit has seen further reductions (Macnab, 2017; The Scottish Government Newsroom, 2017).

Nor does it acknowledge the impact on daily life that the lack of wage increase in relation to inflation has upon each member of the Scottish population.

It could be argued however that these events, while catastrophic for the most vulnerable in society, have also fuelled Scottish capabilities in creative problem solving as individuals, communities and businesses have endeavoured to minimise negative effects upon the quality of life experienced by its population.

Following the economic crash, categoric shifts in employment models occurred generating a change in trend from full to part-time models of working (Hirsch, et al, 2010), and, as a result, a substantial increase in the number of individuals implementing models of working which incorporated multiple avenues of part-time employment (Scottish Council Voluntary Organisations SVCO, 2012; The Scottish Government. Economy Energy and Tourism Committee, 2013), self-employment, and entrepreneurial and innovative ventures (Nesta, 2012; The Scottish Government, National Statistics Publication, 2013) has grown as individuals seek to sustain their income levels.

1.6.6 The Impact of Rural Living

Rural Scotland, home to over a fifth of the population, is a diverse environment world renowned for its natural beauty, wildness and national heritage. It is 'a critical part of our nation, providing substantive economic, environmental, social and cultural benefits' (Donnelley, 2007). Perhaps not as well known is that life in rural communities is often coupled with 'severe social and economic problems, caused by poor transport, lack of economic opportunity and a high cost of living' (Vaitilingam, 2010, p.27).

'low levels of business growth and value added, environmental obligations,[...] generally lower levels of satisfaction with the quality and convenience of services, [...] relative dependence in some areas on subsidy-dependent agriculture, [...] demographic changes and additional demands on services' (Donnelley, 2007).

These problems existed pre-economic crash, impacting daily life and business survival across Scotland's rurality. The events of 2008/9 and those which followed have served to further exacerbate situations across some of Scotland's most vulnerable and valuable communities.

Reflected in the works of Atterton, 2016; Danson & Trebeck, 2011; Donnelley, 2017; Randal, 2017; Vaitilingam, 2010; and others it is apparent that the complexities faced in rural communities and by Micro and SME enterprises are numerous, varied and complex. Reductions in available funding for social and public services, which are predominantly run by small voluntary organisations has instant negative effect upon those who utilise and rely upon these resources. In many cases, it is the voluntary sector who provides the majority of services to rural and remote communities (Vaitilingam, 2010. p.27). Issues which arise as a result of these reductions then compound, grow and create further negative repercussions which can carry impact across the whole community. Poor public transport, limited service availability, reduced opportunities for higher and further education (mainly due to accessibility), higher levels of fuel poverty and a higher cost of living (Atterton, 2016; Randall, 2017) all have an effect. There are

also fewer employment opportunities noted in rural areas (Donnelley, 2017; Employability in Scotland, 2018; The Scottish Government Agriculture and Rural Economy Directorate, 2018; Vaitilingam, 2010). It is factors such as these which are attributed to depopulation of rural communities, as individuals, particularly the younger generations leave their homes in order to find employment or better opportunities in urbanised areas (The Scottish Government. Agriculture and Rural Economy Directorate (2018).

Scotland's economic climate is strongly interlinked with the success and failures of its SME and Micro business eco-systems. This in turn directly impacts the wellbeing of their local communities. These models of business have been described as the 'engine rooms' of economies (House of Commons Trade and Industry Committee, 2005, p.163.), and are considered as crucial to both Scottish, and wider European markets (European Commission, 2015). Scotland's rural communities and businesses provide a key role to both the financial viability and long-term sustainability of its rural and urban areas (SRUC, 2016; The Scottish Government Rural and Environmental Analytical Services, 2010). But these are communities in vulnerable positions who are subject to additional problems arising from situations such as population decline which affect their overall levels of community wellbeing (Danson & Trebeck, 2011).

Rural communities are not homogenous in the same manner that urban centres can be perceived. Often additional problems which arise are location specific, thus adding to the complexity and difficulty faced in enacting appropriate responses. Employability Scotland (2012) expands upon these identified factors, citing the following issues as critical for both rural communities and their Micro and SME networks:

- Equality of access and opportunity – including identification of clients and effectively delivering their service needs
- Transport – to and from sources of employment, of which there are fuel, time and cost implications along with limited public transport services.

- Employment – often seasonal or part-time, responding to specific needs of the business. The small scale of many rural businesses (with the majority being micro-businesses) reduces capacity for being able to offer employment. They also lack management capabilities for handling larger quantities of staff. Scale and size of rural businesses also negatively impacts their capability to employ staff with additional support requirements.
- Education – There is limited access to sources of further education (FE) or higher education (HE) with many physically located outwith areas of access to potential clients.
- Micro-business dependency – Most businesses located rurally are micro in size, (0-9 employees), not SME (10-249 employees). Client networks are key in this environment. The scale of businesses also impacts on their ability to meet the needs of potential markets
- Lack of diversity – A lower range of employment opportunities, with many connected to the predominant lines of trade for these areas, including tourism, retail, hospitality, agriculture, food processing and primary food production.
- Service provisions – Limitations to childcare, due to transport, finance or service provision can impact on capabilities around employment and education. Delivery of services across large geographic areas to meet the needs of small populations who are located at distances, creates problems with factors such as transport, finance and adequate and appropriate service provision. Poor road and transport services, poor communication networks compound complexities in this area.
- Approximately 50% of those living in remote rural areas are experiencing fuel poverty, this drops to 30% in accessible rural areas. Urban areas of Scotland however only present 24% of households as facing the same situation. Household expenditure of fuel for transport purposes is far higher in rural areas than urban. 50% of rural residents report fuel expenditure exceeding £100 a month.
- Access to public services, healthcare and reliable and regular public transport is not as well developed or easily obtained in rural areas compared to urban areas.
- The cost of housing in rural areas is higher, and second home purchases made by those living out with the area impacts on the availability of property for local residents.

Problems which arise in response to factors such as these often fall into the category of 'Wicked Problems' (Churchman, 1967; Newell et al, 1957; Rittel & Webber, 1969; Simon, 1973). Which in short, are situations which arise in response to, and as a result of, a complex web of interconnected factors that have no specific or clear line for solution. Wicked problems are discussed in greater detail within chapter 2.2.

1.7 Summary

The Scottish SME and Micro sector is vitally important to the nation. Rural areas across Scotland are growing and expanding in response to the current ever developing and evolving complex situations. The negative impacts which these financially testing times are having upon society and upon the quality of life experienced by people across the nation has led to new approaches being developed as individuals and communities endeavour to sustain and support their ways of life through innovative measures.

Scotland's economic and societal stability has suffered from a number of years decline and recession following the collapse of 2008 (Boyd, 2011). The SME sector is a neglected and underappreciated area of the economic structure, yet it provides a consistent level of stability and reliable input and output whilst supporting the longevity of markets through 'stimulate[ing] entrepreneurial spirit and innovation throughout the EU and is [...] crucial for fostering competitiveness and employment' (European Commission, 2015 p.4).

Although small in physical scale, rural communities and businesses provide inimitable levels of stability and hope to both our economic and social development. Micro and SME enterprises are described as 'engine rooms' and 'beating hearts' of rural communities for a reason. They play a fundamental role in the national economy. The communities they are situated within are acknowledged as having cultivated and created environments where there is a

greater sense of belonging, lower rates of crime, higher levels of volunteering and more positive perceptions of the quality of life being experienced measured, but they both need support in developing mechanisms for resilience. (The Scottish Government. Agriculture and Rural Economy Directorate (2018).

For the sake of both current and future generations there is a need to build resilience into the Scottish economy. The SME and Micro enterprise sector require support to ensure that future episodes of economic turmoil do not lead to their demise. The current economic and market reality for many Scottish SMEs is one of instability, insecurity and decline. As such, businesses are faced with taking necessary steps to ensure market position by adopting new models and behaviours, such as diversifying their approaches to adapt to current consumer values and drivers, embracing 'collective intelligence' and integrating fields of knowledge into practice (Leadbeater & Mulgan, 2013). Given this sectors 'lynchpin' status within both the local and wider national economic picture, it is a sector in need of careful cultivation and nurturing.

It is imperative that, during these periods of economic instability, along with periods of sustained growth, we continue to explore ways in which resilience can be built for both people and industry. Developing and maintaining ways in which individuals and communities can better serve each other and themselves provides new avenues through which improved quality of life experience can be obtained. SME and Micro enterprises along with Creative Industries are vital to the future development and growth of the Scottish economy. Even more so, they are key to supporting positive changes that occur in the quality of life of the population. We need to refocus our economy towards wellbeing and quality of life for all.

This research argues that through the development of communication between business and communities, these 'clusters' (Kramer & Porter, 2011), may experience opportunities which can bring about beneficial results for both sides (SMEs and their local communities). It aims to explore qualitative perspectives of

personal and social values held by both communities and businesses, proposing a framework through which the communication of qualitative human values can be supported. It argues that positive impacts to quality of life and the wellbeing of people can be obtained through cultivating reciprocal levels of understanding around human values held within communities, by individuals and businesses.

2

**Understanding the role of design
and design thinking in
contemporary society**

Chapter 2. Understanding the Role of Design & Design Thinking in Contemporary Society

In order to understand the aims and objectives of this thesis, this chapter begins by briefly discussing how the field of design has changed over the last two decades. It moves on to consider the role and benefits of utilising design in addressing complex problems and systems, paying particular attention to the scholarly work of Buchanan and others. With design practice spreading its domain of activities into fields beyond design, this chapter takes a closer look at design thinking, drawing upon processes and methods that have emerged over recent years. The chapter concludes by discussing benefits of implementing Design Thinking as a strategic tool within societal constructs and organisations. In doing so, the chapter serves to position Design Thinking as an iterative process in supporting the generation of new knowledge and insights which may have applicability in modern society.

*'Design] ... it involves a sophisticated mental process
capable of manipulating many kinds of information,
blending them all into a coherent set of ideas and finally
generating some realisation of these ideas'*

(Lawson 2005, p.14)

2.1 No Magic Wands Allowed; Unpacking the Ambiguity of Design.

The term 'Design' is inherently ambiguous, and has been used as a verb, noun and adjective (Lawson, 2005). Speaking metaphorically, it is akin to an iceberg with many of its definitions and capabilities hidden below the surface. Often its meaning is positioned within the context of discussion where it can be used to

communicate, explain or categorise concepts, ideas, actions, activities, practices, philosophies, methodologies, aesthetic components, or experiences which are each connected by a core, creatively oriented foundation. Buchanan (1992) usefully points out that:

[...] No single definition of design, or branches of professionalized practice such as industrial or graphic design, adequately covers the diversity of ideas and methods gathered together under the label. Indeed, the variety of research reported in conference papers, journal articles, and books suggests that design continues to expand in its meanings and connections, revealing unexpected dimensions in practice as well as understanding. [...]’ (Buchanan, 1992, p.5).

For all that they may be interpreted as, design is neither magical, nor mystical (Cross, 2006; Dorst, 2017; Kolko, 2011; Lawson, 2005). There is, no ‘disneyesque’ moment within the process; no fairy-godmother armed with sparkling wand bestowing practitioners with gifts of intuitive response, bursts of inspiration, Ah ha’ or Eureka moments⁸ (Dorst, 2017, p.148)⁹. Designers enact and undertake creative steps and processes which are influenced by training, knowledge, empathy and imagination, all of which support lines of creative thinking. Manzini (2015) frames design as the result of three human gifts or abilities:

- ‘Critical sense (the ability to look at the state of things and recognise what cannot, or should not be, acceptable).
- Creativity (the ability to imagine something that does not yet exist).
- Practical sense (the ability to recognise feasible ways of getting things to happen’ (p.31).

These abilities, coupled with previous experiences and the resulting explicit, intuitive and tacit knowledge which designers develop enables designers in their actions. The development of explicit, intuitive and tacit knowledge enable designers in their actions.

It could be argued that the rapid diversification and expansion of contemporary design capabilities, alongside an abundance of vague definitions and buzzwords,

has fuelled perceptions that design is akin to a kind of alchemy to those without an established background in the sector. It is these impressions which many respected design practitioners have sought to clarify over the years. For example: in a broad and widely used definition provided by Simon (1988), the activity of design is positioned as being undertaken by those who wish to facilitate change, with the underlying implication that design is a universal skill and capacity: 'Everyone designs who devises courses of action aimed at changing existing situations into preferred ones' (p.67). The same definition also places design as being firmly located in the domains of object creation with Simon reasoning that 'Design is concerned with how things ought to be, with devising artefacts to attain goals' (p.69). Indeed, even the works of Papanek (1963) portray design as a ubiquitous action inherent to human nature 'All men are designers. All that we do, almost all the time, is design, for design is basic to all human activity. The planning and patterning of any act towards a desired, foreseeable end constitutes the design process (p.2).

This stance and perspective of design, as argued by Manzini (2015), lacks depth and detail. It leads to situations where not only is design practice perceived as being a universal problem solving mechanism; 'an agent for solving problems at all levels, from those in everyday life to those on a global scale' (p.34), but also fuels public interpretations and appreciations of the practice which undermine the hard learned skills and extensive knowledge of professionals working within the field. Attitudes surrounding universal capability and applicability are both speculative and inappropriate. Whilst clear examples are available of the benefits which can be gained through implementing design approaches, there also exists equally as much evidence highlighting where it's application is inappropriate, unsuitable and in some cases seen as detrimental or dangerous.

Offering a perspective and understanding more reflective of contemporary design capabilities, Manzini proposes that design is, in addition to Simon's definitions, is:

‘concerned with making sense of things – how they ought to be in order to create new meaningful entities [...] [Design] collaborates actively and proactively in the social construction of meaning. And therefore also, of quality, values, and beauty’ (Ibid, p.35).

This positions design practice as being concerned with, and capable of, much more than object and artefact creation. It acknowledges and recognises that design practice has emergent roles in understanding, communicating, exploring and contemplating facets of modern society.

While like Simon and Papanek, Manzini attributes and acknowledges designerly capabilities to every human, there is a restricted quality to his definition. He frames design capabilities and practices with greater depth, delineating between professional design practices and general creative abilities. Rather than presenting a sweeping high-level comment which generalises design capabilities as being inherent to everyone, Manzini presents a more nuanced and specific definition placing designerly actions as occurring in one of two modes: Diffused Design, considerate of design enacted by ‘those with natural designing capacities’ and Expert Design, that which is enacted by professionals with training and experience within the field. It is the professional mode (Expert Design) which provides practitioners with ‘the conceptual and operational tools required to support designing processes within the field’ (Ibid, p.37).

Design guides, inspires and describes processes we undertake as we explore and engage with the world. It supports us in expanding our learning and understanding of humanity and it’s complex and interconnected environments. It enables us to refine our methods of expression and communication, supports our evolution and, in one form or another, is surrounding us at all times. According to Cross (2011) ‘anything that isn’t a simple, untouched piece of nature¹⁰ has been designed by someone’ (p.4). Manzini’s position implies that where ‘Expert Design’ exists, it is the result of conscious intent, based upon a body of experience, knowledge and skills which acknowledge and understand designs’ role, influence and potential. Alternatively, ‘Diffused Design’ conducted

within the everyday by non-specialists, is conveyed as occurring through far more sub-conscious reactions, ones which disclose and reveal the natural creative behaviours of humanity. Design is an integral component of our cultural and historical evolution. Designerly behaviours (such as those implied in Manzini's definition of 'Diffused Design') can be tracked all the way back to the origins of man; from the creation of hunting tools and cooking implements to hearths and shelter constructions. These behaviours and actions primarily emerged and served as a functional response to the basic human needs of hunger, shelter and safety (Smithsonian, 2016). Since these early creative forays countless generations of humans have continued to explore these abilities, creating and manipulating their environments and surroundings to provide necessary and desired experiences and interactions in relation to the human experience (Cross, 2011; Friedman et al. as cited in Dorst, 2015; Fry, 2012; Smithsonian, 2016).

'[...] All that we do, almost all of the time, is design, for design is basic to all human activity. The planning and patterning of any act toward a desired, foreseeable end constitutes the design process. Any attempt to separate design, to make it a thing-by-itself, works counter to the fact that design is the primary underlying matrix of life [...] Design is the conscious and intuitive effort to impose meaningful order' (Papanek, 1985. p3).

In all its forms, design has been and is, integral to the development of mankind (Fry, 2012; Lawson, 2005; Papanek, 1985). It has evolved across societies as a process, an action in response to, and as a reflection of, complexities and needs congruent within the modern world (Friedman, et al. 2015; Groupius, 1937; Norman, 2011; Papanek, 1989).

The notion of design as a 'people-centric' problem-solving technique (Curedale, 2013) being relatively new conceptually, is, when considered across the tides of history, actually a well imbedded evolution-driving practice of life. Before its adoption within product and aesthetic processes, design had an extensive and established history as a problem-solving, solution-driven process enacted by

humans. It is through design, in reflection of our wants, needs, desires and hopes, that we have shaped the world today (Rowe, 1987).

‘Design appears to be a fundamental means of inquiry by which man realizes and gives shape to ideas of dwelling and settlement. Furthermore, design is a practical form of inquiry insofar as it is concerned with making and a certain commonplace usefulness, quite apart from its more esoteric benefits (Harrison 1978)’ (Rowe, 1987, p.1).

This research takes the view that design is a process, practice and action through which we explore, investigate, understand, develop and express our perceptions of the world which we inhabit (Friedman et al. 2015). It is an action responsive and reflective of different perspectives, opinions and experiences; impacted and influenced by cultural and location specific characteristics; and, is an experience that, during, throughout, and following completion, is enriched and informed through the involvement and engagement of stakeholders and creators alike.

All contemporary design processes, skills and practices are the culmination of the hard work undertaken by multiple generations of practitioners who have built and shared their accumulated knowledge and skills. As Chartes said in Salisbury, ‘We see more and move farther than our predecessors, not because we have keener vision or greater height, but because we are lifted up and borne aloft on their gigantic stature’ (1159). Contemporary design practice is built upon a solid foundation formed through multi-generational and cross-cultural knowledge exchange. Dorst, in discussion of the works of Foucault, considers how contemporary designers have reverted to forms of thought process more congruent with those seen in medieval society. In considering models of connectivity which were explored and investigated during the Middle Ages and the shifts towards categorisation, division and reason which emerged during the Renaissance and Age of Enlightenment, Dorst describes the behavioural techniques and patterns of contemporary designers as being ‘Medieval’. ‘Designers tend to think in terms of finding or making connections. They are

inclined to use associations and analogies to create new possibilities for solutions. Designers are basically medieval in the way they think' (Dorst, 2017, p.171). All design practices be they historically prominent, or temporarily framed, are built upon and derive from this extensive body of pre-existing work. Design, as a specifically recognised domain, is full of philosophies, ideas and skills which have been repeatedly refined, reflected upon and recalibrated, and, as with all design practices, this process of reflective refinement will continue.

Design, (once an inherent action of human behaviour undertaken intuitively to create solutions, solve problems or create desired conditions, but an action with no name, definition or explanation per say), has become over the years an 'identifiable' practice, synonymous with strategizing, creating, making and hand-crafting (Cooper, et al. 1995).

This set of behaviours and actions over the course of our social evolution has led to the emergence of cottage industries and the trade of marketable products, all conducted at small, localised scale. These cottage industries, the predecessors to our contemporary SMEs and Micro industries then experienced a shift in purpose and practice, as mechanics and machinery were integrated into creative processes.

The mechanization of industries resulted in the automation of processes. This in turn affected the ways in which design and craft were utilised. As such, this impacted on the role of 'design' within these new processes. Morris and other designers of the time, in rebellion against the perceived, realised and anticipated negative impacts caused by the industrialisation of hand crafted processes, refocused their own practices back towards the creation of 'exquisite handmade goods'¹¹ (Alexander, 1964, p.9).

Alexander in Lawson (2005, p.24), proposes that the current face of design which we experience today is the result of 'culturally irreversible shifts', driven by 'sudden and rapid change' which Lawson (Ibid), then positions contextually as a

cultural response brought about in western society by the Industrial Revolution. 'Misfit provides an incentive to change; good fit provides none' (Alexander, 1964, p.50). This position also carries close synergy to the views expressed by Simon (1988), that design is the result of a desire for change.

These considerations collectively support and create the notion and idea that the natural human drives of creativity seen within the context of problem-solving mechanisms, are ignited by perceived imbalances in the status quo. When all systems are balanced, working, and harmonious, there is a lower level, or non-occurrence of the drive to facilitate change and transformation, whereas, when the status quo is perceived as imbalanced and situations negative, the drive to devise solutions of change and transformation occur. This as a conceptual consideration towards the development of design into the forms which we experience and understand today, can also be seen reflected in the works of Leifer and Meinel (2018) (Fig.13), where they position collective collaboration as the predominant 'norm' of behavioural patterns inherent to earlier versions of humanity and its societal constructs.

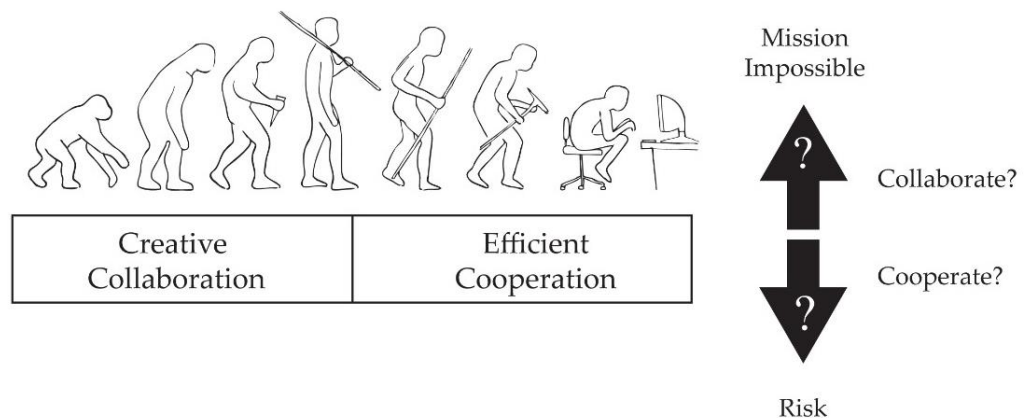


Figure 13. Collaboration versus Cooperation

Source: Leifer & Meinel (2018) p.2.

It is widely acknowledged that during and following the industrial revolution¹², the domain of design was predominantly concerned with product-oriented,

consumer-based frameworks and objectives (Friedman, 2015; Manzini, 2015; Papanek, 1984), its focus trained towards areas such as form, function, materials and manufacturing (Norman, 2010). The original industrial revolution brought phenomenal changes to every aspect of human life through technological development. Many of these advancements were useful and supportive of societal growth but they were also responsible for causing unequivocal shifts to occur across the roles of people. These shifts cultivated people into consumers (Schouwenberg, 2017). Businesses built upon principles and models of mass production and mass consumption, maintained and supported capitalistic, consumer-based economies, which were fuelled and supported by the growth and emergence of affluent societies. The collective 'boons' which emerged from these changes generated environments where the roles of design were geared more towards models of efficient cooperation and 'command control structures' (Leifer & Meinel, 2018), and less oriented to creative collaborative models undertaken by the whole for social good.

'The evolution of how we work together from an archaeological point of view might look like this: The first half of our development had to be overwhelmingly driven by collaboration. Every man, every stranger, every turn in the weather demanded creative collaboration – agreeing to disagree until something worked, or a breakthrough occurred. Whereas the second phase of our evolution seems to be dominated by efficient cooperation, doing what we are told to do, in school and on the job' (Ibid, p 2).

The industrial revolution(s)¹³ have left their mark across society and the environment. As nations and industries settled following the disruption of WWII, economies began to grow rapidly once again, and the period of post-industrialism began to rise¹⁴.

'After the Second World War, the combined forces of growing complexity and the need for efficiency in mass-production required designers to move beyond the classic 'formgiving' role to include consideration of all aspects of product (technology, form, ergonomics¹⁵ and the business side), thus sparking "integrated design' (Dorst, 2017, p.176).

By the 1960's, populations experienced the effects of significant growth of Gross Domestic Product (GDP). Middle and working classes grew in size and affluence, and with this growth, so too did their influence upon markets. In addition, new domestic technologies began to emerge, consumerism began to peak, and products were generated in endless supply chains. The domain of design very nearly remained as simply a tool of decoration.

Whilst in many ways these advancements drove mankind's ingenuity forwards, with significant developments across medicine, sanitation, housing, industry, civil rights and beyond, they also created and propagated complex situations and problems. However, from these problems, environments of reflective inquiry began to emerge.

The 1960's brought with it new voices and proponents for design. Many practitioners showed concern regarding the actions of designers, consumers, businesses and society engaging with what they perceived to be the unwise and inappropriate appropriation and application of design processes, methods and skills. In effect, situations which exposed the status quo as becoming imbalanced became more visible, and with this increased visibility, vocal proponents for change became more common place (Alexander, 1964).

In 1962, the inaugural conference *The Conference on Design Methods* was held in London between the 19th and 21st September. It included works from the likes of Jones, Alexander, Archer and Rittel, and is considered as the starting point of constructive conversations and considerations of design process, theories and methodologies. This conference marked a wider appreciation emerging around the need for change, and what design's role might be in facilitating and supporting changes. It gave name to these inherently human, problem-solving, solution-focused activities, instigating environments and initiating relationships where the development and refinement of philosophies, methodologies, methods and processes could be explored.

Amongst voices which emerged as a result of these works was that of Victor Papanek. He believed design could become a method for improving the world but disagreed with conventional 'rational' design process systems. He argued that they lack the capacity to truly effect meaningful change and that by their nature, they restrict and hinder developments for the benefit of humanity. This belief reflects ideas surrounding Abduction, Deduction and Induction (Curedale, 2013; Dorst, 2017; Peirce, 1998) as logics of reasoning within design (section 2.4.1) identifying Papanek as being aligned with design Abduction (Dorst, 2017, p.13) where 'two unknowns lead to a process of creative exploration'. Papanek became a world-recognised, active proponent for the development of social awareness across the design domain to meet actual human needs through creative means rather than continuing within the boundaries of consumerism and product creation.

'Never before in history have grown men sat down and seriously designed electric hairbrushes, rhine-stone-covered shoehorns, and mink carpeting for bathrooms, and then drawn up elaborate plans to make and sell these gadgets to millions of people. [...] As long as design concerns itself with confecting trivial "toys for adults," killing machines with gleaming tailfins, and "sexed-up" shrouds for typewriters, toasters, telephones, and computers, it has lost all reason to exist. Design must become an innovative, highly creative, cross-disciplinary tool responsive to the true needs of men. It must be more research oriented, and we must stop defiling the earth itself with poorly designed objects and structures.' (Papanek¹⁶, 1985 p ix – x).

The emerging negative impacts arising from the consumeristic behaviours of business and public bolstered and strengthened globally-spread calls for explorations into other capabilities and possibilities of design. Design's role within society gradually began to change to reflect the needs and wants of people and the social and environmental¹⁷ climates which were developing.

As practitioners sought to gain credibility, appreciation and understanding from the fields of 'rational science' (Dewey, 1929; Buchanan, 1992; Dam & Siang, 2018),

methodologies and processes began to emerge as practitioners from the domain began to consider unexplored applications and potential roles for the future. The works of Buchanan (1992) consider that:

‘The search for new integrative disciplines to complement the arts and sciences has become one of the central themes of intellectual and practical life in the twentieth century. Without integrative disciplines of understanding, communication, and action, there is little hope of sensibly extending knowledge beyond the library or laboratory in order to serve the purpose of enriching human life. The emergence of Design Thinking in the twentieth century is important within this context. The significance of seeking a scientific base for design does not lie in the likelihood of reducing design to one or another of the sciences [...] Rather, it lies in a concern to connect and integrate useful knowledge from the arts and sciences alike, but in ways that are suited to the problems and purposes of the present. Designers are exploring concrete integrations of that knowledge that will combine theory with practice for new productive purposes, and this is the reason why we turn to design thinking for insight into the new liberal arts of technological culture’ (p.6).

Models of Participation Design, Collaborative Design and Co-Design began to surface within the creative culture¹⁸, generating avenues of opportunity for designers to embrace wider interactive and investigative positions with stakeholders (Day, 2003).

Exploration of the role of design in addressing complex societal issues (Rittel & Webber, 1973), helped cultivate knowledge of its potential to exceed the boundaries created by its preceding, aesthetically oriented, consumerist labelling. For example, models of data exploration and synthesis (Dorst, 2017; Kolko, 2011) began to be refined into replicable actions. Capabilities and skills in participatory engagement began to grow, empathy for example, became (and has remained), a key skill in supporting inquiries and gathering perspectives, opinions and values from the viewpoints of stakeholders (Cross, 2006). In effect, design began to evolve and change in response to the new social status quo which was emerging.

The work of practitioners, activists and philosophers from across the discipline since the 1960's has had lasting impact. Their efforts created new theories, philosophies, principles, methodologies and rules which in turn influenced practices across the whole domain. The 1960's is recognised as heralding the beginning of change. The vocalisms and workings of great minds began to become apparent to both public and industry. Though significant changes in practice did not truly take off until the late 1980's, 1990's and early 2000's¹⁹, the works of Papanek (1985), Jones (Design Methodologies and Methods, 1970), Alexander (Pattern Languages,²⁰ 1977), Rittel & Webber's (Wicked Problems, 1972) and peers indicated the beginning of new understandings, perspectives and ways of working emerging within design practice. The 1960's also brought the emergence of co-design into design culture creating avenues of opportunity for designers to embrace wider scopes of investigation and interaction with stakeholders (Day & Parnell, 2003), but it was not until the 1980's that design's role as a process truly emerged.

These influential minds collectively called for reflection and consideration of the inherently imbedded design capabilities found within human behaviours that could support transformation and change. They created groundwork for the development of design thinking and co-design practices, providing reasoned evidence and context for the likes of Manzini, Dorst, Day, Buchanan and others to build upon.

Their actions and work clearly show that wider levels of social and environmental awareness existed and that appreciation of the multi-faceted capabilities inherent to the design domain was beginning to materialise across creative domains²¹. These advocates of change curated the foundations from which contemporary design practices emerged and grew.

2.2 Reaping what was sown: Wicked Problems and Design Thinking

Everything which has existed, does exist, and that which is yet to be realised, has attributable cost, from naturally occurring events, through to each manmade exploit, emotion and response. Simply put, for every single occurrence, there is a response, a reaction, a price to be paid. As Newton (1687) put it 'To every action there is always opposed and equal reaction'.²² The practices of design, so integrated into all facets of human life, are no different, and adhere to the same rule set.

This world is complex and diverse. Communities across the globe have evolved into heterogenous systems, home to a plethora of social, environmental and economic instabilities and inequalities. Social and environmental²³ problems are now so intricately woven into the fabrics of communities that often it is near impossible to discern single root causes. Our societies, communities, businesses and actions are all interconnected, giving rise to unpredictable and emergent situations.

Ill-considered practices and behaviours such as those identified by Papanek, Jones, Alexander, and Rittel & Webber have instigated and perpetuated cycles of discord with far reaching negative consequences for societies and the environment.

“Designers contribute to this fragmented critical situation where, through their association with business, commerce and industry, they have created new products, processes and performances with no overview and understanding of the whole system” Bruce and Baxter (2013).

Social systems have grown, and technologies have developed. Humanity is now even more interconnected, and, instantly connected, than ever before. The high levels of interaction which can be seen both at local levels and globally have opened the eyes of the public to, in some cases, catastrophic challenges which

were, (and still are) occurring, from climate change and pollution, to teenage delinquency and family breakdown.

There are a host of names used to purvey and frame problems found in the modern world. Titles of classification range from: Simple, Complicated or Wicked problems (commonly associated with the work of Rittel & Webber, 1969), through to Complex or Alien problems (Bruce & Baxter, 2013), even terms such as Tame or Critical are used as people seek ways to convey and describe appropriately the complexity of situations being faced. Irrespective of which term is used, these titles convey problems of incremental complexity, which, as humans, we attempt to address and resolve. Wicked problems are messy, ill-defined and therefore difficult or even impossible to solve (Churchman, 1967; Newell et al. 1967; Rittel & Webber, 1969; Simon, 1969, 1988). The term Wicked Problems developed as a result of explorations into problems found within planning processes and has become the 'go to' phrase for descriptions of complex, interconnected, systemic problems found across all areas of life. These issues are structurally un-definable, containing multiple co-relating factors. A scaffolding of other individual problems that contain equal levels of complexity, supports them. Attempts to define and understand issues within these areas often bring about further revelations and underlying problems to address. Rittel and Webber generated a ten-point descriptor to give indication of the nature of these complexities and aspects which effect resolution. An abbreviated version of this is available in Appendix F, *f1*).

Well-defined problems (Simon, 1973; Newell et al. 1967), are situations where the outcome and aims are clearly visible. They require definitive actions to be undertaken in order to be resolved. Rowe (1987) identifies artefacts such as 'crossword puzzles, finding the combinations to safes, and making moves in checkers and chess' (p.40) as fitting into this categorisation.

Ill-defined problems, (Bazjanac, 1974; Newell et al. 1957; Simon, 1973), are considered when neither the outcome nor methods for reaching the outcome are

apparent in the initial stages. This variety of problem requires time, effort and involvement with the stakeholders to clarify and determine exact positioning and direction for a resolution to be developed (Ibid. p.40). Rowe identifies that the majority of architectural and urban design problems can be classified within these boundaries.

Wicked Problems, as categorised by Rittel and Webber fall into the ten following categories:

1. 'There is no definitive formulation of a wicked-problem.
2. Wicked Problems have no stopping rule.
3. Solutions to wicked problems are not true-or-false, but good or bad.
4. There is no immediate and no ultimate test of a solution to a wicked problem.
5. Every solution to a wicked problem is a 'one-shot' operation - Every attempt at a solution counts.
6. Wicked problems do not have an innumerable (or exhaustively describable) set of potential solutions, nor is there a well-described set of permissible operations that may be incorporated into the plan.
7. Every wicked problem is essentially unique – regardless of similarities, each problem has distinguishing features.
8. Every wicked problem can be considered to be a symptom of another problem.
9. The existence of a discrepancy representing a wicked problem can be explained in numerous ways. The choice of explanation determines the nature of the problem's resolutions
10. The planner has no right to be wrong' (Rittel & Webber 1973. p.161 – 167).

Over the years, there have been continued efforts made towards understanding, conceptualising and addressing 'Wicked Problems' through design, scientific and technological explorations. Although these endeavours have often brought success, it has not always been as helpful as intended, leaving some communities and individuals still suffering from marginalisation and neglect (Leach et al. 2007; Steps Centre, 2010). It is acknowledged that the most proactive approach towards tackling these social issues is to directly engage with the people who live there (Day & Parnell, 2003). Community members are privy to knowledge that

when shared, can offer invaluable insight into potential resolutions (Arias et al. 2000). Social problems are too difficult for any one individual to tackle independently and are 'usually best tackled in groups or teams, as more skills and knowledge domains can lead to better informed decisions and possible resolutions' (Bruce & Baxter, 2013).

For instance, engaging members of communities into models that support active participation towards the creation of outcomes, allows for exploration surrounding many pre-conceived assumptions that can arise and encourages investigation into unknown areas. Members of communities are host to 'unconscious knowledge pools' (Day & Parnell, 2003). In other words, they have an awareness of the day-to-day facets that create challenges within the social, economic and environmental layers of their societies (Ibid). Indeed, Arias (2000) has pointed out that:

'Complex design problems require more knowledge than any single person possesses because the knowledge relevant to a problem is usually distributed among stakeholders. Bringing different and often controversial points of view together to create a shared understanding among these stakeholders can lead to new insights, new ideas and new artefacts. (Arias et al. 2000).

Understanding this myriad of components, inclusive of social complexities such as Wicked and alien problems, along with developing skills in visualisation, collaborative processes, research methods, empathy and people centredness, allows for the development and practice of a model of design better known as Design Thinking.

Design Thinking goes beyond the boundaries traditionally associated with design practice. It allows for the adoption of multiple methods, processes, approaches, methodologies and research within its structure, considering real world contexts and situations faced. These skills and approaches offer opportunities to consider socially complex problems in new ways, aiding the

process of untangling and reframing them in order to enable real change to happen (Bason, 2012).

Buchanan positions that the 'peculiar nature of the subject matter of design' is why design problems can be identified as 'complex, indeterminate or wicked', saying:

'Design problems are 'indeterminate' and 'wicked' because design has no special subject matter of its own apart from what a designer conceives it to be. The subject matter of design is potentially *universal* in scope because design thinking may be applied to any area of human experience. But in the process of application, the designer must discover or invent a particular subject out of the problems and issues of specific circumstances' (Buchanan, 1992. p. 16).

This suggests that the indeterminacy of a field, allows a more open perspective of problems to be considered, a more 'design abductive' (Dorst, 2017) approach, thus supporting and allowing a creative resolution to emerge. Indeed, it is this aspect of design which positions it into the field of 'unknown unknowns²⁴' (Rumsfeld, 2002).

The capabilities of the designer influence and impact the process, as it is their perspectives, values and beliefs, fed with information from primary and secondary sources which nurture a response resulting in creative solutions. They begin from a point of the unknown, exploring and discovering things they knew, things they knew they weren't aware of yet, and, discovering still, things they did not know, that they did not know. Design supports inquisitive exploration to identify the unknown unknowns. It allows absolute ambiguity and uncertainty to exist simultaneously for the purposes of creative exploration.

Design is re-orienting its focus, no longer only working within traditionally acknowledged fields of practice. New contemporary models which represent a human and socially centred process are emerging. The applicability of Design Thinking across a plethora of areas, can aid in the humanisation of products,

services and environments for social good (Bason, 2012) while Co-design and participatory models are supporting the integration of key knowledge from core parties (Day & Parnell, 2002). These capacities allow us to consider design as a way in which socially complex problems might be addressed and also where it may be able to positively affect areas where it has previously created environments of discord.

2.3 Design Metamorphosis: Growth of A Social Conscience and the Development of New Practices

Businesses and governments have become increasingly aware of the negative environmental and social impacts which are occurring globally, nationally and at local community levels in response to unsuitable and unsustainable models of service provision, consumerism, and capitalism. Simultaneously, designers too have developed a deepened appreciation of potential negative impacts which can result from their work. (Cross, 1972 in Sanders, & Stappers, 2009. Jungk, 1972 in Cross, 1972). Designers have undeniably played a role in creating the model of society which we experience today through contributing towards the generation of products and objects, and through generating ill-considered design outputs. Realisation of the existence and complexities of Wicked Problems and their ilk, resulting from these actions, has instigated fundamental reconsiderations of design's potential application. Design has become, as put by Papanek 'the conscious and intuitive effort to impose meaningful order' (1985, p.4).

As a sector, design is capable and willing to work within more positively oriented positions, maintaining the creative and imaginative qualities of ideas and generating outputs which are more socially and ecologically sustainable, in both purpose and in implementation, in order to develop better futures. As Lorenz said when considering the concept of Chaos theory: 'If the flap of a butterfly's wings can be instrumental in generating a tornado, it can equally well be

instrumental in preventing a tornado' (Lorenz, 1972, p.181). As such, although design has contributed to the creation of complex and interlinked social and environmental problems, it carries the capabilities to address them effectively. It also has a social responsibility and moral accountability (Sanders & Stappers, 2009) to work towards resolving and rectifying these environments²⁵ and situations which it helped to create.

We have reached a position Alexander (1964) would describe as 'misfit' with solutions proposed often insufficient or inappropriate for the context of their applications. The practice of design, in accepting its moral responsibility has evolved, experiencing a cultural shift in response to the challenges faced. These challenges are the price of previous (and current) generations actions coming to bare. With heightened awareness of issues such as sustainability, environmental impact and socio-economic inequality being prevalent at global and local levels, and, driven by concern over the socio-ethical impact of design practices, movements formed by design practitioners from fields of both traditional and contemporary practice have arisen (Ramirez, 2011).

Responsive to the needs of society through far more than product creation and aesthetics design practices are considering the implications of their actions, and the impact of its outputs. There is a conscious drive being made towards the improvement of service structures, experiences and environments both natural and man-made that provided better engagement and positive impact (The Design Council, 2012).

'The manifestations of change that we see in the contextual landscape of design have resulted in a number of shifts in how designing is done today. The shifts can be seen in where it is happening, when it is happening and who is involved' (Sanders, 2013. p.61).

Design practices are no longer solely conducted in the closed confines of a studio space or laboratory, rather they now occur in the world, in any setting which allows for communication, engagement and interaction (Ibid, p.59). They have

expanded their remit beyond the boundaries of product generation and are now integrated into the 'pre-design' phases of creative processes.

Design has metamorphosed into a collective action, capable of uncovering, disclosing and utilising the various perspectives, opinions, values and beliefs of multiple stakeholders from a range of backgrounds. Practices have matured and grown as practitioners have explored and pushed their own, and their chosen practices capabilities and boundaries. Design now occurs in the real world, considers real world situations and knowledge and has social conscience embedded in its' actions.

2.3.1 Newly Appreciated Practices and Capabilities

These new directives and objectives have resulted in the emergence of new practices of design and new roles for design practitioners. Sanders proposes that design now occurs in two domains, (Table 5) the old, considering objects and the inward activity of design, practices more associated with traditional design, and the new, emerging practices which consider context and purpose.

Table 5. Old and New Design Domains

old traditional design disciplines	new the emerging design disciplines				
Visual communication design	Design for Experience	Design for Service	Design for Innovation	Design for Transformation	Design for Sustainability
Industrial design					
Interior space design					
Architecture					
Interaction design					

Source: Sanders in Valentine et al. (2013) p.60.

It is important to acknowledge that the boundaries of both traditional and contemporary models of design practice are considerably more blurred and what now exists are blends of practice. New capabilities are built upon and integrate preceding knowledge and skills.

'The history of design is not merely a history of objects. It is a history of the changing views of subject matter held by designers and the concreted objects conceived, planned, and produced as expressions of those views. *One could go further and say that the history of design history is a record of the design historians' views regarding what they conceive to be the subject matter of design.*' (Buchanan, 1992. p.16).

Rather than interpreting the creative practices of the design domain as having singular, separate forms with clear delineation between practices, it is important to consider alternative perspectives. The boundaries of traditional and contemporary practices are considerably more blurred and merged than Sanders' proposal implies. For instance, Buchanan (1992) offers an astute, forward-thinking proposal for its time in his writings on 'areas of design' (p.9), by taking into consideration traditional practices while exploring the potential for future developments offering examples of the many ways in which design practices are blending and integrating in new ways (Table 6).

Table 6. Buchanan's Exploratory Areas of Design

Exploratory Areas of Design	Descriptors
1 Symbolic & Visual Communication	<i>'The communication of Information, ideas and arguments through synthesis of words and images'</i> . Inc: Traditional Graphic Design; Typography; Advertisement; Book & Magazine Production; Scientific Illustration; Photography, Film, Television and Computer Display.
2 Material Objects	<i>'The exploration of form and visual appearance, [...] Exploring integrations of Art, Engineering, Natural and Human Sciences'</i> . Inc: Clothing; Domestic Objects; Tools; Instruments; Machinery; Vehicles; Exploration of Social and Cultural Relationships between people and product; Investigation form and aesthetic qualities – influences and meanings.
3 Activities & Organised Services	<i>'Connections and Consequences'</i> . Inc: Traditional Logistics; Physical Resource; Instrumentalities; Sequencing; Schedules and Objectives; Pattern Development with Organic Flow; Intelligent, meaningful and satisfying experiences. Everyday connections and their effect upon structure and process.
4 Complex Systems or Environments for Living, Working, Playing or Learning	<i>'Sustaining, developing and integrating human beings into broader exological and cultural environments, shaping when desirable and adapting when necessary. Connections and Consequences'</i> . Inc: Traditional Systems; Engineering; Architecture; Urban Planning; Analysis of Complex Whole System Integrations; Hierarchies.
5 Communication, Construction, Strategic Planning or Systemic Integration	<i>'Design as a method of deliberation and argument. Exploring and overcoming limitations of the verbal of symbolic, the separation of words and things/theory and practice'</i> . Inc: Moving to interconnection/interplay of signs, things, actions, thoughts.

Source: Buchanan (1992).

Buchanan outlines areas of exploration which clearly communicate practice types and important philosophies and skills aligned with each proposed grouping, (some of which at the time of his writing were just coming to light and others still which had not yet emerged). Instead of identifying designers and design practice via predominantly accepted skill sets or 'models of traditional practice', Buchanan offers a fluid, open perspective of the domain showing variational perspectives, each aligned to different practice 'types' of design, but all intrinsically interconnected by intent. He provides examples of practices which may be more attuned to particular areas, but explains these as such, and shows a fluid nature to inclusion and exclusion within practice types, which is predominantly determined by the individual designer.

Buchanan's proposal resonates with the works of Norman (2014), who upon recognising the shift in capabilities being enacted within contemporary design practices, proposes that, in order to have the appropriate level of skills and understanding to address modern social complexities properly, 'contemporary design practitioners actually require capabilities in 'applied behavioural science'.

2.3.2 Emergent Roles within Contemporary Design

Contemporary design practices show an appreciation of multiple fields of knowledge, understanding of cause and effect, responsibility of actions, environmental impact, sustainability, participant and stakeholder engagement and community action in the creation of products, services and outputs.

With greater social awareness and responsibility in, and for, it's actions (Brown, 2009), designers are emerging with a far greater breadth of skills and capabilities. For instance, Inns (2007) in considering how these new roles may be classified proposed six new emergent roles for designers:

- 1) Designer as Negotiator of Value.
- 2) Designer as Facilitator of Thinking.
- 3) Designer as Visualiser of the Intangible.
- 4) Designer as Navigator of Complexity.
- 5) Designer as Mediator of Stakeholders.
- 6) Designer as Co-ordinator of Exploration.

Roles such as these exemplify the development of additional areas of design which go beyond more traditionally recognised practices such as: graphic, industrial, textile, interior and product design. They encompass capabilities exuded by 'T' shaped designers, those who have a core specialised 'depth of skills' (represented by the vertical axis) and a broad range of understanding across other disciplines and fields of knowledge (represented by the horizontal axis) (McKinsey in Brown, 2009). Likewise, Tan (2012), in her PhD considering the various roles of a designer within designing for social good, suggested seven key roles which practitioners can adopt, that of: 'Co-creator, Facilitator, Researcher, Capacity Builder, Social Entrepreneur, Provocateur and Strategist'.

Design is, as Papanek said 'the conscious and intuitive effort to impose meaningful order' (1985, p.4). It looks to 'craft[...] decision-making' (Helsinki Design Lab, 2016). The emergent roles identified are key in modern approaches. They challenge the preconceived ideas surrounding the capabilities of design and are indicative of some of the core skills held and developed by practitioners

Across the global platform design approaches are now being implemented to instigate and support business growth, societal improvement and social innovation (Brown & Wyatt, 2010; Cross, 2006). Designers are called upon from every facet of society to utilise their skills in order to enable individuals, communities and businesses in exploring potential developments, changes and futures.

"In the early days of industrial design, the work was primarily focused upon physical products. Today, however, designers work on organizational structure and social problems, on interaction, service, and experience design. Many problems involve complex social and political issues. (Norman, 2010. p.1).

Designers possess core transferable skills that can transcend the remit defined by their traditional training. They include; The ability to synthesise complex data; Examine and determine constructive lines of practice; The ability to communicate and engage with and across other sectors; The ability to identify and reframe problems; Project Manage; Tell engaging stories to present and communicate concepts, ideas, plans etc clearly; Facilitate; Sense-make; Undertake conceptual development through ideation and brainstorming; Visualise concepts and prototypes; Work in teams and/or in leadership positions; Work in multi-disciplinary settings; Have an understanding and appreciation of market and manufacturing processes. Design practices have transcended pre-conceived boundaries surrounding their processes and capabilities and have emerged as effective agents of change across a much broader range of domains. Design skills and design thinking allow and support insights to be gathered through engagement, participation and observation. By implementing design processes, communication bridges can be negotiated, cultivating an appreciation and acknowledgement of shared perspectives, opinions and ideas that can be utilised to bring about systematic shifts towards positive outcomes (Day & Parnell, 2003). Through implementing principles and skills core to traditional practices in new ways, we can consider complex challenges faced across society from fresh perspectives. We are enabled to redefine problems, seek out opportunities and create more suitable and responsible solutions (Helsinki Design Lab, 2013).

'Making the world your own, and making your mark on the world, rather than merely receiving a manufactured environment assembled by external others, is absolutely central to our health and our wellbeing, as individuals, as families and as society' (Gauntlett, 2011).

Leifer and Meinel identify the third rule of Design Thinking as being 'All design is re-design' (2011) a position corroborated by Karjaluoto (2014):

“Designers trade in ideas, aesthetics, and solutions: things difficult to quantify and even harder to make procedural [...] Humans are remix artists, taking from one another and building collectively, and designers do this as much as anyone” (Ibid., p.4).

It is now accepted that within these contemporary practices, no one individual can develop and refine solutions to the complexities faced in social constructs. It is in fact necessary and essential to creative processes to involve a variety of people, each with their own specialties, and experience in collaborative efforts (Arias et al, 2000). These practices of design are re-forming previous services, systems, processes, activities etc, driving them towards 'desired solutions' (Simon, 1988).

2.3.3 Design Thinking, A Brief Summary

Design has diversified its' practices and embraced social engagement within its' approaches. Knowledge and capabilities have spread to many other areas and sectors as variations and processes inspired by design theories have become more common place. Design Thinking, for example, is commonly attributed to the development and success of some of the biggest products, names and companies in the world today. It's processes, now globally recognised are heralded as a being responsible for a range of both modern and historic services and products, including:

- Edison's customer-focused approach with the development of the lightbulb.
- Isambard Kingdom Brunel's Great Western Railway.
- Ray and Charles Eames' significant work in Architecture and furniture design.
- Ray Crocks' McDonalds Chain.
- Steve Jobs and Apple.

Design Thinkers can be found in any sector, practice or walk of life. It is the diversity of fields where Design Thinking can emerge from which is, in part, responsible for the numerous variations and divergence of formats. Leifer & Meinel (2011) have offered 4 principles of design thinking that facilitate the creative process:

1. The Human Rule – All design is ultimately social in nature. The starting point for design thinking always starts with people and culture.
2. The Ambiguity Rule – Design thinkers must perceive ambiguity. Too many constraints and ‘fear of failure’ are restrictive. Innovation requires us to push the boundaries of exploration, to explore the ‘unknown unknowns, to push the boundaries of knowledge, ability and possibility.
3. The Re-Design Rule – All design is re-design. To know the past in order to gather the information, inspiration and influences we need to design effectively for the future.
4. The Tangibility Rule – Making ideas tangible always facilitates communication. Prototyping facilitates conversations, which leads to better outcomes. (Ibid. p xv).

Design Thinkers are well positioned to address complex problems due to their ability to deal creatively with levels of ambiguity, visualise the intangibles and envision the future through re-design. It is a practice which allows a re-framing of problems to occur, creating environments where situations are considered through a solution-focused lens rather than from a problem-oriented perspective (Cross, 2006). Not only that, designers tend to use visual communication to gather data, identify problems and communicate ideas (Plattner et al. 2011). Curedale (2013) further expands the capabilities and behaviours of Design Thinkers, outlining the following (Table 7).

Table 7. Core Attributes of Design Thinking. Baeck & Gremmet (2011)

Core Attributes of Design Thinking		
Ambiguity	Being comfortable when things are unclear or when you do not know the answer.	Design Thinking addresses Wicked - Ill-defined and Tricky Problems.
Collaborative	Working together across disciplines.	People design in interdisciplinary teams.
Constructive	Creating new ideas based on old ideas, which can also be the most successful ideas.	Design Thinking is a solution-based approach that looks for an improved future result.
Curiosity	Being interested in things you do not understand or perceiving things with fresh eyes.	Considerable time and effort is spent on clarifying the requirements. A large part of the problem solving activity then consists of problem definition and problem shaping.
Empathy	Seeing and understanding things from your customers point of view.	The focus is on user needs (problem context).
Holistic	Looking at the bigger context for the customer.	Design Thinking attempts to meet user needs and also drive business success.
Iterative	A cyclical process where improvements are made to a solution or idea regardless of the phase.	The Design Thinking process is typically non-sequential and may include feedback loops and cycles (see below).
Non-judgemental	Creating ideas with no judgement toward the idea creator or idea.	Particularly in the brainstorming phase, there are no early judgements.
Open mindset	Embracing design thinking as an approach for any problem regardless of industry or scope.	The method encourages 'outside the box thinking' (wild ideas): It defies the obvious and embraces a more experimental approach.

Source: Curedale (2013) p.16.

The attributes outlined above assist designers in contemplating, understanding and disseminating complex bodies of information, informing and enabling ideation and development processes as they work towards resolution. They allow for clarity where previously there may have been none to observe (Brown, 2009). Indeed, design thinking is a process which encourages, and requires the exploration of a problem, from multiple perspectives, and one which allows problems to be reframed in the context of the situation occurring (Brown & Wyatt, 2010).

Schön (1983) proposed that the designer conducts a reflective conversation with the situation. They 'shape' situations around their perceptions and available

knowledge. The situation 'talks back' and the designer then responds to the talkback. It becomes a circular, iterative process.

It is clear that design has experienced shifts in direction, perception and capabilities and although it still plays a valuable role in aesthetic development, its capabilities are motivated by both intrinsic and extrinsic factors. When Victor Margolin was asked his opinion if humans were 'hard-wired' to design thinking or if it had to be taught; his response was pertinent and true,

'I think humans are made to design since they have to survive, but people have to be taught how and what to design' (Margolin in Interview with Stunda, 2015). The nature of design is inherently...what? Interdisciplinary...? However, to develop subject knowledge, skills in the application of design and its thinking need to be communicated and taught'.

Through engagement supportive of interdisciplinary working to uncover needs and wants of key stakeholders, design thinking and design-led methods, can and do create positive societal, environmental and economic benefit (Brown & Wyatt. 2010). Design Thinking incorporates both designers' skills and a people centric focus in generating solutions responsive to the needs of stakeholders in understandable and meaningful manners (Alder et al. 2013).

Design Thinking offers opportunity to implement meaningful change socially, economically and environmentally by driving social innovation through business culture. Through businesses developing a deeper understanding of the needs and wants of populations and individuals, the empowerment of communities and therefore the success of businesses can be pursued. Perspectives of the multi-dimensional facets of life that impact quality of life experienced, aid prosperity (in its many forms), build and support resilience, happiness and sustainability which encompass and reflect the values of the populous, will aid in creating a productive future for all parties.

'Design Thinking is a process. It is never a product' (Dyson, 2016). It supports the development, ideation and realisation of a product, or outcome or experience.

It is a process capable of supporting the discovery of necessary information which in some cases is not immediately available or apparent. It can aid the identification of key facts and insights needed to create or re-design a product, experience or service, but it is never a tangible object which can be bought, traded or sold. 'Design Thinking is a mindset of discovering reality we do not yet know' (Ibid, 2016).

2.3.3.1 The Role of Facilitation in Contemporary Design Practices

Designers regularly facilitate conversations and interactions as they seek the necessary information required to meet their specific intentions or briefs. The role of design facilitator is perceived as being one which is both relatively new and emergent (Aguirre et al. 2017). It has arisen within the Design Thinking movement as being a core practice of designers as they work towards greater levels of stakeholder involvement and participation within the creative processes.

Aguirre et al. (2017) position design-led facilitation as being 'vital to emerging fields of systems and service design' (p.201), whilst Mager (2009) positions the practice as 'enabling teams to dive into the ecologies of services, into the world of needs and experiences of users and providers ... [and] visualize, formulate, and choreograph solutions to problems that do not necessarily exist' (p.6-7).

Facilitation occurs at many levels throughout the design research process, from the formulation of strategy and event design and creation, through to the interactions, engagement and objects utilised within the process. Aguirre et al. (2017), propose that there are 6 dimensions which exist within design facilitation tools, separated into either core facilitation dimensions or design facilitation dimension (Fig 14).

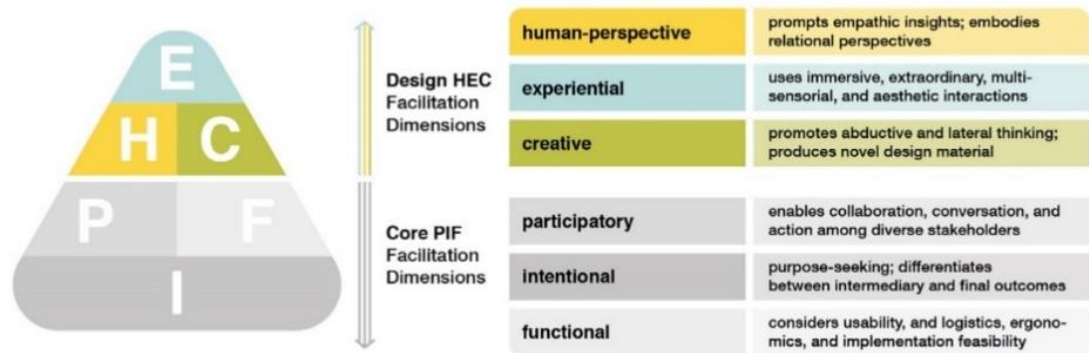


Figure 14. *The Six Dimensions of Design Facilitation Tools*

Source: Aguirre et al. (2017, p.203).

Identified through undertaking of 4 extensive case studies around design facilitation, these proposed dimensions serve to accurately portray qualities and actions inherent to the practice. Designers and design as a field are evolving with the times. These shifts in focus and practice has seen the emergence of skills and capabilities which are more focused towards participatory and stakeholder engagement arise. Design's relationship with people-centred creation which focuses upon the identification of needs and wants of people is a challenge being met with the emergence of new types of design practice and designerly tools such as facilitation (Napier & Wada, 2016).

'Design facilitation is an emerging type of design process that is fast becoming a core competency of designers who find themselves needing to engage in people-centred, participatory approaches to meet the intertwined demands of clients and the needs of particular groups of users and audiences' (Ibid, p.162).

This shift can also be seen as a change in perspectives, both internally within the field of design and externally, by those who work out with the creative industries as being a move from positioning the 'designer -as-expert' to the designer-as-facilitator' where the key knowledge and information is in fact held not by the designer, but by those they endeavour to engage with. It is through this engagement that the designer can facilitate the sharing of this knowledge and utilise it to create potential options and proposals (Sanders & Stappers, 2009).

2.4 'Alchemy'²⁶ in Action: Design Thinking Processes, Principles and Frameworks

The term Design Thinking first originated in the works of Bruce Archer in 1965. Archer was an early pioneer, with the likes of Papanek and Jones and his role in the development of design research is acknowledged as having shaped design education as we experience it today. The objective of Archers work was to understand and explain the design process, if possible, to give it rigour within bounds of science and other sectors. He explored the act itself, its processes, applications and undertakings in attempt to both further understand his own perspectives and to share with others firm knowledge which would dispel notions of uncertainty. His thesis *The Structure of Design Processes* (1968) explores aspects of design from definition through to the act of design, problems which are encountered and techniques for application. (1965). Drawing upon his doctoral thesis, *Systematic Method for Designers*, Archer's work utilised the term 'design thinking' to indicate a specific component of the creative process affected by both the increase in areas where design might be applied, and by the resulting complications formed through the integration and influence of new areas of knowledge and evidence from multiple sectors.

'The traditional art of design – that is, selecting the right material and shaping it to meet the needs of function and aesthetics within the limitations of the available means of production – has become immeasurably more complicated in recent years. [...] Within the boundaries of these limitations, the art of industrial design was something close to sculpture. Today, the designer is faced with subtler evidence of user needs and market demands. He is presented with a galaxy of materials to choose from, many of them having no true shape, colour, or texture of their own. The means of production have become more versatile, so that rules of thumb provide no easy guide. [...] In the face of this situation there has been a world-wide shift in emphasis from the sculptural to the technological. Ways have had to be found to incorporate knowledge of ergonomics, cybernetics, marketing and management science into design thinking...' (Archer, 1965. Ch1.3. p.1).

The term however did not become popularised until academics and practitioners such as Rowe (1987), Lawson (1980), Buchanan (1992) and Brown (2009) began to adopt it within their own works.

Design thinking became a popular term, found both within the domain and across society following its adoption by Tim Brown, who is regularly accredited with its coinage in terms of naming it as a specific model of practice. There are numerous other works which also supported the popularisation of it as a term and model of practice, including Cross (1982) Faste (1980); Kelley (1991); Lawson (1980), McKim (1973); Moggridge (2007); Schon (1983) and Simon (1969). Brown documents his introduction to its use as:

‘We started to talk about this expanded field [of design] as “design with a small d” in an attempt to move beyond the sculptural *objet* displayed in lifestyle magazines or on pedestals in museums of modern art. But this phrase never seemed fully satisfactory. One day I was chatting with my friend David Kelley, a Stanford professor and the founder of IDEO, and he remarked that every time someone came to ask him about design, he found himself inserting the word “thinking” to explain what it was that designers do. The term “Design Thinking” stuck. I now use it as a way of describing a set of principles that can be applied by diverse people to a wide range of problems’ (Brown, 2009. p. 7).

It’s adoption as a term led to it being used to frame and identify the shift in processes, philosophies, frameworks and practices which were emerging post 1960. Over the years, this term, originally a description of a component found within creative processes has become a name for a domain (Brown, 2009) in itself, one with its own actions, methodologies, processes, and philosophies, which is synonymous with a more people centric approach to creativity across practice and academia (Leifer & Meinel, 2018).

From here we can suggest that ‘Design Thinking’ can either be used as a ‘descriptive’ term to denote thought processes which occur in creative practice (as positioned by Archer), or, it can be considered as the definition of a definitive

model of practice, a process inclusive of creative thought, existing within the design domain itself. For the context of this thesis, the term 'Design Thinking' refers to the latter.

Design thinking is not an alchemic process in the sense of magic and mystery, rather, it is a process of transformation, strategy and redistribution (be that of goods, actions and structure) which combine to create and support a systematic approach to the resolution of problems (Pal, 2017).

There is an established body of literature which examines design processes and creative actions in detail. These writings and explorations have developed over the years as people have sought ways in which to explain what designers do and how they accomplish their objectives. These studies have identified key components and actions which occur within design processes, for example: Early work conducted in Lawson's 1979 study of 'Design Patterns of Action' with architecture students and scientists, indicated that while scientists tended towards models of information analysis to solve problems (pattern recognition) (Cross, 2006; Alexander, 1979), designers work within models of information synthesis (Pattern Synthesis) (Ibid) to address a problem (Lawson, 1979).

Visual representations of Abductive, (Peirce, 1903,1998) Deductive (Aristotle, 322 BCE; Pythagoras, 500bce Peirce, 1903, in Peirce, 1998;) and Inductive (Curedale, 2013; Dorst, 2017; Peirce, 1998) reasoning provide understanding of the foundations from which designers (and other professions) build their processes. Dorst (2017) however goes further extrapolating constructs within the known models, influenced by knowledge of design processes to identify a model of Design Abduction which is where, he suggests, the differences between conventional problem solving and creative problem solving lie (Fig.15).

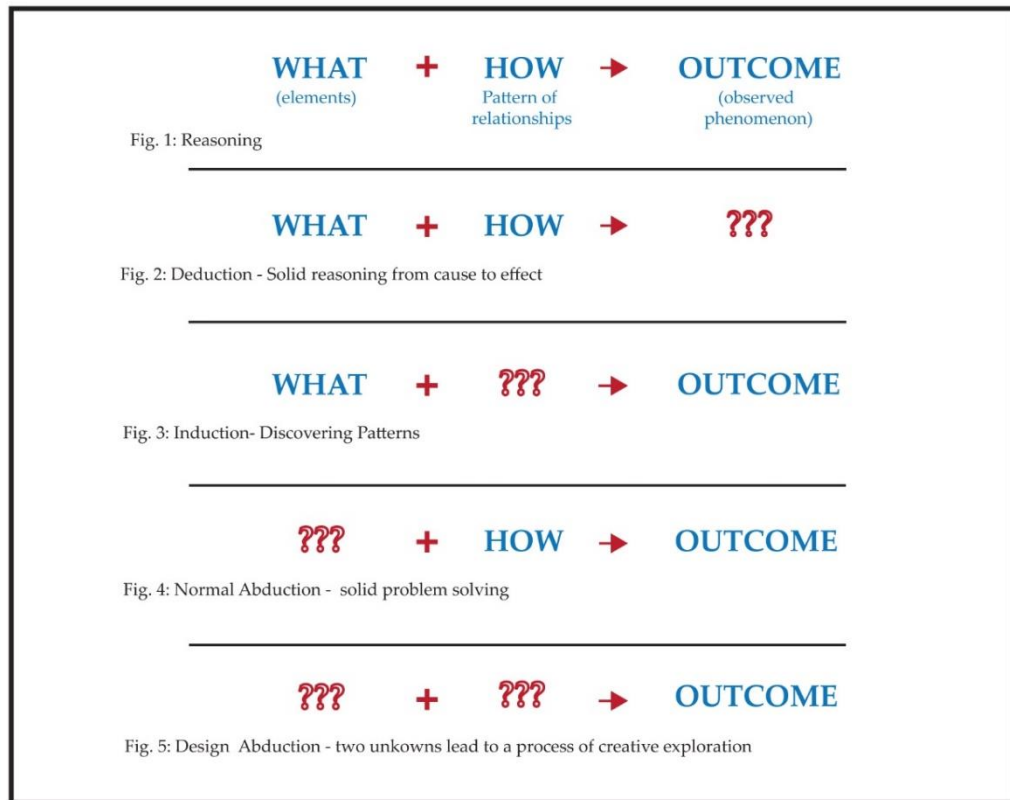


Figure 15. The Logic of Creation (Fig1-5)

Source: Dorst (2017) p.13).

Peirce coined the term in his 6th Harvard lecture on the 7th May 1903, 'The Nature of Meaning' during which he outlined the models of reasoning – deduction, induction and abduction, positing that 'no new ideas could come from inductive or deductive logic (Curedale 2013) and proposed that essentially, the logic of abduction was one of pragmatic perspective. Abductive, inductive and deductive models of reasoning exist across multiple sectors. For example, in the fields of engineering, mathematics, science, philosophy or psychology the principles for each type of reasoning remain the same regardless of the context they are being applied within. Early predecessors to contemporary process models which explore and communicate design processes and design thinking in visual format can be tracked back to the 'Iconic Model', (Mesarovic, 1964; Watts, 1966 in Gregory, 1966²⁷), a visual which portrays clear resonance and reflection with the linear, yet iterative conclusions drawn by Asimow on design practice (Rowe, 1987) in action.

'The Iconic Model' (Fig.16) indicates the beginning phases of exploration and communication of process and action through visual format and provides contextual background and foundation to understanding how our contemporary appreciation of design processes evolved. A synergy exists between these early and modern visualisations, located not just in information shared, but in the manner of visual communication implemented along with the explanations provided. The individuals involved in these studies have each contributed to the development of knowledge around design by exploring the actions and processes involved, deepening understanding and appreciation of the scope of skills which can be possessed by designers, and by considering and exploring the ways in which design, as a field, effectively communicates these facts with others.

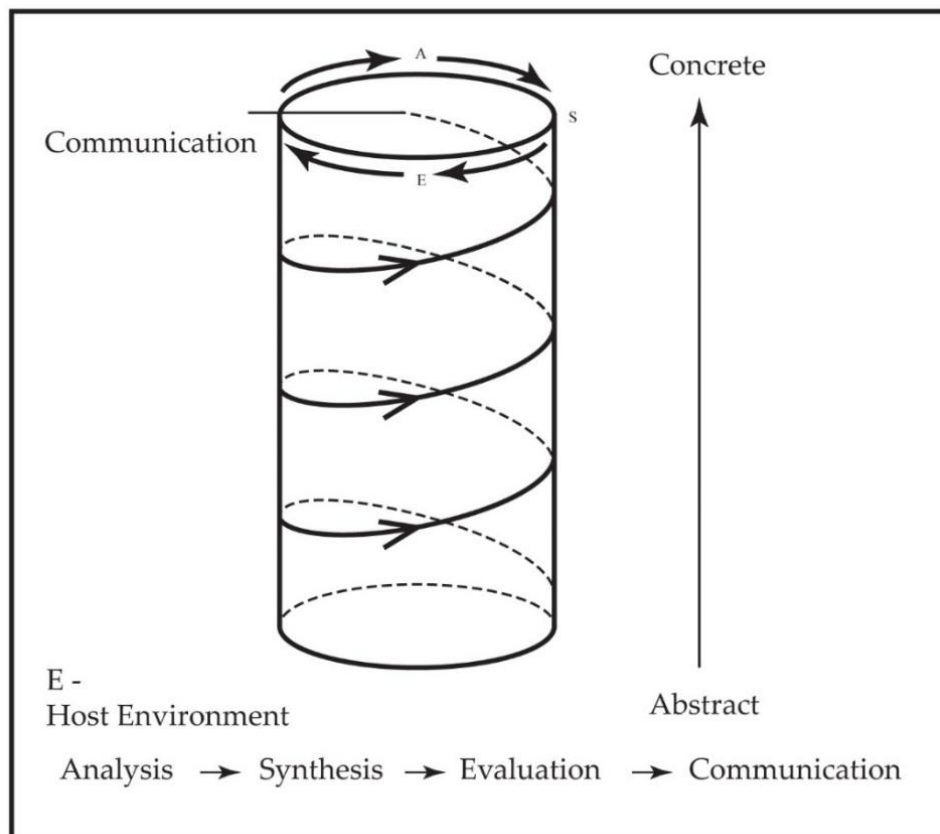


Figure 16. *The Iconic Model of Design Process*. Watts (1966), Mesarovic (1964).

Source: Rowe (1987) p.48.

Cross, (2006) (Table 8), Moggridge (2007) (Table 9), and peers, have built upon early explorations of process formed by the likes of Asimow (1962), Lawson

(1980) and Peirce (1904), gradually constructing and presenting categorisations of problem-solving skills and abilities found in contemporary design practice refining visual representations and frameworks of process which serve to communicate how designers accomplish their tasks today.

Table 8. Principles of Designerly Ways of Knowing

Principles of Designerly Ways of Knowing
1. Designers tackle 'ill-defined problems.
2. Their mode of problem-solving is 'solution focused'.
3. Their mode of thinking is constructive.
4. They use 'codes' that translate abstract requirements into concrete objects.
5. They use those codes to both 'read' and 'write' in subject languages.

Source: Cross (2006) p.29.

Table 9. Core Skills within Design Practice

Core Skills within Design Practice
1. To synthesize a solution from all of the relevant constraints, understanding everything that will make a difference in result.
2. To frame or reframe the problem or objective.
3. To create and envision alternatives.
4. To select from those alternatives, knowing intuitively how to choose the best approach.
5. To visualise and prototype the intended solution.

Source: Moggridge (2007) p.649.

These contributions have not only supported the expansion of knowledge about the design domain and the extended capabilities of designers but have also served to communicate succinctly the complex workings which occur in the adoption of contemporary design approaches and processes.

Amongst the most valuable of all processes found within the design profession is visualisation. Designers communicate through visual format, through signs and semiotics, through models of 2 and 3 dimensions. It is as integral to each practice as breathing is to life. Designers make the intangible tangible. Visualisation, be it through drawing, modelling, sculpting, allows for ideas and thoughts to take form. It makes sharing and communicating concepts, ideas,

plans and stories possible and aids the communication and the dissemination of information. It is a process which eases understanding and facilitates teaching, learning and communicating. Wujec (2013) positions visualisation key to solving complex problems, the process of making your thoughts visible through nodes and links creating a tangible output around which conversations can flow.

Visuals stand amongst the earliest tools of mankind, and they have developed and changed over time as design too has shifted from an aesthetically driven process towards higher levels of social engagement. Visualisations serve as 'boundary objects' (Griesemer & Star, 1989; Rhinow et al. 2012), facilitating knowledge exchange both internally within organisation and across external boundaries. In businesses and organisations, they can create bridges 'between different domains and stakeholders and may deliver positive effects in the innovation process' (Rhinow, et al. 2012, p.1). Many organisations now take process models, iterate them and shape them to their own specific needs. Indeed, numerous design companies utilise visualisation as a key technique and approach through which they can communicate their own practices and process both internally and to external parties. Visualisations, both 2D and 3D, allow for communication bridges to be negotiated and developed, cultivating environments where perspectives, opinions, ideas and knowledge can be shared (Burns et al. 2006; Day & Parnell, 2003; Manzini, 2015)

One of the most famous design process visualisation is The Double Diamond 'diverge-converge' model, created by The Design Council (2005a). Starting from a narrow point it diverges in exploration of inspiration and knowledge, converges through a process of synthesis and framing, re-diverges to explore potential solutions and finally converges at the point of problem resolution. The simple visual portrays a complex series of actions in a simple and easily digestible format and is now commonly found and applied in multiple contexts. Even Google Design Sprints implement a model of design which bears an uncanny similarity to the Design Council's original contribution. Nonetheless,

there are now many examples of design process models which exist to visualise the different stages, steps and actions which are undertaken by design practitioners Appendix G, (g1-g3) provide further examples of Design based processes, g1: The Double Diamond (The Design Council, 2005), g2: The 5 Stages of the design process (Ideo & Riverdale, 2012), g3: The Design Thinking Process (Stanford d.school, 2012).

A relatively coherent and clear map which exemplifies visual format and connectivity between IDEO and Stanford's process models is that of the d.school Paris (Fig.17). This model 'The Design Thinking Process'²⁸. incorporates the following steps of: Understanding; Observations; Imperatives; Ideation; Prototyping; Testing; Storytelling; Piloting and Generation. Inspired by Curedale (2013) and Leifer & Meinel (2011), the complexity of the model varies in response to the expertise of the designer. In other words, early level students engage predominantly with the Stanford d.school model, while those with greater levels of experience implement the '3rd generation IDEO process (Inspire, Ideate, Implement).

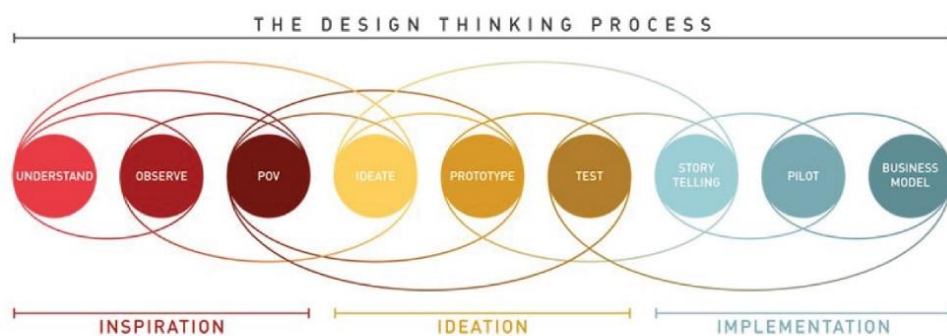


Figure 17. The Design Thinking Process

Source: 'Our d.school Process' d.school Paris (2009).

Design Thinking requires the ability to work with uncertainty and ambiguity. However, communicating this with those outside the field is not always straightforward. The Realities of Design Thinking, a model produced by Leifer & Meinel (2011) (Fig.18), is one which resonates with many practitioners due to

its ability to visually convey Design Thinking through a series of clear steps and stages, (enabling explanation to external parties). Simultaneously, it also imparts the realities and complexities encountered in Design Thinking practice, it is not a linear, simple process. Stages influence and impact upon each other and iterations are one of the ways in which designs are refined and improved. Stages are revisited numerous times as knowledge grows. The knotted sketch visually represents the sensation of confusion and uncertainty faced by most designers during at least part of their creative processes.

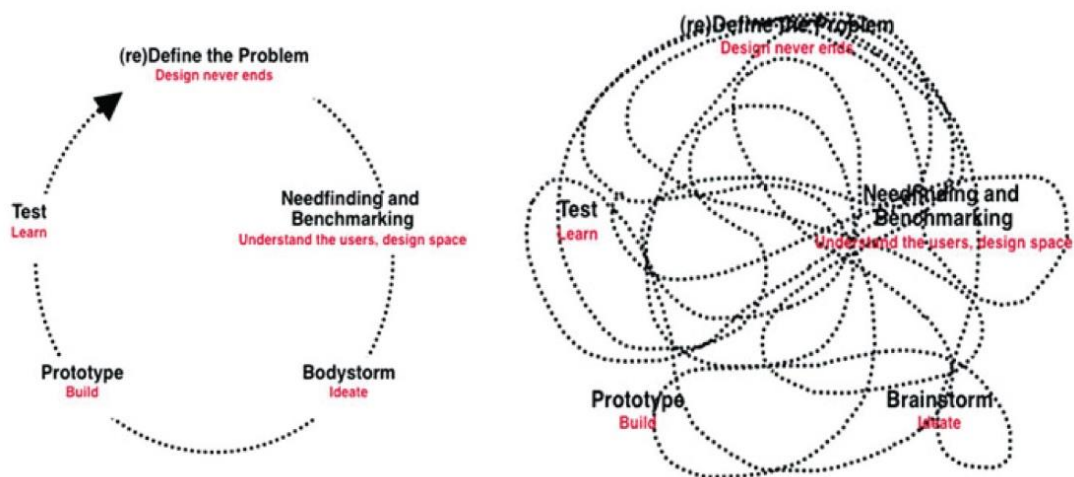


Figure 18. *The Realities of Design Thinking*

Source: Leifer & Meinel (2011) p.12.

Design Thinking is a user-oriented, risk reduction, systematic and strategic, logical practice which draws upon imagination, intuition and reasoning when considering resolutions for problems encountered (Pal, 2017). Controversial views aside, it has been proven to have real applicability towards addressing ill-defined and wicked problems, and is an effective strategy for innovation, both social and organisational (Behyl & Giese, 2016).

As Curedale identified, within the works of Waloszek the process and practice of Design Thinking can be broken up across 5 or 6 key areas dependent upon the company/individual undertaking it: Understanding; Observing; Interpreting; Ideation; Prototyping; and Testing. Although terminologies used to describe and

'categorise' each of these stages varies drastically across sources, each 'component' fundamentally serves to address the same premise.

UNDERSTANDING/empathy: Integrating and appreciating the nuances of people.

Understanding arrives in multiple formats: An ability to empathise is key to the human-centred directives of Design Thinking as is developing an understanding and appreciation of their stakeholders' perspectives, values and points-of-view. Abilities in this area enable designers to position their clients at the heart of the creative process. By empathising and positioning themselves in the stakeholder or participants shoes, the designer can gain valuable insight into the situations and nuanced complexities faced.

The understanding phase is also a steep learning process and requires development of an understanding of the fields connected to study and of available information. It is a phase deep in both primary and secondary research. This phase and the Observation phase support understanding and identification of context and of the constraints which may exist around the problem being explored.

OBSERVATION/research: 'Seeing, hearing and documenting the untold.

Observing stakeholders, environments, situations and available primary information allows designers to begin identifying patterns, behaviours and other key information. Seeking out knowledge through observation provides research and appropriate data through which further steps of Design Thinking are supported. Considering stakeholder priorities, trends emerging, real-time, real-life situations which are encountered provides valuable information and points of inspiration. Observational phases of research allow for a fuller understanding of the user experience, this in turn informs and shapes future decisions and outcomes (d.school, 2012).

INTERPRETATION/synthesis: Identifying, defining and framing the problem.

This stage brings all the relevant bodies of information and knowledge together in order to identify the problem or situation. Often this results in a re-framing of the problem through identifying the situation through different lenses and perspectives. As with all

phases of Design Thinking, framing and synthesis can be undertaken and supported by a number of methods and approaches.

'In design, framing can be thought of as the designer's perspective when approaching the problem (both conceptually and pragmatically). The frame itself applies a set of exterior, subjective constraints to the design problem ; it is built on the types of experiences referenced in sensemaking (Kolko²⁹, 2007. p.14).

The Stanford d.school describes this phase in a more restricted form as being focused towards 'processing and synthesising of works undertaken during the earlier empathy studies to enable the development of a user perspective to address with your design'.

IDEATE/create: Imagining possibilities and potential resolutions.

The ideation stage begins the process of exploring possibilities. It is the stage where, based upon previous knowledge and information obtained, the designer can generate a large range of diverse possible solutions or outputs which may meet the brief. During this stage no idea is good or bad, there are instead ideas which may or may not be worth further exploration. Initial ideas are then considered, and possible directions are selected for rapid prototyping, or for stakeholder/participant feedback. At this stage there is no good or bad idea, there are ideas which may or may not be worth further exploration.

PROTOTYPING: Making the intangible tangible.

Design Thinking is a highly visual practice. The development and testing of prototypes and visualisations begins early in the creative process. They support the realisation and refinement of ideas and concepts before they are implemented or put in place in the real world. Built or sketched quickly, they are cost and time effective in making concepts rapidly visible and accessible. They allow designers to test assumptions and perceptions and can be changed and altered as required. They serve as 'boundary objects' (Griesmer & Star, 1989; Rhinow et al. 2012) facilitating meaningful conversations across parties (in this case the designer(s) and the key stakeholders or participants). These conversations aid and shape the development of future ideas and the refinement of proposals. There are no rules around form in prototyping. They can be two-dimensional, i.e. sketches, pictures,

signs, semiotics, or three-dimensional, i.e. models, objects. Prototyping offers the opportunity to explore variations and the unexpected in fast and effective manners.

TEST/validate: Incorporating Information into Outcomes.

Closely linked to the prototyping phases, testing solutions before making them 'live' allows for periods of reflection to occur and for alterations to be made to proposed outcomes. This phase along with many of the others is an iterative component where ideas can be explored in a 'real-world' context. Findings and feedback gathered through user-testing can be reincorporated into design solutions. Dependent upon purpose and formats, the testing phase can include both qualitative and quantitative studies to explore effectiveness, impact, acceptance, or other relevant areas of investigation which can support further refinement and development.

Each of these phases is facilitated and conducted through the implementation of a method/tool/process/artefact selected (or created) by the Design Thinker. Their choice of 'intervention' has a direct influence upon the stage where it is implemented. They can generate unexpected responses: Fail to identify areas of interest; Create bias unintentionally. Design Thinkers spend considerable time developing, testing, refining and re-using tools of their own making and utilising ideas and tools created by other designers. Each situation faced is unique and each undertaking requires a considered approach. As a result, each Design Thinking activity has a variable quality embedded within it.

2.4.1 Opening Pandora's Box: The World of Design Methods

Designers and design teams across the globe both create and utilise objects and toolkits to compliment and support processes of engagement with individuals, companies and communities as they endeavour to generate solutions to political, social, environmental and business problems. Commonly described as 'Boundary Objects' (Griesmer & Star, 1989) these are objects created to be:

'both plastic enough to adapt to local needs (...) yet robust enough to maintain a common identity across sites.' (Ibid, 1989, p.393).

They encompass the ability to create connections across divergent and intersecting social spaces and have the potential to assist with the development of a shared language and understanding, thus enhancing the process of interaction (Ibid. 1989).

Design expertise supports the development of artefacts and objects to create opportunity for individuals, communities and businesses to discuss and determine underlying and/or nuanced aspects relating to relevant factors, i.e. specific, culturally contextual social factors, or key details regarding population, their local needs, etc. It actively opens dialogue through avenues previously undisclosed or unexplored and encourages openings to share values (Blyth & Kimbell, 2011). Through development of objects that can instigate and support conversation and knowledge exchange to occur within participatory groups, investigation surrounding communally shared and individually held values can be undertaken. This process also supports investigation into the overall effectiveness of the objects in traversing social channels and creating bridges of communication and knowledge exchange.

Many toolkits exist, including, for example: The Human Centred Design Toolkit (IDEO, 2012); Design for Social Impact (IDEO, 2011); The Young Foundation (Davies et al. 2012); The Creative Enterprise Toolkit (Nesta, 2014); The Behavioural Design Lab (The Design Council, 2012); MakeTools (Sanders 2002; Sanders & Liem, 2011; Sanders & Westerlund, 2011); Reducing Violence and Aggression in A&E (The Design Council, 2011). Sources such as these exemplify efforts made to explore stakeholder perspectives and human values in order to gain rich insights supportive of communication and relationship development through creative means (Arias et al. 2000; Brown, 2009; Day & Parnell, 2003).

Co-Design, Consensus Design, Participatory Design and other contemporary practices from within the discipline enable engagement, participation and communication to occur with non-designers and stakeholders. Approaches and motivations to working within and through these practices vary: Some are

altruistically oriented, looking to support social improvements and quality of life through high levels of community engagement. Others are more fiscally oriented; their focus pointed towards participatory engagement to drive and support the development of user-centred products. There are groups and parties who focus their efforts towards mid-levels of participation while remaining more connected to traditional practice and others still who adopt more restrained sets of approaches towards collaboration, only utilising the knowledge and perspectives of select participants of key information directly relevant to their objectives. However, finding the right community to engage with and gaining access to the correct participant groups requires time and consideration. Relationships have to be cultivated and trust developed in order to conduct successful research endeavours. Each step within the process has to be considered and planned carefully in line with the research strategy.

Approaches to participant engagement and interaction are shaped by underlying design methodologies. There is a vast array of available methodologies (many from other fields and sectors) which are used to underpin design practices and design led research, each providing a scaffold for strategy development to occur in consideration of the complex situations being addressed. These are determined in part, by the purpose and design of the research being proposed.

Historically, methodological approaches are more commonly associated with fields of study inclusive of: The Sciences (i.e. Social, Natural and Formal³⁰), The Humanities (i.e. History, Geography, Psychology), Medicine and Health, Applied Sciences (Systems Science, Engineering) and Mathematics. It was not until the emergence of the Design Methods Movement during the 1960's, which was popularised and explored through the works of Jones, Thornley, Rittel, Alexander and peers, that the emergence of contemporary methodological practices with applicability across design-led research endeavours began to emerge and gain established status (Cross, 1984: 1993). The Design Methods Movement, (which, despite its name, focused upon emergent methodological

approaches within design), was initiated via a series of conferences, the first of which was hosted in London 1962. It emerged as a result of these works and has continued to evolve and expand ever since.

Design methods, approaches and practices can be perceived as aids to both internal and external lines of communication. By implementing and engaging through collaborative processes, communication bridges can be negotiated and developed, cultivating an appreciation and acknowledgement of shared perspectives, opinions and ideas that can then be utilised to bring about systematic shifts towards positive outcomes (Burns et al, 2006; Day & Parnell, 2003; Manzini, 2015).

As previously discussed, Star and Griesmer (1989) suggest that “boundary objects” are in effect any object which can facilitate meaningful exchange and communication to occur between individuals (or groups) with different backgrounds. Design, which ‘speaks’ through objects, actions, process and visuals, can perhaps be understood as one of the original forms of making connections. The design action being undertaken or ‘boundary bridge’ created provides insights and data and a starting point for people to share. These practices, processes and methods of design allow communication to occur in multiple contexts with individuals (and groups) of vastly different backgrounds. Design methods and tools aid designers/researchers develop an (internal) understanding of key information and in synthesising and disseminating this acquired knowledge (i.e. what could be considered as a form of self or internal communication). They also act as conduits through which the designer/research can share information, thoughts, ideas and collect required data (i.e. external communication avenues). They can support designers in the synthesis of complex data; Support the examination of lines of practice; Communicate and engage with and across other sectors (sometimes one, sometimes multiples); Identify and reframe problems; Visualise concepts and prototypes. Selecting and applying the right design method/action/artefact/process at different stages

during the design process enables designers to work in multi-disciplinary settings, communicating, facilitating, and sensemaking information across disparate sectors and fields.

2.5 Applying Design Thinking in Social Innovation and Businesses

Innovation, as defined by the works of Schumpeter (1934) is a term used in business to describe how products and ideas become monetized. Schumpeter identified Innovation as the monetization of creativity and as ‘development as production of new combinations’. Godin, who undertook substantial studies of Schumpeter’s workings summarises that Schumpeter associated innovation with five phenomena within business development. (1) Introduction of a new good; (2) Introduction of a new method of production; (3) Opening of a new market; (4) Conquest of a new source of supply of raw materials or half-manufactured goods; and (5) Implementation of a new form of organization. (Godin, 2008. p. 4).

Social Innovation, for want of a better word, is a beast of a different nature. Although it can serve to produce fiscal and profitable return for organisations, communities and businesses, it is commonly associated and more predominantly active across a range of sectors dealing with more socio-environmental and socio-economically oriented kinds of behaviour. Social innovation is an action and mindset which is more focused towards addressing ‘systemic social and environmental issues’ and considers solutions which will create social value (Soule, 2018).

Within business, Innovation can imply a multitude of actions, such as; The development of new skill packages; Adaptability; The implementation of new methods and the transferability of skills. It is also used to convey resilience and relevance of products, services and systems in today’s markets. Innovation is now seen as a fundamental agent of change and growth in business (The British

Government. Department of Culture, Media and Sport. 2008). It was anticipated a decade ago that 'Innovation' would rise to become one of the largest avenues of financial growth across both the United Kingdom and further afield across international markets and borders.

It is apparent from the rise in figures surrounding voluntary work (Scottish Council Voluntary Organisations, 2013), a visible growth in entrepreneurship and creative enterprises (Nesta. 2012) and an increase in self-employment rates (The Scottish Government National Statistics Publication, 2013) that innovative approaches, both of the business and social variety are being implemented to support growth and development across the population of Scotland. Social Innovation is cultivating environments that generate opportunities and to create interesting resolutions and approaches for the complexities faced within the current climate socio-economic environments.

In terms of Design, Social Innovation and Innovation, it is increasingly common to find these terms firmly affixed and closely located to each other in a large quantity of much design based literature. This is reflective of the creative qualities which are imbued within innovation itself, the qualities which it then seeks to impart within creative processes, and the creative qualities within design as an action undertaken.

Innovation, if we take it as defined by Schumpeter is by its very definition soundly fixed within the realms of economic, consumer oriented, business driven perspective and position. Alternatively, Social Innovation allows for the skills and behaviours intrinsic to Innovation to be applied in new ways. Design institutes employ innovation strategies as mechanisms through which to engage with the public, to shape and define outputs and to create new markets. Given the social and collaborative nature of design thinking, and it's applicability towards the consideration of complexities found across communities and locations, it is logical it be employed as a mechanism through which we might ideate and enact social, economic and environmental changes.

Innovation is fiscally driven; it is how inventions become culturally embedded and how businesses thrive. On the other hand, although Social Innovation carries fiscal impact, it is derived through a different action. Where innovation is an intrinsic action of businesses, Social Innovation has a far more human and emotional basis. Its roots lie in the late 19th Century field of sociology, although today it is far more likely to be found being discussed in areas of design, business, management and politics (Ayob et al. 2017). The Stanford Business School defines it as:

‘[...] the process of developing and deploying effective solutions to challenging and often systemic social and environmental issues in support of social progress’ (Stanford Business School, 2018).

Docherty (2017) suggests that Social Innovation ‘enables new ways of tackling social needs and creating new relationships by both empowering citizens and generating social benefit’ (p.720). Clearly then, this has synergy with Design Thinking building and cultivating an environment of deeper empathy and understanding through human-centred design processes.

Through review of the works of Baldock & Evers, 1991; Henderson, 1939; Westley, 1991 contained in Ayob et al. 2016, the predominant positioning for ‘Social Innovation’ can be identified as being intrinsically connected to concepts surrounding societal relation. It does not have to be connected to innovation, although innovations can be deemed as social innovations dependent upon their impact³¹. Ayob’s work positions Social Innovation as being 1 of 4 models:

- Social Innovation as Outcome (Westley, 1991)
- Social Innovation as Relationships – the restructure of relationships where positive change is driven by citizen movements (Henderson, 1939).
- Social Innovation as deliberate socio-political change for the benefit of society – co-production for the transformation of services (Baldock & Evers, 1991)
- Social Innovation – change within organisations. (Ayob et al. 2016, p. 643-644).

Smeds et al. (1994), once argued that a technological innovation was a social innovation due to the impact which it carried upon quality of life experienced. This set precedent for each of the 4 models of social innovation amalgamating with technological innovation (which in turn tracks back full circle to Schumpeter's position on innovation as the monetization of invention). Social Innovation, by re-constructing social relations through the implementation of product or technology, becomes a business ideal. When technological innovation becomes Social Innovation, it shifts the societal status quo, whilst simultaneously generating profit for the business.

Businesses that support social innovation bring positive societal change, be that internally within their organisations, or relationships across organisations, or through development of relationships with customers and stakeholders. In doing so they create environments of positive change socially and also generate positive economic impact, thus benefiting themselves as individuals, collectively (organisationally) in the business sense, and socially, as a part of humanity.

As discussed earlier, Design Thinking is inherently human-centric and therefore offers new ways to consider problem identification and solving. This makes it both appealing and useful to organisations where it is applied³².

As businesses and governments have become increasingly aware of the negative environmental and social impacts which are occurring locally and globally in response to unsuitable and unsustainable models of service provision, consumerism and capitalism, designers have developed a deepened appreciation of the negative impacts which can result from their work. (Cross, 1972 in Sanders & Stappers, 2008; Jungk, 1972 in Cross, 1972). Social Innovation is a potential avenue to developing resolutions in a case by case scenario. It serves to address and engage directly with specific key stakeholders. Similarly, Design Thinking offers the opportunity to situate users directly at the heart of planning and

development, thus creating savings fiscally, socially and environmentally, Social Innovation offers the potential to impact real change at local levels.

Designers have played a role in creating the model of society which we experience today through contributing towards the generation of products and objects, generating ill-considered design outputs. However, as has been established so far, there is an acknowledgement that design has capabilities which extend far beyond the generation of materialistically driven consumer-based outcomes. Companies such as IDEO, Frog, Stanford d. school etc have popularised and publicised the concept of Design Thinking across the globe, and as a result, companies, industries and system providers have become more accepting of the potential for including models of Design Thinking within their work.

Design Thinking has emerged as a business driver, business creator and effective process to support innovation. Its capabilities as a strategic process that is inherently human-centric offers new variables for consideration in problem identification and problem solving. In a business/organizational context, Tim Brown describes Design Thinking as:

'a human-centred approach to innovation that draws from the designer's toolkit to integrate the needs of people, the possibilities of technology, and the requirements for business success'. (Brown, 2009).

It supports companies in identifying and addressing the unmet needs of their customers, shifting business models from business-oriented to customer centric.

Christian Bason, a member of the European Design Leadership Board, points out that he believes that the capabilities of design have application across multiple avenues:

"Design should be applied in many more sectors and different situations, and at the same time we need to remember what it is that makes design unique – the ability to visualize, to make abstracts concrete, to influence people's behaviour" (Bason, 2012).

Social Innovation can make cultural and sociological shifts a reality. By partnering with design thinking, opportunities to explore nuanced behaviours and needs of communities can be facilitated. The Young Foundation (2018) presents a methodology for Social Innovation which positions it as being a 'collaborative and inclusive way to find solutions that meet people's real needs, a creative process with the aim to deliver new solutions to a challenge' They promote Social Innovation as being an approach through which social needs can be addressed more effectively, resulting in both improved capabilities and relationships for businesses. They identify that Social Innovation must be:

- Collaborative and open – Diversity in participation is believed to support and enhance the realisation of solutions. It calls for 'cross-fertilisation of ideas (from multiple participants with different backgrounds) as being fundamental to this stage. It also requires identification of participant roles prior to undertaking challenges in order to maintain environments of collaboration.
- Iterative – An environment where solutions and ideas are revisited and iterated and adapted through appropriate feedback channels.
- Diamond Shaped – This phase resonates with the Design Council (2005) Diverge – Converge Model, where ideas are refined and narrowed down, then revisited and explored further, and so on. This phase incorporates aspects of both divergent and convergent thinking.
- Coaching approach – In design thinking terms this phase resembles the facilitation element commonly found within design thinking. It respects the knowledge of participants, identifying them as 'experts' within the context frame.
- Peer-to-peer learning – Cultivation of environments where participants are encouraged to share their knowledge and personal experiences which each other. This is believed to support both collaboration and responsibility (Young Foundation, 2018).

The Young Foundation positions participants and designers as belonging within one of four roles: Facilitator, Stakeholder, Support Partner and Challenge Owners. Having a specific role and a clear outline of what to contribute is

believed to aid relationship development and benefit overall success and outcomes. The four phases of Social Innovation also resonate over to the discussed phases of Design Thinking, even though there is a variation in the terms used. The general direction and content is remarkably similar to practices enacted in Design Thinking (Fig 19 shows the SIC social innovation process across 4 key steps:

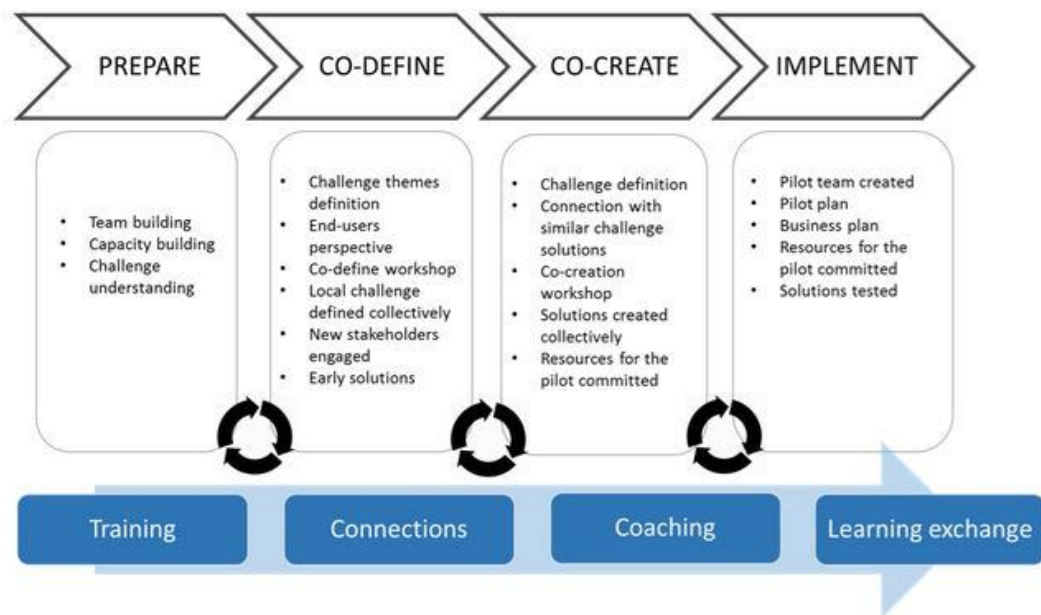


Figure 19. SIC Social Innovation Process Model

Source: Young Foundation.org, 2018.

This research focuses towards adopting a perspective of social innovation as relationships – the restructure of relationships where positive change is driven by citizen movements (Henderson, 1939). This decision is grounded by the belief in the capabilities of design thinking to facilitate an understanding of real world situations faced by SMEs and micro industries in Rural Scotland. It aims to support the communication of values between communities and their local industries in order to support future relationship and business developments.

Design Thinking offers the opportunity to consider problems and situations in a new light through constructive conversations. It is particularly useful when enacted through models of knowledge exchange and knowledge sharing. The

practices, philosophies and processes of Design Thinking can complement and support cross-disciplinary practices. However, caution must be given as to where and how this occurs. For instance, contemporary design practices have received over the years negative press over 'parachuting-in'. That is, dropping into and agitating social and cultural situations, gaining the information they desire with no real consideration for the ethical implications of their actions upon their participants.

2.6 Summary Discussion

Chapter 2 set out to contextualise and frame this research within the field of design, specifically within the practice of Design Thinking. Through discussion of developments which have occurred in the field of design over the past decades and by considering the resulting transitions which have manifested, it identified Design Thinking as a contemporary practice with significant participatory inclinations. It presented how, through participatory approaches, Design Thinking has emerged as both an effective strategy for innovation, and one capable of addressing ill-defined and wicked problems,

It highlighted that the development of resolutions in relation to complex and interconnected social, environmental and economic challenges faced across modern society are, at least in part, a responsibility of the design sector. It has capabilities that can support and pro-actively address the creation of avenues of action.

This chapter provides a frame and contextual background for the practice of Design Thinking as the approach implemented in this piece of design-led research. It identified Design Thinking as a practice of design with intrinsic qualities of collaboration, communication, prototyping, visualisation and empathy which enable its implementation as a strategic tool for identifying, ideating and creating potential solutions through iterative and collaborative

approaches. Design has a professional body of knowledge to offer which can contribute to the reshaping and future development of our social constructs and environment. Fresh perspectives and methods of communication which have been developed seek to support the public in realising that good design practices, theories and research are not inaccessible or exclusive fields. Design and its thinking are fundamentally human; good design outputs are reflective of the needs and wants of the people. It is a process and action which is in a state of continual evolution and metamorphosis, influenced by both internal and external factors.

Action is required to instigate new and sustained economic growth to occur across communities and businesses. Through working together for mutual benefit, contributions can be made towards economic growth. Understanding and determining social, personal values which can contribute towards societal prosperity can couple new opportunities for business growth with positive social impact creating the potential of self-sustaining circles of support, reliance and resilience.

Design-led research offers opportunity to consider previous, current and anticipated future complexities faced within societal constructs through new lenses. Through utilising 'Design' capabilities to undertake co-creative and collaborative projects, engaging directly with those who are affected and experiencing the effects of these situations, the knowledge necessary to support the deciphering and creation of decipher potential resolutions can emerge. Co-design and participatory approaches utilise and implement recognised design based skills such as visualisation, prototyping, artefact generation. These additional insights provided by participants serves to add complimentary elements of knowledge which support creative problem solving. Design led research, which considers the voices of all actors involved who are connected or related to the subject material being studied, provides a wider and more in-depth qualitative element to the process, enriching the end output.

3

**Exploring Differing Value
Theories across the Domains of
Business, Economics and
Community**

Chapter 3. Exploring Differing Value^e Theories across the Domains of Business, Economics and Community

This chapter presents and reviews value theory concepts from the differing perspective viewpoints of Business, Economics and Communities. It begins by discussing concepts surrounding values as personal and social realities pertaining to their meaning, influence and position within and across our lives, and identifies the researcher's position. It then moves on to explore the role of values within business, how and why they are important, and what impact they have upon business models. Following on from this, the chapter considers the role of value as perceived and communicated through the field of economics and how this may have developed meanings beyond its original scope over the years, (where financial value is misinterpreted as reflecting social values). The focus then shifts to emerging alternative models of value assessment, exploring briefly their rationales and processes, and considering the role of values within community settings. The chapter concludes with a discussion on the potential role for design in supporting the communication of values between business and community groups providing examples of previous works where this has been attempted. Chapter 3 serves to address objectives 1 & 2 by examining traditional and alternative economic models of value assessment and establishing a context based upon literature at the intersection of business, community, economics, values and design.

'GDP measures everything in life, except that worth measuring'

(Kennedy, R. 1968).

^e Use of the term value in this specific context of chapter title is representative of value in both numerical/fiscal/economic and personal/social human values. It is important in the context of this research to distinguish between the terms value and values. One is simply not a pluralisation of the other. Value mainly refers to quantitative or numerical/fiscal/economic matters, while values are qualitative expressions of human importance. Definitions of these and other similar terms are available in the glossary (p.xx-xxvi).

3.1 The Domain of Values

Human beings search for order and meaning in chaos and attribute value in one form or another to every aspect of our lives. These values play a vital role in individual and group behaviours impacting and influencing the ways in which communities develop and evolve (Schwartz, 2006; 2012). They are open to a wide variety of interpretations. Consequently, meanings, descriptions and expressions of values vary dependent upon the context they are positioned within (Cannon, 2007; Schwartz, 2012).

In Psychology and areas of social science for example, values are perceived as 'motives for action' (Hechter et al. 1993), thus positioning values as the human reasoning and cognitive basis for our choices, actions and behaviours. On the other hand, biology and the sciences, consider values as 'the product of instinct and natural drives' (Ibid), justifying and rationalising the actions, reactions and responses of living things to the world around them as intrinsic and in-built behavioural patterns. In anthropological and sociological circles, values are deemed as 'being the basic determinants of [all] social action' (Ibid). Indeed, available interpretations are so wide ranging that the Oxford English Dictionary provides no fewer than 496 definitions of value, (which are derived from both qualitative and quantitative positions along with 106 associated phrases (OED, 2018).

Over the years a range of scholars, including Hechter, Schwartz, Schumpeter, Cannon and Rokeach have contributed personal explorations and considerations of values to the conversation as deeper understanding and appreciation of human values and their motivations have been sought. As such, human values are understood and accepted as being either Immanent/Intrinsic or Instrumental (Hechter, et al. 1993; Wright, 1971) or Instrumental/Terminal (Rokeach, 1973: 2000) in nature.

Hechter et al's consideration of social human values as either instrumental or immanent, positions instrumental values as more closely associated with the acquirement of products in order to strengthen one's perceived social positioning. This in turn closely attributes and associates instrumental values with the success of consumer markets (1993).

'People can act on the basis of instrumental values to combine their time and personal endowments to produce fungible resources, (such as wealth, status, power) that may be exchanged for a wide variety of specific goods. Action on the basis of instrumental values provides means to other ends: it is designed to increase the actor's stock of fungible resources. As their name implies, instrumental values pervade society; they are what enable the economist's incentives to produce their intended effects' (Ibid p.4-5).

This positions instrumental value as value we place upon things for the results which they afford us, (Hechter, 1987; Westacott, 2019). For example: Money has instrumental value. The purchasing power it affords allows for interactions to occur such as; the exchange of goods, (be that property, food, transport, facilities etc). It can be used to facilitate access to experiences of value, or for material gain, i.e obtaining objects of desire. Money is a means to an end; we provide it context, meaning and value through associated values, i.e the value of what it can give us. Without that context or meaning, money is little more than elaborately printed paper (Westacott, 2019).

Immanent or intrinsic values which support the development of individuality across our social groupings effect the ways in which we aim to be perceived, understood and engaged with by those around us. As Hechter also points out however, immanent values are not always reliant upon the individual's actual resource capabilities or availability.

'[...], people can also act on the basis of *immanent values* to attain goods and ends that are desired purely for their own sake (Hechter, 1987; 42-43). Where instrumental values are held commonly by the members of society, immanent values are unlikely to be. They afford us an opportunity to individuate ourselves in social life. [...]

Behaviour that is motivated by immanent values is independent of its effects on an actor's stock of fungible resources and may even be inconsistent with the attainment of these resources' (Ibid. p4-5).

They represent a far more 'human' perspective. We each have our own individual, and immanent values which are core to our behaviours and beliefs (Cannon, 2007). These types of values are more closely associated with things like our sense of identity, feelings of belonging and the overall human experience. It is our immanent or intrinsic values which influence our behaviours, actions and emotions (Schwartz, 2012; Rokeach, 1973: 2000; Cannon, 2007; Hechter; 1987). Intrinsic values 'allow humans to determine the goals and directions of their development, regulating and displaying the features of their behaviour' (Illyin et al. 2016, p.1393). They provide the scaffolding upon which we set the standards of our engagement with the world around us. (Rokeach ,2000; O'Farrell, 2019; Westacott, 2019).

'Valuing is something that one performs. To value something is to not merely express a belief, but it is to live one's life in such a way that can be seen as a witness to the given belief [...] This may mean having and publicizing one's belief in that value as well as participating in a social performance of valuing when appropriate (Cannon, 2007, p.330-331).

We communicate emotions, human qualities and beliefs through expressing our values, and we express care and consideration for things which we perceive to have value, be they material or other. Schwartz (2012) positions that 'Values are critical motivators of behaviours and attitudes' and are built and refined across time and through experiences. We attribute intrinsic personal value to objects or experiences with no accountable instrumental value as a result of our emotional response, thus valuing certain things and behaviours because of their intrinsic quality and worth to both ourselves and their value to others (Westacott; 2019; Cannon, 2007; Illyin et al. 2016). An example of this would be keeping a piece of inexpensive jewellery from a grandparent for sentimental reasons. It is kept and treasured not for its fiscal worth, or as a potential fungible resource, we retain it,

and value it for the emotional and personal worth we have designated to it. It provides and carries in itself, intrinsic value.

Schwartz, who has conducted a considerable number of reviews, research and investigation of scholarly works and philosophies around values, determines that 'When we think of our values, we think of what is important to us in our lives' (2012, p.1). They are influenced by, impacted by, and impactful upon, multiple facets, features and factors of life. Some are shared throughout whole communities whilst others are individually determined by our own perspectives (Schwartz, 2012). 'Values enable us to position ourselves and [our] actions across a wide variety of events, situations and day-to-day life' (Lindsay, 2016).

Rokeach (1973: 2000), Cannon, (2007) and Hechter (1987) consider that Immanent values which support the development of individuality across our social grouping effect the ways in which we aim to be perceived and understood and also impact the ways in which those around us engage and interact. However, when our individual values and the exhibition of those values is perceived as being oppositional to the 'collective norm' the levels of social acceptance experienced are reduced (Cannon, 2007). Conceptually this highlights that there is a possibility that businesses (inclusive of SME and Micro enterprises), who are identified or perceived to be acting in opposition, (or at least not presenting/acting/behaving) in alignment with their local communities' collective norms and values may experience similar kinds of disassociation and reduction in acceptance.

Through intrinsic and immanent development, values form in response to personal beliefs and are influenced by collective beliefs creating a key feature found in human personalities (Illyin et al. 2016; Cannon, 2007). They contribute towards individual and collective goals, shaping and determining behaviours. They serve as a scaffolding and provide a 'set of standards [...] through which action, judgement, choice, attitude, evaluation, argument, exhortation and rationalisation' (Rokeach, 2000, p.2), are all influenced. Not only that, they shape

how we perceive, contextualise, rationalise and disseminate experiences and encounters, which in turn influences our attitudes around notions of right and wrong, good and bad, along with impacting upon our wants, needs, hopes, beliefs, dreams and goals (Taylor, 2012) at both individual and collective levels.

Within intrinsic and immanent values exist both individual (personal) values and collective values. According to Taylor, (2012), personal values emerge from those of the collectives which surround us as we grow becoming 'adopted personal values' (Taylor, 2012). With our individual values shaping and influencing our social positions, (Cannon, 2007), manifestations of our values through our actions and behaviours, (as based upon our personally held values and beliefs), when aligned and relatable to those around us, positively influence our acceptance as part of that collective or cultural whole (Ibid, p.331).

Social, Subjective or Personal values and their level of influence can vary with factors such as: Public acceptance and collective ideologies; Perceived values of products; and Motivations which serve to align personal values with that of the public being affected (Leontyev, 1996, Kagan, 1997 and Smirnov, 2007 cited in Illyin et al. 2016, p.1395).

Hechter (1993) also identifies that immanent values differ in a variety of ways, presenting that variations occur across;

- Their scope of control.
- Their application.
- Their social pervasiveness (from those of individuality to the immanent).
- The variation of analysis from micro to macro.

Their scope of control varies depending upon how much control the individual has to define, enact and engage with them.

'[Values] differ in their *scope of control*. Some (such as adherence to an orthodox religion) concern objects and events that are under the actor's control. Others (such as the preference for participating in egalitarian rather than hierarchical groups) necessarily concern

objects and events that are beyond any single actor's control' (Hechter, 1993. p.4-5).

The scope of values influences when, where, how and why they may become visible to others,

Values differ in their scope of application. Some (for example, the altruism that often is considered responsible for behaviour in the nuclear family) are evoked only under specific social situations, whereas others (for example, the reciprocity implicitly expressed in the Golden Rule) may be acted on in nearly all social situations' (Ibid, p.4-5).

Values vary in their metrics of assessment dependent upon the context they are being assessed and considered through, and the process of analysis impacts the ways in which they are perceived and communicated across individuals, social groups and scientific communities. Within domains of business and economics for example, value is associated with; The acquirement of fiscal or fungible resources (gaining money and/or property or goods); As drivers of strategy; Indicators of growth; As reflecting failure and stagnation in consumer behaviours (Gibson-Graham et al. 2013). In communities they clearly take on far more variable roles, partially responsive to the ebbs and flows of business and economic models. More recently however, from across business and economic sectors, a slight shift in focus towards the refinement of models more appreciative of social and environmental factors of wellbeing is emerging (Ibid, p.4).

'Values differ in the level of analysis in social scientific explanations. They enter into social scientific explanations both at the micro and macro levels of analysis. They play an important role as motivating elements in explanations of individual behaviour and are often invoked to explain differences in social outcomes such as institutional arrangements and aggregate rates of productivity, fertility and crime' (Ibid, p 4-5).

Values as said, are subject to change and transformation (O'Brian, 2009; Schwarz, 2012). They manifest and develop in various ways and can also have specific meaning and importance to the individual and/or social setting where they are

found (Cannon, 2007; Hedahl & Huebner 2012). They can be individually perceived, socially accepted and can relate to matters both physical and non-physical i.e. an object (physical), an emotion or service (non-physical). As Cannon (2007) suggests, 'accounts of individual and collective valuing should be complimentary, consistent and accurately descriptive' (p.331). Collective values require contextualisation within their presentation, as do individual values (Cannon, 2007; O'Brian, 2009; Schwartz, 2012; Hedahl & Huebner, 2015). Identifying collective and shared value structures as positioned by Hedahl & Huebner (2015), are significant for understanding some collectivises (p.1). They provide rationales as to 'why' collective collaboration occurs through activities, entities or practices (Ibid, p.2). They support the identification of motivations and give meaning to collective behaviours. This provides a foundation formed around what Hedahl describes as 'collective concerns' or factors of importance and value to the community. They cannot be assumed to provide a unanimous, definitive or absolute perspective of the whole social group, rather they are indicative towards popular and predominant trends (Hedahl & Huebner, 2015).

When we discuss values within the context of being personal, or individual in nature, we use terms which are qualitative in nature, more emotively and behaviourally descriptive. Expressions range from singular terms through to structured statements which can express drives, motivations and/or rationales. For example, in Rokeach' Value Survey (RVS), he identifies two categories of values as existing within immanent value structures, that of Instrumental and Terminal. Instrumental values in this context are representative of individual personal values which relate to human behaviours and actions while terminal values are seen to represent goals in life which lead to desired end outcomes (Rokeach, 1985). Table 10 offers an overview of Rokeach's Terminal and Instrumental Values.

Table 10. Outline of Rokeach's Instrumental & Terminal Values

Instrumental Values	Terminal Values
Ambitious (Hard-working, aspiring)	A world at peace (free of war & conflict)
Broadminded (Open-minded)	Family Security (taking care of loved ones)
Capable (Competent, effective)	Freedom (Independence, free choice)
Cheerful (Light-hearted, joyful)	Equality (brotherhood, equal opportunity for all)
Clean (Neat, tidy)	Self-respect (self-esteem)
Courageous (Standing up for beliefs)	Happiness (contentedness)
Forgiving (Willing to pardon others)	Wisdom (a mature understanding of life)
Helpful (Working for others welfare)	National security (protection from attack)
Honest (Sincere, truthful)	Salvation (saved, eternal life)
Imaginative (Daring, creative)	True friendship (close companion)
Independent (Self-reliant, self-sufficient)	A sense of accomplishment (a lasting contribution)
Intellectual (Intelligent, reflective)	Inner Harmony (freedom from inner conflict)
Logical (Consistent, rational)	A comfortable life (a prosperous life)
Loving (Affectionate, tender)	Mature love (sexual and spiritual intimacy)
Obedient (Dutiful, respectful)	A world of beauty (beauty of nature and arts)
Polite (Courteous, well-mannered)	Pleasure (an enjoyable leisurely life)
Responsible (Dependable, reliable)	Social recognition (respect, admiration)
Self-controlled (Restrained, self-discipline)	An exciting life (a stimulating active life)

Source: The Nature of Human Values, (Rokeach, 1973).

The works of Schwartz (2012) takes considerations and suggestions such as these further, refining a description and explanation to provide a more straightforward outline and meaning, He proposes that values have 2 different levels: Features and Motivations and that all values are subject to 6 features (Table 11).

Table 11. *The Nature of Values*

The Nature of Values – Features	Motivators
1. Values are beliefs.	Values are beliefs linked inextricably to affect. When values are activated, they become infused with feeling. People for whom independence is an important value become aroused if their independence is threatened, despair when they are helpless to protect it and happy when they can enjoy it.
2. Values refer to desirable goals.	Values refer to desirable goals that motivate action. People for whom social order, justice and helpfulness are important values are motivated to pursue these goals.
3. Values transcend specific actions and situations.	Obedience and honesty values, for example, may be relevant in the workplace or school, in business or politics, with friends or strangers. This feature distinguishes values from norms and attitudes that usually refer to specific actions, objects or situations.
4. Values serve as standards or criteria.	Values guide the selection or evaluation of actions, policies, people and events. People decide what is good or bad, justified or illegitimate, worth doing or avoiding, based on possible consequences for their cherished values. But the impact of values in everyday decisions is rarely conscious. Values enter awareness when the actions or judgements one is considering have conflicting implications for different values one cherishes.
5. Values are ordered by importance relative to one another.	Values are ordered by importance relative to one another. People's values form an ordered system of priorities that characterize them as individuals. Do they attribute more importance to achievement or justice, to novelty or tradition? This hierarchical feature also distinguishes values from norms and attitudes.
6. The relative importance of multiple values guides action.	Any attitude or behaviour typically has implications for more than one value. For example, attending church might express and promote tradition and conformity values at the expense of hedonism and stimulation values. The trade-off among relevant, competing values guides attitudes and behaviours (Schwartz, 1992; 1996). Values influence action when they are relevant in the context (hence likely to be activate) and important to the actor.

Source: Schwartz, 2012. p.3-4.

In addition, Schwartz proposes a model of 10 families of values he considers to be universal (Table 12). Values which can be appreciated, understood and related to be people across the globe. Schwartz suggests that each of the 10 values identified are grounded by:

'one or more of three universal requirements of human existence [...] the needs of individuals as biological organisms, [the] requisites of coordinated social interaction, and [the] survival and welfare needs of groups' (Ibid, p.4).

Schwartz's 10 universal values do not provide strict definitive definitions of each kind of human value, rather they grant us a way to group kinds of values into different umbrellas: Areas (or themes) that create points of similarity and descriptions which support consideration, understanding and manageability when considering groupings.

Table 12. 10 Universal Values as Identified by Schwartz

10 Universal Values	Motivation/Goals
Security	Safety, harmony and stability of society, of relationships and of self.
Conformity	Restraint of actions, inclinations and impulses likely to upset or harm others and violate social expectations or norms.
Tradition	Respect, commitment and acceptance of the customs and ideas that one's culture or religion provides.
Self-Direction	Independent thought and action – choosing, creating and exploring.
Stimulation	Excitement, novelty and challenge in life.
Hedonism	Pleasure or sensuous gratification for oneself.
Achievement	Personal success through demonstrating competence according to social standards.
Power	Social status and prestige, control or dominance over people and resources.
Benevolence	Preserving and enhancing the welfare of those with whom one is in frequent personal contact (the 'in-group').
Universalism	Understanding, appreciation, tolerance and protection for the welfare of all people and for nature.

Source: Adapted from Schwartz, 2012. p.5-7.

From here, correlations between the works of Schwartz (2012) and Maslow (1943) and others begin to emerge. If we consider values as identified and grouped by Schwartz, and their relation to features identified by Maslow regarding fundamental human needs, then reflect and consider the writings of Hechter, Rokeach, Cannon, Hedahl and others previously discussed, we begin to envisage and comprehend the very complex nature of values and their intrinsic role within our lives. These musings also provide scope to explore and identify a base structure from which values and can be considered. For example, while Hechter allows us to consider variations which exist across social and human value

structures and their potential motivations and resulting actions, Schwartz offers rich levels of insight which drill down into more specific aspects of motivations and drivers through his identified groupings of values and Rokeach allows for consideration of behaviours and life goals. This in turn allows us to then consider the multiple ways in which values effect and impact our lives and reflect upon where these values may originate.

The 3 universal rules outlined by Schwartz (2012), that of biological, social and survival can be aligned with the foundational tiers (Physiological, Safety and Love/Belonging) found in Maslow's work (Fig.20) and the variations in types of values provided by Hechter, such as those perceived to be immanent or instrumental offer us insight around our understanding, recognition and appreciation of values and their application, justifying and rationalising actions and underlying motivations. This plays a role in our understanding of the variations in impact which they can carry, which further aids our understanding of the roles of values within wider contemporary social constructs.

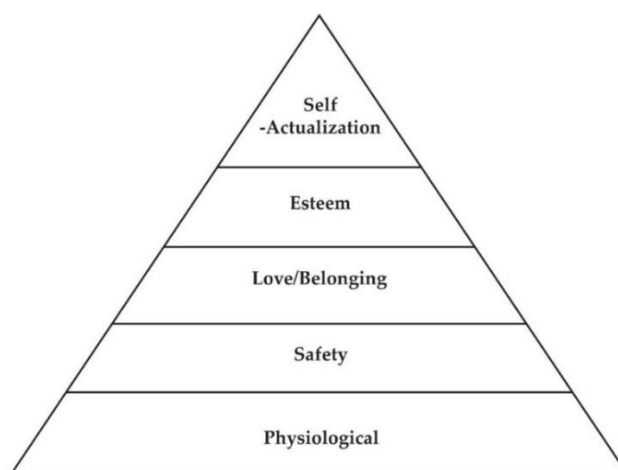


Figure 20. Maslow's Hierarchy of Human Needs.

Source: Inspired by Maslow, 1943.

Maslow's hierarchy is predominantly visualised in graphic form enabling a complex and well-developed line of thought to be communicated simply and clearly. There are multiple variations available each with their own cosmetic aesthetic variation, but fundamentally the information provided remains the

same across the board. The origins of the original visualisation are elusive (the graphic representation itself never actually appeared in Maslow's work; see both 1943 paper and 1954 book), but it is generally accepted that the logic and inspiration underpinning it may well reside in the following statement surrounding relative satisfaction.

'So far, our theoretical discussion may have given the impression that these five sets of needs are somehow in a step-wise, all-or-none relationship to each other. We have spoken in terms as the following: "If one need is satisfied, then another emerges." This statement might give the false impression that a need must be satisfied 100 per cent before the next need emerges. In actual fact, most members of our society who are normal, are partially satisfied in all their basic needs and partially unsatisfied in all their basic needs at the same time. A more realistic description of the hierarchy would be in terms on decreasing percentages of satisfaction as we go up the hierarchy of prepotency, For instance, if I may assign arbitrary figures for the sake of illustration, it is as if the average citizen [p.389] is satisfied perhaps 85 per cent in his physiological needs, 70 per cent in his safety needs, 50 per cent in his love needs, 40 per cent in his self-esteem needs, and 10 per cent in his self-actualization needs' (Maslow, 1943. p.382).

Maslow clearly delineates specific aspects of human life in relation to human needs and wants. As such, this reflects actions, behaviours and features of value and importance to an individual at any given time, dependent upon their specific and unique situation. Maslow's generalizations surrounding percentage quantities of needs met and satisfaction granted resonates with the subjective (and variable) nature of values themselves. An individual may well perceive their own needs of warmth, food, water and shelter as having been met adequately based upon their own definitions of importance and their own personal value structures, but an external party may well contest this perspective. They may argue that these needs are not being adequately met, if, in their opinion, what they are see does not align with their independent and separate value structures. Needs, wants and values are subjective to those experiencing them and values are directly impacted and shaped by needs and experiences.

What Maslow provides is a clear categorisation for aspects of human needs and wants which can then in turn be used to align and ground Schwartz, Hechter, Rokeach and other theories surrounding human values and their motivations which and the variations of these which can occur. Fig 3.2 offers a quickly digestible visual correlation of the works of Schwartz and Maslow portraying similarities of opinion surrounding human needs and resulting value types which emerge, allowing us to identify that, of the 5 predominant human needs identified by Maslow, each could be considered as responsible or responsive to a minimum of 4, maximum of 8 value types and their correlated motivations.

Intuitively driven, these correlations were highlighted and aligned where correlation and areas of compatibility could be identified. The outlines provided by Schwartz (Table 12) and factors identified in Maslow's detailed breakdowns of each need (1943:1954) were mapped (with a degree of intuitive response) in relation to each other by considering factors such as: Where did they hold similarities? What motivations could be perceived as evolving from the same root principles? Where do similar drivers and motivations align? Where did additional features align and relate to each other ranging from motivations through to end outcomes.

Each of Schwartz's 10 universal values are highlighted in relation to their occurrence across Maslow's model. For example, the umbrella term of Security as provided by Schwartz, has bearing and relation towards each of Maslow's identified human needs. Alternatively, where Schwartz presents definitions and positioning of the value group Conformity, it is only across Maslow's descriptions of psychological need and the need to love and belong that features can be seen to align and relate. Tradition as a universal value speaks clearly to factors of need identified by Maslow as related to Self-Actualisation and Esteem. Each of Schwartz 10 universal values are identified in a different colour. The position of each colour block alongside Maslow's pyramid of needs serves to indicate where similarities and compatible notions and considerations exist.

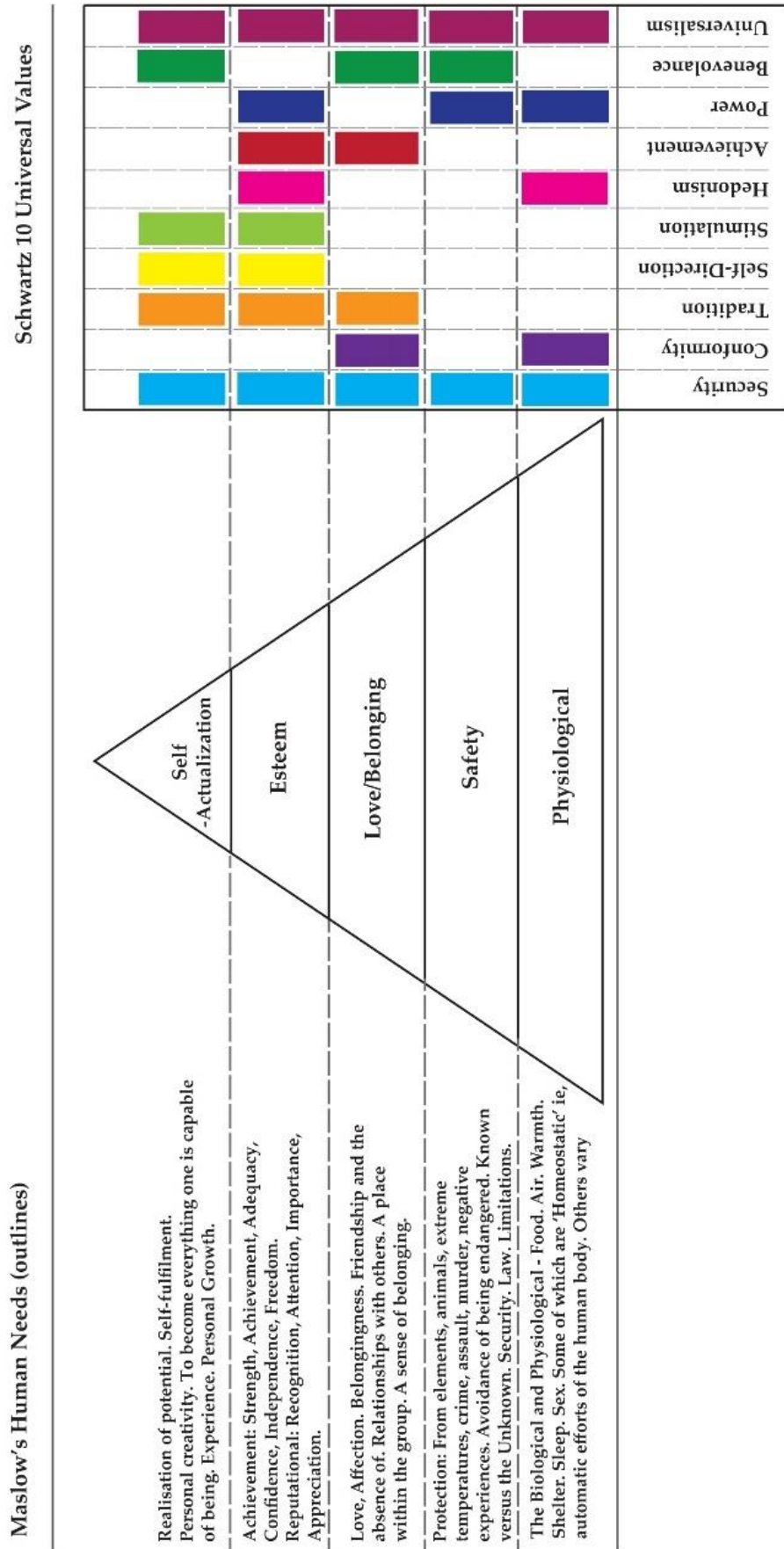


Figure 21. Correlations between Maslow and Schwartz

Source: Built upon the works of Maslow 1943 and Schwartz 2012.

Values play a key role in qualitative aspects of life. Their range of impact and influence is extensive, spanning the immanent, intrinsic and instrumental and terminal) and can be individual and/or collective.

Human values, as discussed within this sub-chapter, are critical motivators of behaviours and attitudes' (Schwartz, 2012). To provide a quick recap, as is presented in Ch1, p. 10, based upon an understanding derived from the works of the thinkers presented so far, this research positions and interprets values as:

- Principles, beliefs and ethical standpoints which influence, contextualise and rationalise human priorities, shaping and influencing behaviours, actions, attitudes and responses.
- Human expressions of conscience and importance which form the ideals and rules around which we live our lives.
- They provide meaning and guidance to decisions we make and how we evaluate potential choices and actions. (They are negotiable but only to a point)
- They can be individual, collective, personal and professional and can relate to physical and psychological matter. (They can be independently professional, or personal, or collective...),
- They can change over time, adapting and shifting in relation to our lived experience and the development and growth of our personal knowledge.

3.2 Value and Values within the Business Domain

Businesses have developed and adapted with mankind as society has evolved in order to meet the needs, wants and demands (both realised and unrealised) of people.

The direction which societies take in the world is bio-culturally determined. We, like all living beings are biologically motivated to survive and adapt in changing environmental circumstances. In addition, however, we are culturally motivated. The two motivations are intimately bonded together like the combination of two 'forces' and the direction taken at any one time is the resultant of the magnitude of the two forces. Where early hominids were almost solely biologically dictated, modern homo sapiens are increasingly directed by culture and its primary component – technology' (Bruce & Baxter, 2008).

Businesses hold in effect, a somewhat symbiotic relationship with humanity. They are moulded and shaped to meet the needs and instrumental values of both those responsible for their creation (the business owners, i.e. maintenance of lifestyle, profit, sustainability), and in response to identified and anticipated needs and wants of markets (the consumers). They respond to factors of influences which occur within their direct social constructs, locally identified needs and wants from their immediate markets, and also to influences exerted from larger globalised platforms.

'Man began its existence as a beast, but soon developed social bonds and union to form societies. These societies then went on to develop civilisations, from which grew new social institutions. Market was one, the State another. Business evolved as synergies were created by bringing factors of production together, resulting in the modern era' (Kumar, 2017).

As we have established, values hold a key role in how we, rationalise, understand and perceive our own and others' actions. Be they of immanent, intrinsic, instrumental or terminal nature, or indeed even fiscal, numerical or monetary in nature, they are a fundamental feature which is firmly affixed to every factor of life.

Within the context of business, the meaning of value shifts and reflects qualities more associated with instrumental values, or financially oriented value (quantitative) rather than immanent or intrinsic values. (That is not to say they have no role here, rather, they are less prevalent).

At first look, values considered within the domain of business tend to be closely associated with matters of numeracy, finance and traditional economics. Upon closer inspection however, a more three-dimensional and inclusive model of engagement with values can be identified. For example, within a business based context, value can be interpreted as:

- Indicative of the perceived value gained by customer and consumers through selecting specific company's offerings (*Indicative of instrumental value*).
- The drivers behind the internal marketing strategies and plans (*The potential fiscal/monetary value that successful strategies may bring*).
- The anticipated wants and needs of the customer identified by the company (*Assumed immanent and Instrumental values of customers*).
- Financial revenue and turnover, quantities of materials, transportation, production and other attributable costs (*Current, anticipated and sought after Fiscal, monetary gain*).
- The foundational basis of the business ideals and morals (Clark et al. 2012).

Along with:

- The principles of a company, how it is run (considered as standards of practice guiding behaviour) (Heryati, 2018). (*Immanent/intrinsic, instrumental and terminal values, but these can be influenced and driven by drives towards profitability and financial growth*).
- The personal motivations, objectives and ethics of both company and financiers. (*The immanent values underpinning its inception*).
- Elements of financial worth, productivity, fiscal value, revenue and turnover. Factors more closely associated with a business's instrumental values (Porter, 1980).

The instrumental values which businesses provide for individuals and communities through products, services and experiences that they require or

desire, positions businesses with a key role in economic and social development. In effect, businesses have feet in both qualitative and quantitative fields of value. They develop new products, services, experiences and processes to satisfy our collective and individual needs and demands, thus generating further factors of instrumental value into our lives. If we apply the considerations mentioned in 3.1, (that values are intrinsic, personal and collective and agree that every individual has their own cultivated and developed personal value structures which are influenced by social, environmental and cultural factors): Businesses of most kinds, although generating financial and economic value through matters of instrumental value, are in fact built upon a foundation made from the instrumental, immanent and intrinsic values of the individuals responsible for their inception (Cannon, 2007). They represent a melting ground for the incorporation of multiple value types, both qualitative and quantitative.

Rationales proposed by Porter (2011), along with the works of Osterwalder and Pigneur allow for definitions value within the context of to be considered as :

- Value being provided to the customer through the business offering. (*What they gain through their purchase*).
- The financial value of the object/service/system itself being provided. (*What it costs/what it's worth in monetary terms*).
- Value in relation to company revenue streams, profit margins, income after outgoings, productivity and success (The financial economy of the business).
- The value of the company to its customer base, and also to its employees and stakeholders³³ (*The quality of human relationships*).
- Value as a business model driver. (The ethical foundation and values which the business portrays and is built upon).
- Value derived from and perceived through external communications, branding, marketing, testing, both financial and social.

Companies across the globe are spending more and more time and energy determining their core qualitative social values and working out how to

communicate these effectively with their intended consumers in order to develop lasting relationships. The aim of developing such relationships is to ensure continued revenue turnover through engagement with customers to support the long-term survival and success of the business or enterprise. for businesses long term survival.

Terms such as 'Genuine, Exceptional, Innovative and Involved (Adobe, 2018), or 'Leadership by Example, Constant Desire for Renewal, Togetherness and Enthusiasm, Cost-Consciousness, Striving to meet Reality, Humbleness and Willpower, Daring to be Different, Accept and Delegate Responsibility, Simplicity, Constantly being "on the way"' (IKEA, 2018), are used to share with customers the drivers and ethical positioning of a business and are proposed as underlying all actions of the company. They portray instrumental values as motivation to their customer base which provide points of connection and relatability.

Communicating values and generating value for customer bases are beasts of varying natures. It is relatively simple to idealise and wax lyrical about a company's goals and nature, presenting a façade to the public that the bottom line is of least importance and avoiding terms such as profit margin and revenue streams and capital gains which may indicate otherwise. It should be acknowledged, and accepted, that financial drivers are vitally important to sustaining the survival of a company. It is these drivers which dictate the value generated for the customer. Revenue and profit streams shape productivity, manufacturing and product/service availability. Without these factors the long-term survival of a business can be called into question. It is a careful balancing act between presenting and communicating perspectives of the immanent the instrumental values of the business along with the factors relating to financial value with external parties.

3.2.1 The Shape of the Contemporary Business Environment

For regulatory purposes, in order to be considered a business it is imperative that any venture creates profit. It is often argued that 'If a business is not generating profit, then it is a hobby' (Bamford-Niles, 2014; Caan, 2013; Kappel, 2016). This notion aligns with the presumption that the only value businesses generate is financial, aligning with concepts of instrumental value rather than appreciating that a business is capable of simultaneously hosting qualities of immanent/intrinsic value. Technically, if we consider the HMRC (Her Majesty's Revenue and Customs) and government regulations and definitions provided, it is factually correct. If an activity generates a profit, it is a business and as such is subject to the regulations, laws and taxes put in place by the government. If, however an activity is undertaken for pleasure, (which may then hold immanent and instrumental value) but does not generate financial return, (or is identified by the tax man as being a hobby) it is not subjected to the same regulations.³⁴

'Business begins with value creation. It is the purpose of the institution; to create and deliver value in an efficient enough way that it will generate profit after cost' (Jorgenson, 2015).

The very unfortunate result of perspectives such as this, is that the more ambiguous and less easily defined qualities and impact of businesses can remain unrecognised and unacknowledged. Although regulations and rules provide a necessary structure for the legalese of business to function within, and a necessary scaffolding for navigation throughout the sector, they fail to address that not all value is assessable or indeed quantifiable in traditionally accepted manners. Negating the inclusion and consideration of value arising in any light than financial, amplifies the implication that value only counts if it is monetary. This attitude and perspective can also be found in the domain of economics.

There are specific, pre-determined categories which contemporary businesses fit within (Table 4). These categories range from micro enterprises through to large businesses. It is through these categories that regulations, laws and structures are

developed and determined by governments. Boundaries are set which range from financial turnover limitations to maximum and minimum employee allowances. For example, the annual turnover allowances for micro to medium sized enterprises varies ;Micro enterprises have a maximum level for turnover set at lower than £2 million per year; Small enterprises a turnover less than £10 million a year and Medium enterprises a limit of £25-£500 million per year. Employee allowances across these business models also varies (the number of individuals allowed to be employed) from 0-9 individuals for Sole and/or Micro enterprises; 50 individuals for Small Enterprises, and a maximum of 250 individuals for those within the Medium-sized enterprise category. Large businesses are considered to be those which exceed the aforementioned maximum regulations set by the government (The European Commission, 2015; The United Kingdom Government, Department for Business Innovation and Skills, 2012; The Scottish Government, Businesses in Scotland, 2017). (It is important to note, that these regulations currently apply within the boundaries of both the United Kingdom and the European Union but are not globally defining).

These rules and regulations provide guidelines through which legal precedents and regulations can be formed and set. They allow taxes and other financially related aspects of business to be dealt with appropriately in reflection of the scale of business. They provide quantitative metrics for categorisation. Although variations exist regarding the rules and defining features of more socially inclined business models, these types of endeavours are also regulated through financial revenue and employee number boundaries. Their wider 'social environmental and human values' remain uncounted within the realms of GDP or GNP. For example, social enterprises are driven by business models which function with a social, community or environmental purpose. They embody immanent, intrinsic and instrumental values and embrace collective values and consider factors of collective concern (Hedahl & Huebner (2015). They deliver

outputs through trade and re-invest more than 50% of all profits back into the business towards their cause mission (Social Enterprises Scotland, 2018). The *impact* of a Social Business is measured by its effect upon people or environment over a specific period of time rather than by profitable return (Lehmann-Ortega et al. 2010), while the more quantitative aspects of a social enterprise are assessed in relation to regulatory requirements. And in that sense, they are held by the same rules and regulations of economic growth as all other businesses.

Businesses can and do offer value to their local communities and wider networks through more than economic revenue and employment, for example, they may offer instrumental value gained through the service they provide via the experience offered. It can be argued that through a model or framework which explores the integration of both financial and social/personal values, an understanding of impact which exceeds revenue and is inclusive of factors such as social development, equality and environmental sustainability can be more effectively worked towards.

New emerging models such as The Circular Economy (The Ellen McArthur Foundation, 2012, 2013, 2014, 2018; The European Commission, 2012) embody notions of shared values and collective actions between both business and consumer markets as being of long term benefit for the continuation of both human and planetary existence.

Through the lens of instrumental values, it can be seen that modern businesses emerged from previous actions such as the trade of goods, products and services, examples of which can be found dating back as far as the 8th Century BCE (Bain et al. 2017). As simple trades occurred between one individual's transactions began to gain more meaning and position within social structures. Models of behaviour and trade which hold resonance with contemporary models of business experienced today first began to emerge in the forms of guild, merchant collectives, capital partnerships and joint stock companies (Ibid). According to

Kumar, the emergence and development of businesses as we know them can be categorised as fitting into one of three phases:

- Pre-industrialised world businesses
- Industrialised world businesses
- Businesses within the networked world (Kumar, 2017).

In terms of predominant economic activities which supported societal growth and development, historically agriculture was central to the process. This activity can be associated clearly with the identified physiological needs of humans in the acquirement and provision of food, shelter, water and warmth. This activity and resulting actions served to meet identifiable needs fundamental to life and existence (Maslow, 1943). Agriculture not only supported production of food and nourishment for people, but by-products from the chain were then incorporated into wider markets to meet other needs such as clothing and shelter. This then met and created yet further factors of instrumental value via products, services, experiences and so forth. Indeed, agricultural developments helped to fuel and support the emergence of cottage industries which then stood as a pre-cursor to the industrial revolution. Often, it was members of the farming industry who embarked upon these cottage-based industries as a way of supporting their income. Throughout the industrial age however, businesses developed into something previously unseen, large scale corporations capable of mass production.

Contemporary society is now home to an extensive variety of businesses, some of which still function through mass production models, and others emerging who have adopted more bespoke, small scale models. Each of these businesses is driven and shaped by their underlying business model (inclusive of Ownership Models, Business Models and Value Models). All business models evolve and change in response to surrounding social dynamics, but one prevailing factor exists across the board; they need to generate financial value. This is accomplished through providing financial, physical or emotional benefit to their

customer base via product, service, experience or other, in return for (normally) a form of financial compensation. They must create financial return (or economic value), and, in return for said finances, they provide instrumental value to their customer base through goods, services and products.

Experiences encountered by businesses within today's contemporary and networked world vary drastically to those of their predecessors. Modern businesses not only compete at localised levels, but now have instant access to global platforms. This access is also mirrored by their consumer base. They have to contend with instantaneous feedback mechanisms across social media platforms which allow customers and stakeholders levels of engagement and interaction which previously did not exist (Merchant, 2012)³⁵. This in turn affects who, where, when, why and how interactions occur between businesses and their consumer markets.

Decisions surrounding ownership, funding, type of business model and value propositions need to be made when starting a business. A plethora of available regulatory ownership/funding models are available to select from for legal purposes ownership/funding models, such as, Sole Propriety, Non-Profit, Partnerships, Micro Enterprises, Limited Liabilities, Corporations, Social Enterprises³⁶, (Business Gateway, 2013; Nesta, 2012: 2012b) are now far more common with each 'type' subject to different rules and regulations (Table 13) including tax requirements, employee allowances (how many staff are allowed) and registration. These ownership/funding models do not dictate the value or values of the business, rather they provide the legal framework through which businesses are enabled to engage and interact with both governmental and legal legislations.

Table 13. Selection of Ownership/Funding Models for Businesses.

Ownership Model	Basic Regulation Outline	Other Limitations
Sole Propriety	No employee allowances. One sole worker who own & runs the business. Not a Limited Liability. Does not need employer ID number. Taxes filed under personal Social Security numbers (Meggit, 2018).	Personal & business assets considered to be the same. i.e. If a business fails, any claims can make use of the owner's personal assets and finance.
Partnerships	3 model options; General, Joint, Limited. General; equally divided responsibilities and profits Joint; project/time specific. Exist as long as required. Limited; partners who provide investment and partners who actively manage business (Beattie, 2018).	Limited partnerships require written agreements. Formed through co-ownership & financial contributions/services for proportionate profit return. Can employ staff. Can be comprised of 2 or more individuals.
Micro Enterprises	Smallest business type. Function with fewer than 10 employees. Annual turnover of less than £2 million euros (Financial Ombudsman Service, 2015).	Inclusive of self-employed, partnerships, etc. Regulations are dictated by annual turnover and staffing levels.
Limited Liabilities	Based on models of Partnerships. Is legally separated from members i.e. liability falls solely to company & cannot directly affect partners personal assets or property. Has unlimited capacity (Companies House, 2000).	Taxes are paid directly by the partners. Business profits are collected, Tax Returns submitted, HMRC identifies tax liability.
Corporations	Owned by shareholders who make all management & running of business choices. Is an independent legal entity. Must conduct annual meetings and file minutes. Complex management structures (Kunz, 2018).	Taxed twice. Once as whole entity, then via shareholders. Extensive paperwork involved in & a complex network of legal & tax regulations which must be met. Can vary in size from small to large. Legislation dependent upon profits, staffing & taxes.
Non-Profit and/or Registered Charities	Must provide annually:- An annual tax return, A Trustees Annual Report and a full set of accounts. Exempt from income tax. Must be registered with HMRC (Digital Guide, 2017).	Some taxes must be paid: VAT, Dividends, land/property profit (Charities have different VAT rules). If the charity/NFP profits by more than £5000 per annum it must be registered with Charity Commission. As profit margins grow, process of declaration & info required for inclusion increases.
Social Enterprise	Inclusive of community enterprises, credit unions, co-operatives, housing associations, leisure trusts (Digital Guide, 2018). Modelled on reinvestment rather than profit generation (Digital Guide, 2017).	Most Non-profit organisations are Social Enterprises. Model of reinvestment into local communities rather than focusing upon profit generation for shareholders or owners.

Compiled from: Beattie, 2018; Companies House, 2000; Digital Guide, 2017; Kunz, 2018; Meggit, 2018; Lister, 2018; Financial Ombudsman Service, 2015.

Each differing ownership/funding model allows a company or individual scope to determine the ways in which they will finance their operation and how they will create profit for either themselves, stakeholders, or in the case of Social Enterprises, Non-Profit Organisations or Charities. They will ensure that their revenue stream allows their venture to survive whilst meeting their outlined social or environmental goals.

The demands, wants and needs of each individual and each community are enormous. They are also in a perpetual state of flux, responsive and reflective of particular social or environmental factors and nuances being experienced. These factors and their nuances impact both the immanent and instrumental values found in groups. As such, there is almost unending opportunity in the area of business development to explore potential avenues of growth and profitability.

Businesses are fundamental to the modern economic structure (The Scottish Government, Scottish Planning Policy, 2010). Economic structures thrive through positive return. The predominant perception is that communities and individuals then benefit in response to positive returns. During periods where economic structures suffer despondency, stagnation and collapse, the effects are equally as polarised (Boyd, 2011).

3.3.2.1. Business Tools to Support Identifying Value

The development of models of business has become an industry within itself - a market where companies aims and objectives are solely driven towards aiding other enterprises in the identification of their strategies, planning, marketing, branding and with the identification of their own and their intended customers' values³⁷. With over 5 million users, one of the most commonly recognised and globally implemented strategies for business model development is that created and developed by Osterwalder et al. 2010:2015 (Fig.22).

'Ultimately, business model innovation is about creating value, for companies, customers, and society. It is about replacing outdated models. [...] It's a business model response to emerging user needs and pressing environmental concerns' (Osterwalder & Pigneur, 2010, p.5).

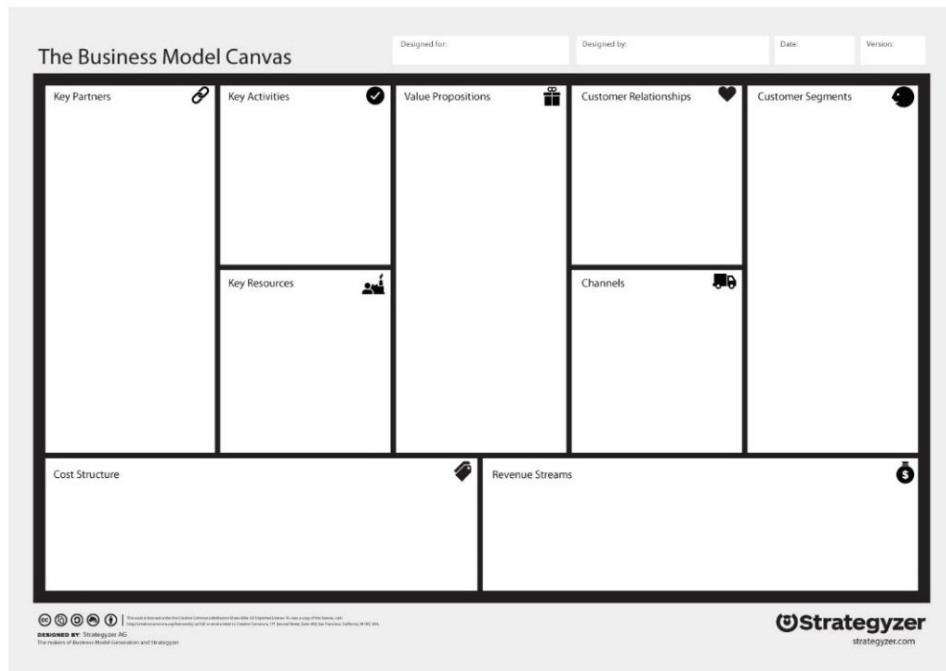


Figure 22. The Business Model Canvas.

Source: Osterwalder & Pigneur, 2010.

Osterwalder's Business Model Canvas is a visual map completed by those aiming to start or to re-design their business, which allows them a safe and no-risk environment through which they can identify and explore 9 key elements of business structures. The end result effectively provides an outline of the business model which you aim to enact.

Business models are shaped through the creation of values. It is the process of creating value which shapes and moulds business models. The Business Model Canvas proposes that within the creation of any business or enterprise there are 9 fundamental building blocks which collectively form a description of the drives and intended/current actions of a company and serve to outline the strategic position and actions of a company:

- Customer Segments – Who you want to reach in the marketplace.
- Value Propositions – The Products/Services/Systems you wish to create.
- Channels – How you will communicate and deliver products, services or systems.
- Customer Relationships – How you build and retain long term customer loyalty.
- Revenue Streams – How to better understand profits and margins.
- Key Resources – The resources required to accomplish an activity (or proposition) e.g. capital, labour and time.
- Key Activities – What the business needs to do really well.
- Key Partnerships – Supply chains, partners and other business level stakeholders.
- Cost Structure – All financial costs for running the business.

These 9 blocks are associated to one of four related components found within business management; Customers, Offer, Infrastructure and Financial Viability (Ibid, p.15). Each block of the canvas considers different kinds of value held by the business, from detailing key partners involved, through to the more financially oriented aspects of business management such as revenue, resources and costings.

Business models are the strategic plan which underpin a business's actions and constitute a key role within a business plan. They identify the ways in which a company intends to create profit.

‘A business model is supposed to answer who your customer is, what value you can create/add for the customer and how you can do that at reasonable costs’ (Drucker in Das, 2017).

Business models have evolved over the years in response to consumer market changes and demands and there are now nearly innumerable possibilities open to fledgling businesses. Models range from the more traditional, i.e. Manufacturing, through to contemporary developments such as Bricks and Clicks models and franchises which utilise both on and offline capabilities to ensure revenue turnover. Appendix H, *h1*, offers insights around further traditional and contemporary business models which may be adopted. They

enable businesses to identify the intended instrumental values they aim to bring to consumers, the value they aim to create themselves and support the identification communicable the company values

Individuals and collectives often have innovative ideas but find that the hardest step is to know where to begin when creating a viable business plan that will be profitable and sustainable in today's modern markets (Nesta, 2012:2013). Adding a further layer of complexity to an already quite convoluted set of structural frameworks many business models found today are hybrid, multi-model variations. They have one specific ownership/funding model, and implement multiple aspects from different business models to create strategies capable of generating greater levels of revenue for the business and value for the customer, be that through enhanced experience, greater value for money, streamlined services, etc. For example, Activision Blizzard³⁸, a company providing interactive entertainment software operates a highly productive hybrid model for the mass market, which is inclusive of elements found in subscriptions, micro transactions, direct sales, free-to-play, bricks and clicks and franchises. This wide variety of actions allows the business to consider not only the most effective ways in which to generate profitable returns but does so by playing directly to what they perceive to be customers instrumental and immanent values (Activision Blizzard, 2018).

Models and approaches like those implemented by Activision Blizzard exemplify how businesses can and must adapt to remain relevant to their customer bases. However, it can be argued, that this variety of approach is only applicable to companies of scale. Small and micro enterprises lack capacity to compete effectively against these large super enterprises. The resource capabilities of large conglomerates are fundamentally different from those found in SME and Micro enterprises, not least of which in terms of financial scale. SME's and Micro enterprises require their own cultivated approaches to support longevity and survival in the business market. Approaches which are aligned with their specific

capabilities. One potential avenue for SMEs and Micro enterprises to garner support is through the investigation and consideration of their businesses social values seen in line with the cultural community values which surround them. This leads to the question: Can stronger economic position be obtained through cultivating relationships with local communities which are reflective and respectful of their collective and individual value structures?

3.3.2.2. Value Analysis Matrix

Value chains play a significant role in all businesses. Identifying a business's value propositions is a key step in the development of a business models A number of tools exist in this area to explore the intended value they aim to generate for themselves and their customer base. A highly regarded example is the Value Chain developed by Michael Porter, originally published in 1985. Porter coined the term 'Value Chain' in his book 'Competitive Advantage: Creating and Sustaining superior Performance' and used it to describe the actions and activities undertaken by a business in a manner which allows an understanding and appreciation of the organisation's competitive strengths and weaknesses. Porters' Value Chain explores the ways in which a company brings value, both from financial and social perspectives to its customer base. From here, steps can be taken to identify opportunities for enhancing and developing these identified values, from both the business perspective, and from those of the customer base. Porters model (Fig.23) was developed around the basis of commonality found across all businesses (actions and activities undertaken by all business) giving it extensive applicability.

According to Porter, activities conducted by business are considered to be one of two actions:

- Primary Activities; Inbound Logistics, Operations, Outbound logistics, Marketing and Sales, Services.
- Support Activities; Procurement, Human Resources, Technological Development, Infrastructure.

Porter's exploration of the generic value chain in businesses, whilst providing a platform for businesses themselves to explore their own chains, allows us insights into the many variable ways value has meaning in business context; Value (profit) for business survival; The customer base and all associated values; Reciprocal value relationships which exist between employees, their work, and the company itself, (commonly considered to be fiscally driven however they do include personal human values which emerge)

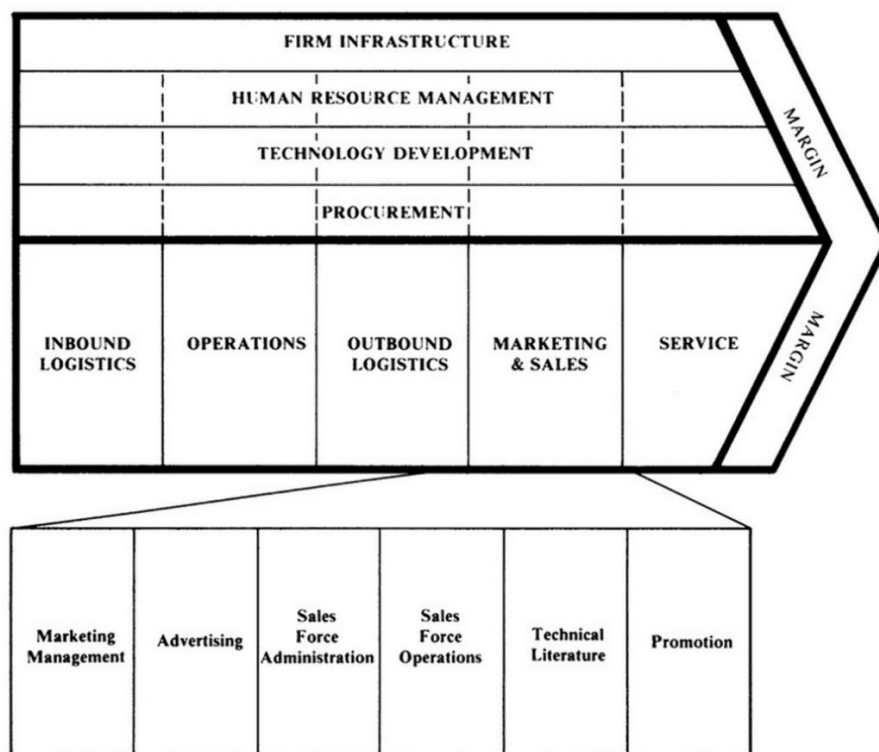


Figure 23. Michael Porter: Subdividing a Generic Value Chain.

Source: Porter, (1985).

As Handy (2002) raises, businesses are more akin to communities, made up of people sharing skills, time, energy. Each individual brings and takes their own 'value' to the table.

Another more contemporary variation of Porter's model can be seen in the works of Osterwalder and Pigneur et al. 2015 (Fig.24). This proposition explores in more detail two key sections found in their book 'The Business Model Canvas', that of value propositions and customer segments. In this instance they are called 'Customer Profiles' and 'The Value Map'. These two sections continue on directly

from the canvas providing room to explore customer understanding and your approach to value creation for them.

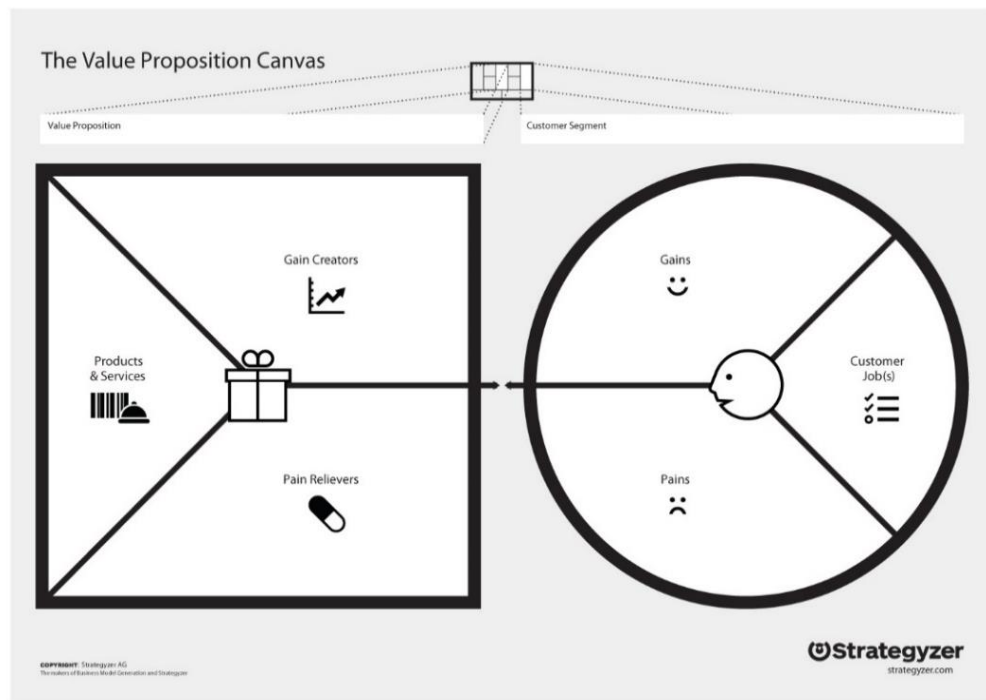


Figure 24. The Value Proposition Canvas.

Source: Osterwalder & Pigneur, et al. 2015.

There is a synergy which exists between this model of business thinking and tools which are used across design thinking and human centred approaches. The building a Customer Profile speaks to the design practice of creating personas and of empathy development. Its exploration of the customer experience allows for elements of empathy and understanding of wider perspectives to be taken into consideration in the planning stages. Understanding your customer base, their goals and aspirations helps to ensure that a business delivers value in ways which will be both beneficial and welcomed by customers. The value map then allows scope to explore the ways in which your company might tackle identified customer needs and wants through detailing ranges of propositions across products and services, pain relievers and gain creators (Osterwalder & Pigneur, 2015).

As with the 'Business Canvas Model', although considerate of values beyond the quantitative, unless the people from the community or the customer base are actively involved, this model fails to explore communication of values and reciprocated relationship development between businesses and the communities they will be situated within. As discussed, values, being inherently social in nature, are formed and influenced by an individual's extended social circle. In large scale businesses, a local community's value structures may not play such a vital role as it would for those with smaller enterprises who rely upon local community support for survival.

3.3.2.3. Sharing Values

The relationship of trust between public businesses and government has destabilised as a result of the 2008 economic crash (Fox, 2013; Kramer & Porter, 2011) (as discussed in Ch1.2). The wider that imbalance between levels of affluence, poverty, wellbeing and quality of life grows, the greater the voids existing between communities and their governing structures and business become. The wealth of the individual is not dispersed amongst the many and this factor fuels a notion that whilst businesses find success, social inequalities grow³⁹ (Neate, 2017). Companies are widely perceived to be prospering at the expense of the broader community (Beitler et al. 2011; Hawkins et al. 2013; Kramer & Porter, 2011).

Michael Porter, considered to be the world's foremost expert on business studies, points out that strategy formation and implementation is a critical component to the success of any business. Kramer & Porter's 2011 claim that their strategy for growth and competitive advantage, (which takes form in their model of Shared Value), resonates well with current trends emerging across society, in particular, trends which are resulting in businesses developing greater awareness of consumer, community and environmental values.

Kramer and Porter's model of Shared Value⁴⁰, 'Corporate Shared Values' (CSV) aims to enable businesses to address the realities of societal discontent, whilst simultaneously focussing upon both profit creation for both the business itself, and its local cluster's (community) survival. The long-term benefits of this proposal they claim, will create a positive step forwards towards the catalysation of a sustainable resolution for both economic and social contentions. Shared Value, as a strategic mechanism for business could support the promotion of future business generation, societal security and long-term economic recovery, thereby reigniting people's trust in the system (Hawkins et al. 2013; Kramer & Porter, 2011). It is perceived that without the adoption of new approaches towards growth and development, the world economic structure will not achieve a full, nor lasting recovery (Hanauer & Liu, 2012; Hawkins et al. 2013; Kramer & Porter, 2011).

'The solution lies in the principle of shared value, which involves creating economic value in a way that also creates value for society by addressing its needs and challenges. Businesses must reconnect company success with social progress. Shared value is not social responsibility, philanthropy, or even sustainability, but a new way to achieve economic success. It is not on the margin of what companies do, but at the centre' (Kramer & Porter, 2011. p.4).

Kramer and Porter argue that when a business works efficiently to ensure the wellbeing of their staff and local cluster, this further supports and strengthens the pre-existing relationship with their community. 'By better connecting companies' success with societal improvement, it opens up many ways to serve new needs, gain efficiency, create differentiation and expand markets (Ibid. p.7).

In effect, their proposal is that businesses learn to appreciate and understand what their local communities' value and what they need. Through developing a provision of support for their local 'clusters', through the promotion of provisions, work, transport, materials and other factors, businesses can simultaneously bring positive impact to their own productivity and profitability

while aiding an increase to quality of life in their areas. Through engagement with models that support the sharing of values, businesses can pro-actively adopt approaches to growth which may aid the regeneration of the larger financial economic structure, the stabilisation of local economies and positively impact quality of life. In effect, rejuvenating approaches taken towards profit creation aids the curation of an environment capable of nurturing prosperity over profit models.

Contemporary society requires models which allow greater independence for individuals, and, in tandem, cultivate and recognise the needs of local communities, social clusters and environmental issues through the generation of sustainable engaged businesses (Epstein-Greeves, 2012; ISO, 2019; Kramer & Porter, 2011). Businesses can generate both profit and value (both financial and experiential) for the social needs of their communities through being mindful and considerate of their immediate and extended networks, environments and the values of those who live around them.

3.3.2.4. Corporate Social Responsibility

Similarly, Corporate Social Responsibility (CSR) is an approach towards business development which supports and enables companies to positively impact local communities. It speaks to 'the social responsibilities and accountability of businesses to itself, its stakeholders, and the public' (Chen, 2019). In this sense, a business which adopts the behaviours of CSR are perceived as contributing in a beneficial way to social and environmental factors (Chen, 2019). Practices within CSR demand acknowledgement and consideration of how daily activities impact both the company itself and the world around them. 'Business and organizations do not operate in a vacuum. Their relationship to the society and environment in which they operate is a critical factor in their ability to continue to operate effectively' (ISO, 2019). By creating opportunities for companies to 'give back', through special endeavours to communities, CSR is a strategy of reciprocal benefit (Kramer & Porter, 2006). The company and community benefit from the

philanthropic efforts made. It is a 'strategy more normally associated with large businesses' (Ibid) and this reflects the reality that in order to generate positive impact, companies require to be established, stable and profitable. All of which takes time and finance. Companies can donate financially, or through time, resources, services and other features (ISO, 2019). For example, Starbucks Coffee, globally acknowledged for its ethical standpoints enacts CSR through 5 main strategies, Social Impact; Environment; Ethical Sourcing; Youth and Skills, and Health and Wellness. Within each of these areas, they undertake work inclusive of; Creating recyclable products through to ethically sourcing their coffee; Employing over 50% of staff as early careers (aged under 24); Developing green stores and; Proactively tackling their carbon footprints. Each of their policies focuses upon factors of sustainability and supporting communities. The returns on these actions both benefit them directly through profit lines, but simultaneously have a positive impact socially. The International Organization for Standards (ISO) presents ISO 26000, standards and regulations which support businesses who wish to operate in this way.

Businesses and companies can end up diversely affected by situations through a failure to observe both the large and small picture. They can be directly affected by their surrounding infrastructure. Kramer and Porter argue that there is opportunity to strengthen and build relationships through implementing models of shared value rather than CSR taking the view that:

'We believe that CSR is a different – if overlapping - concept from creating shared value. Corporate social responsibility is widely perceived as a cost centre, not a profit centre. In contrast, shared value creation is about new business opportunities that create new markets, improve profitability and strengthen competitive positioning. CSR is about responsibility; CSV is about creating value' (Kramer, 2011).

Through nurturing a deeper understanding of the value systems that drive, constrain, influence and impact businesses and community structures, it is possible to envisage a future where relationships are reciprocal and supportive.

Essentially, business models and their value propositions (where they intend to bring positive social impact to their customer base and local clusters), need to adapt and shift to meet current and future social and economic needs in a manner beneficial to everyone involved, allowing for the evolution of models of profitability, prosperity and environmental sustainability to emerge.

Through nurturing local clusters (communities) that support them, it is possible to encourage a growth in profitability and to bring about positive societal change (Kramer & Porter, 2011). They indicate that these 'clusters' incorporate multiple features. They are the backbones of the communities within which the business is based. For instance, the education system, health care provision, resources, consumers and other local retailers all constitute components of a larger picture. Where communities rely upon good businesses to provide work, living wages and opportunity, there is a mutually reciprocated need from the business for the community to provide a demand for the product/service/system which they are offering. However, this is a highly complex situation. Sole traders and micro enterprises often either lack capacity or cannot access the appropriate skill sets required within their local area.

It is these wider structures and considerations of values which need to be considered by businesses. By expanding their current propositions to exceed the boundaries formed by those of their intended customer base and embracing the wider social environments which shape their consumers perspectives and experiences, they may identify ways in which to support their business. As Cannon (2007) suggests, it is the acceptance of exhibited behaviours, cultures and values which either positively or negatively impact social acceptance. Therefore, it stands to reason that if a business' behaviour is perceived as detrimental to the local community or seen to not align with pre-existing cultural and collective immanent and instrumental value structures, there is potential for the community to reject the business entirely.

Through working together for mutual benefit, contributions can be made towards social, environmental and economic developments. Understanding and determining values which contribute towards societal prosperity can couple new opportunities for business growth with positive social impact creating the potential of self-sustaining circles of support, reliance and resilience. Recent years have seen the development of portfolio businesses emerging from pre-existing SMEs and Micro businesses as they partner with R&D, designers, academics and others in efforts to accomplish positions of market security (Design in Action, 2016). Developing and maintaining patterns of growth and sustainability in a business are now considered as being far more complex than the capitalist model would suggest. Modern businesses need to develop strategies to diversify and innovate in order to survive the current landscapes at both local and global levels.

This step can be taken through the strategic implementation of design thinking and the implementation of design methods. This can support the development of communication and understanding and cultivate an environment where knowledge and values can be exchanged in order to support positive futures to emerge. This leads to an empowerment of citizens and a humanisation of the business sector enabling the rebuilding of social structures and business stability. By utilising design thinking approaches to guide and support businesses in creating clearer lines of communications with employees, stakeholders and customers, allows for insights around social structures to be considered, and for individual and community values to become more central within the process of creating social and business growth. Examples of this can be seen across companies such as: Apple; Nike; IBM; Oral B and Intuit Labs where customer and community voices have become fundamental to current practice and in supporting ideation for future innovations.

3.3 Value, within an Economic Context

Within the field of economics, established approaches which serve to identify, assess, collate and communicate value are generally undertaken through analysis of numerical, quantitative data. The results of this are then capable of being used for global and local comparisons. Value within the context of economics, is for the most part concerned with instrumental values associated with trade and finance, be that the monetary value of products, services, experiences, or the monetary value resulting from trade, exchange and developments. Alternatively, it can also connect to instrumental values through the benefits they afford consumers. No matter the perspective, economics, like values, impacts across our lives in a rather extensive way.

3.3.1 Traditional Perspectives

Traditionally, (for roughly the past century) the manner in which western society has conducted its financial affairs is generally accepted to have occurred through a model of 'capitalism' (Brown & Lauder, 2001; Picketty, 2014; Young, 2012), and as such, has communicated national 'value' through the models of GDP (or previously GNP). This is also how the perceived financial value of most nations is communicated both at internal and global level. This model is long contested and disputed (Danson & Trebeck, 2011; Fitoussi et al. 2009; Schmuecker & Wallace, 2012), and it is arguably perceived as being a supportive mechanism aggravating inequality through wealth distribution and is identified as one of the root contributing factors towards levels of inequality of wealth encountered globally (Kuznets, 1939; Picketty, 2014).

Perelman (2000), positions the United Kingdom as a democratic society, which, at least in theory, functions as a Meritocracy, implementing Capitalism as the socio-economic model through which it manages, maintains and develops its commercial value and worth. At its most basic stripped back level, capitalism is the right and allowance of an individual to create goods and services generating

profits from their endeavours for their own use. A foundational lynch pin within the structure of capitalism is the right of the individual to determine their goods, manufacturing methods, costing and sale (Ibid). Capitalism also supports the rights of each individual to earn a wage and the right to spend the income earned through their endeavours in a manner of their own choosing (Ibid). There is a reciprocated dependency between capitalism and consumerism. For individuals to earn a wage they must produce a desired output which is then purchased by another person. This model enables the wheel to keep turning (Hanauer & Liu, 2012; Marx, 1844). The outputs produced and supplied by each nation's businesses and corporations vary widely and encompass every imaginable aspect of life, producing outputs in response to the needs and wants of the population. The human-factor of self-expression and individuality perpetuates the cycle further to reinforce the success of the capitalistic-consumer based model.

Periods of economic instability, where individual financial income no longer enables basic living expenses and needs to be met, has a direct and negative effect upon wider aspects of the overall economic structure, with, in extreme cases, negative ramifications spreading beyond ones country's borders and impacting upon others. When the wheel of consumerism slows it affects production lines, job market generation and employment; thus, businesses and society suffer. The final result of a crippled economic structure is that the government, corporate institutions and businesses receive the full brunt of the blame (Kramer & Porter, 2011; Hanauer & Liu, 2012).

Part of the fundamental issue at heart here is that when the value of a community is quantified and positioned as something of only instrumental value to the nation, and it's worth and value is assessed only through economic models such as GDP, limitations which are inbuilt into the parameters of the assessment model exclude more nuanced and critical factors, such as those which pertain to quality of life experienced. As such, portrayals of societal growth and wellbeing

derived from metrics such as GDP lack key vital information. They simply represent the financial, quantitative fiscal worth.

3.3.2 Gross Domestic Product

GDP is a quantitative mathematical calculation. Its conception and creation is regularly attributed to the world renowned economist and statistician Simon Kuznets⁴¹. It undisputedly offers companies, nations and governments the opportunity to assess and compare rates of growth, stagnation and failure across their productivity over specifically determined periods of time (quarterly) (Schmuecker & Wallace, 2012; Sheram & Soubotina, 2000). As a uniform metric it provides an appreciation of internal and local financial situations and serves to support degrees of global comparison (Kuznets, 1930; Kuznets et al. 1939). To this day it remains inarguably, a quantitative method for the statistical analysis of finance which is incapable of inclusion of qualitative data that considers societal aspects of life, such as, voluntary work undertaken, quality of life experienced, nor quality of goods generated and exported. Nor does it consider the ramifications of wars and natural disasters beyond the repercussions towards finance (events such as these cause un-natural influx in levels of GDP) (Picketty in Clark & Domokos, 2014; Picketty in Moore, 2014).

Since its inception, GDP has faced continual scrutiny. It receives consistent criticism from across the global platform regarding its inability to effectively represent societal realities experienced (Bell, et al. 2012; Danson & Trebeck, 2011; Fitoussi et al. 2009; Schmuecker & Wallace, 2012). What must be remembered is, that it was never actually created to provide this. Unfortunately, the information which it portrays, has, over the years, been misinterpreted as providing a marker for social realities, and as such, GDP has accrued value and meaning which is far out with its original domain.

When Kuznets created GDP, it was an approach designed to provide an assessment of wealth accumulation or positioning, but it is frequently perceived to be indicative of aspects beyond its capabilities, such as:

- Quality of life experienced
- Environmental Impact
- Sustainability of both business and social endeavours.

The model developed for measuring and assessing GDP was not generated with these wider goals in mind. There are currently three equations for determining GDP in use. Each of these should all reach the same total amount. The most commonly used of the three is $(Ex-Im) + C + I + G$ (Fig.25) (Sheram & Soubbotina, 2000).

GDP (Gross Domestic Product) =

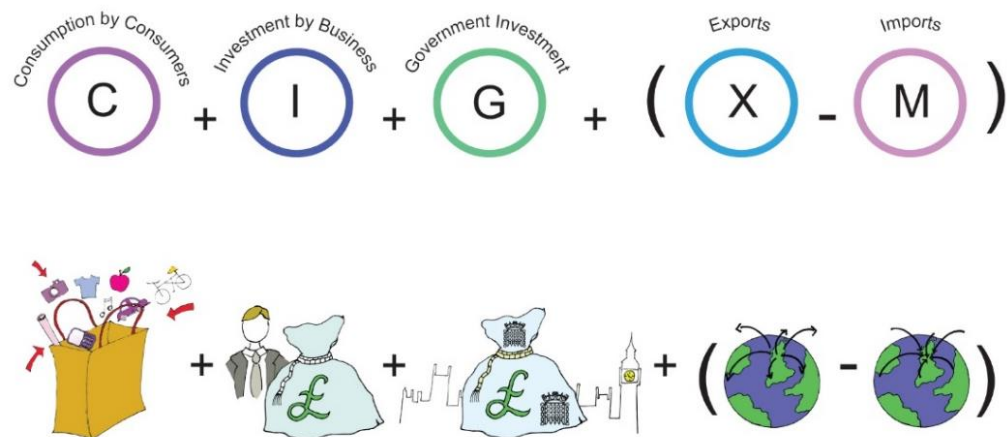


Figure 25. GDP. Gross Domestic Product (model).

Inspired by Sheram & Soubbotina (2000).

This translated equates to:

The net value of exports (of a country) (the financial worth), minus the imports (from foreign countries), added to consumers total spending, plus investments made by business (on goods and services), plus the total spending by government (Sheram & Soubbotina, 2000). The sum total from this, viewed in relation to the previous period's equation allows for interpretation around the

health of the economy, if it is in stagnation, decline, or experiencing a period of growth (Ibid).

This allows governments to then publish National Statistics information and make statements about their specific country's development such as,

'Scotland's Gross Domestic Product (GDP) grew by 0.2% in real terms in the first quarter of 2018, following growth of 0.3% in the fourth quarter of 2017. The equivalent growth rate for the UK as a whole during the first quarter was 0.1%. In the latest quarter, output in the Services sector grew by 0.4%, output in the Production sector grew by 0.9% and output in the Construction sector fell by 3.5%. Compared to the same quarter last year, Scottish GDP has grown by 0.8%. Equivalent UK growth over the year was 1.2%. GDP per person in Scotland grew by 0.1% during the first quarter of 2018, compared to a fall of 0.1% in the UK as a whole' (The Scottish Government, National Statistics Publication for Scotland, 2018).

3.3.3 Social Realities

Reading the quote above one could be persuaded to believe that in the main Scotland is doing rather well. It is succeeding in growth and productivity, experiencing a positive period at least in financial terms. From this perspective arises assumptions that as a result of this positivity, across manufacturing, production and commerce, therefore it's people must also be faring well and experiencing a similar positive period. Headlines are published across national news outlets which corroborate these assumptions. Headlines of:

- 'Optimistic' outlook for Scotland's economy' (BBC, 2018g),
- 'Scottish economy 'grew throughout 2017' (BBC, 2018e),
- 'Scottish economic growth outstrips that of UK in 2018' (Gordon, 2018),

coupled with statements such as:

- 'Scotland's economy is strong, with output per head the highest in the UK outside London and the south-east' (Mackay in Gordon, 2018) and
- 'The UK Government is investing to boost economic growth through its ambitious modern industrial strategy', and

- 'Direct investment into Scotland's cities and regions through growth and city deals' (Mundell in Gordon, 2018),

perpetuate notions that all is well, and that Scotland is a thriving environment to live within. Where these portrayals of economic prosperity become particularly controversial is when they are considered in balance with contradictory news communications surrounding rising rates of poverty, homelessness, in-work poverty, rising crime rates and societal discontent. The economy may well have grown somewhat over the past couple of years, but, when faced with headlines such as:

- 'Poverty and Inequality on the rise in Scotland' (BBC, 2018f),
- 'One in five people in Scotland now live in Poverty' (McKendrick, 2018),
- 'Sexual and Violent Crime on the rise in Scotland' (Marshall, 2018),

it becomes difficult to reconcile growth in GDP as positively impacting and effecting quality of life. It cannot, and does not, reflect the intrinsic and immanent or indeed, the instrumental and terminal values of people. Economic growth never portrays the realities of life experienced by those who are actually creating it in the first place. It does not reflect factors such as happiness, contentment, trust, safety, etc. There is no part of GDP which looks to the personal, immanent or intrinsic values of people and how these values communicate into potential financial return or decline.

The realities are that the situations in Scotland (and wider afield) are far more complex and interconnected than can be perceived through just numbers. For example, communities and individuals now face fluctuating employment rates and a lack of employment opportunities (Dunlop et al. 2012; Macnab, 2013; The Joseph Rowntree Foundation, 2010). This has led to a culture where full-time work placements are being gradually replaced by models of multiple part-time employment (Scottish Council Voluntary Organisations, 2012). SME (and large company) closures, a deterioration of the high streets (Portas, 2011) and rises in poverty and deprivation (Loyd, 2013; Oxfam, 2013; The Scottish Government,

Department of National Statistics, SIMD, 2012) are also all contributory factors which negatively impacting life and the potential for future prosperity and growth in communities.

According to statistics released in 2014 by the Scottish Government there were approximately 950,000 individuals living below the 60% median wage and during the same time frame it was estimated that roughly 250,000 children were living in poverty (Hirsch et al. 2013; The Scottish Government, National Statistics, Poverty in Scotland, 2018). That is roughly one quarter of all Scottish children. Working families are finding themselves struggling to provide basic food, clothing and necessities for their children. Finding money to finance trips away and treats is, for many, a dream. School teachers and nursery staff schoolteachers are working to fill gaps providing food, clothing, shoes and gifts from their own pockets for poverty-stricken children under their care (BBC,2018g).

A categoric rise in social endeavours has emerged as communities pull together in attempts to support each other through these times. Social enterprises such as:

- Togs for Tots (established 2015), provides clothing, equipment and furnishings for families in need.
- Trussells Trust Food banks, who, in Scotland alone, provided 170,625 3-day emergency food packages across the country to families and individuals in need between April 2017 and March 2018 (Trussells Trust, 2018),

along with many others are working across the nation to support individuals and families in need. We now live in a society where Pet Food Banks exist (Est 2014) which aim to support those in such severe financial situations that they face abandoning or rehoming precious family pets.

3.3.4 The Social Response

It is situations like this which directly contradict the association between positive GDP growth and overall quality of life experienced. Although the numbers are rising, so too is the poverty rate. This also highlights the emergence of more

immanent personal and social values becoming central to enterprise. In fields of business, social welfare and economics, social enterprises are a globally growing phenomenon (Silva & Poza, 2016; Sepulveda, 2015). Individuals and collectives are responding to the inequalities and problems faced socially through their development and are actively embracing both their own (and their funders) immanent values (Silva & Poza, 2016), while simultaneously addressing matters of instrumental value and need of others with the view of supporting their living conditions and enabling their societal visions (Ibid, p.10). They are in effect, creating the mechanisms of support and care which they perceive are not being provided for others by governments and councils and in doing so, are both supporting their own collective ideologies whilst simultaneously contributing to the financial value generated by businesses in the area.

The wellbeing of societies is not lynch pinned upon financial figures. They do constitute a component and complimentary factor within the overall picture, but they are required to be seen in perspective and in proportion, viewed in balance with the quality of life being experienced by citizens (Bell et al. 2012; Danson & Trebeck, 2011; Fitoussi et al. 2009; Kuznets, 1939:1955:1966; Kennedy,1968; Kramer & Porter, 2011). Our individual values are influenced by our collective values (and vice versa), these in turn impact and shape our perceptions surrounding collective concerns which resultingly shape our actions, behaviours, responses and plans.

Multiple facets and aspects of society have a clear impact upon both economies and quality of life experienced (Bell et al. 2012; Danson & Trebeck, 2011; Fitoussi et al. 2009). Their lack of inclusion within GDP, or rather, the lack of an approach capable of their inclusion, has resulted in a data gap in the market. This gap represents an opportunity to consider the development and inclusion of more socially reflective appreciations of value which can consider both financial and human values.

Schwartz, (2006) discusses how an understanding of collective values found in communities offers opportunity to identify social structures, goals, ideals. Defining these values as 'Universal Organisations of Human Motivations' (p.1) he argues that understanding values which go beyond finance can aid us in exploring and enhancing our appreciation of individual and collective responses (Schwartz, 2012). There is no denying that our economic wellbeing is determined by the success of our nation's businesses. There is also no denying that this success plays a role in the social wellbeing of our communities. our businesses, financially life becomes less sustainable, but without consideration towards quality of life experienced by those generating the said financial economy, life, along with business becomes equally as un-sustainable.

By rethinking the possibilities for expansion and growth through implanting clear processes and cohesive patterns into the behaviour of companies and business, it is possible to encourage growth across multiple fronts (Kramer & Porter, 2011). Re-structuring businesses and economic models from their current financially oriented positions towards ones more centralised around value exchange and cultural/community values, carries strong resonances with the design practice of placing stakeholders at the heart of the process. People who should have been central to development processes were placed as secondary to the needs and wants of the consumeristic model driven by the need for ever increasing GDP. Danson & Trebeck, (2009); Fitoussi, (2009); Fox, (2013); Gauntlet, (2011); Kramer & Porter, (2011) and others have subsequently joined the debate over the years arguing for a rethink of priorities to ones which place humanity and the environment at the core of prosperity and profitability in order to regain meaningful balance of the economy, for both wellbeing and financial sustainability. Once seen as a machine to be driven ever forwards, the economy, and its impact upon life should be seen as a garden to nurture (Hanauer & Liu, 2012).

Fundamentally, it can be said that there is far more to numbers than simply allocating and determining finance, revenue and quantities. There is also far more to the human mind and experience than simply functioning in order to generate bigger numbers and higher profit margins. It is time that we took control once more of our mathematics, our priorities and our finances, and considered our recognition and understanding of value and values within our societal structures to create a world that is prosperous, sustainable and provides a positive experience for all.

Within this sub-section, Value has been discussed within the context of finance, economics, growth and profit. These perspectives of value are derived through mathematically based calculations based upon assumptions and assessments of commerce but are unfortunately perceived as implying social growth, living standards and social standing. As has been presented, these traditional assessment techniques and calculations have gained meaning far beyond their original intention. As is argued, there is a place for both qualitative and quantitative perspectives of value to be considered as we move forward towards more inclusive ways in which to present and consider the truly important factors in life. When looked at in detail, it can be seen that the roots of mathematics, the most quantitative of metrics, is actually an inherently a creative action. It emerged and evolved as a creative response to inquiries made by of human minds. This in turn has influenced all factors of life from how we build our environments, the science we undertake, the art we create, the music we enjoy and practice. Consider this from another perspective;

Music, and musical ability, most commonly associated with the creative fields, they can be connected to mathematics in a remarkably simple way. As Leibniz said in his 1712 letter to Goldbach, 'Music is hidden arithmetic exercise of the soul, which does not know it is counting' (Desmond, 2012) and as Desmond elaborates:

'Music is unknowing mathematics; Singing does not know that secretly it is arithmetical determination. From the view I am suggesting, one wonders if it is the opposite that is more truly the case: not that music is secretly mathematics, but that *mathematics is a music the intellect does not know it is singing*' (Desmond, 2012, p.29).

In response, perhaps what is required is a rethink, that maybe we should reclaim our usage of the predominant quantitative metric and re-imagine how we can integrate them more fully and effectively into qualitative assessments. The question we now face becomes, how did we take something as inherently creative as mathematics, a key exemplar of how the human mind can create things of both beauty and order and allow it to become used as a mechanism and driving force of inequality seen and experienced across the globe. Maybe, with a rethink and readjustment of our perspectives, we can make the mathematics in our lives count for something more.

3.4 Values in Communities

What must be remembered in all of this, is that all concepts of value are created determined and defined by humans. Be they quantitative or qualitative, they are given meaning through the contexts which we apply to them.

In terms of axiological values, (those focused not upon money or quantity), values are considered to be intrinsic, immanent and terminal and instrumental rather than quantitative. They are inherently social in nature, from their ideation, through development, enactment and to the degrees of importance which they are ranked, (be they materially or emotionally oriented). These kinds of human values are formed, defined and developed by the human psyche and are subject to indeterminate numbers of variations and changes.

Values of communities go by a number of names such as: collective values, community values, cultural values, social values. Fundamentally, they express an alignment of values found within a group. This alignment of values aids the creation of societal stability. They should not however be mistaken as a collective representation of the whole (Cannon, 2007). They are, as mentioned earlier, an indication of typical and general consensus formed across groups. They are not absolute, rather they grant insight into majority and typifying perspectives.

Within the context of community, there are, as described by Cannon (2007) two predominant kinds of values to be found; individual collective. These are formed of intrinsic, immanent and instrumental and terminal natures. It is proposed that collective values are the formation of 'storied groups', that is, groups with a form of collective membership based upon

'to differing degrees [...] the acceptance of, participation in, and most importantly, identification with a [common] narrative that tells the story of the group and which is the genesis of many of the group's shared values (Ibid, p.328).

This has application to the cultures and communities which develop over time in location based definitions of community. These theories surrounding community

development, core community values and motivations also stretch into the world of the virtual. Kurikko & Tuominen (2012) argue that in fact even within the world of the online communities, values are fundamental realities which are equally as valid as those found in physical communities. Kozinets (2012) frames them as 'real communities populated with real people' and as such, they react, and engage in much the same manner as physically located communities.

'a community can be formed by any group of people who share a common interest [...] and who create a parallel social universe rife with its own myths, values, rituals, vocabulary and hierarchy. [...] They become a common understanding of a shared identity (2012).

It is the ideology of a shared identity which resonates back to Cannon's theories around storied groups. Features found in physical communities such as traditions and expectations relating to acceptable behaviours, values, moral responsibilities and obligations have been identified as manifestations of collective value groupings. These features can also be recognised as occurring in virtual communities. In both contexts, this theory is grounded upon the consideration of how through the narrative, individuals develop a sense of connection and belonging to the people (and location) around them, (similar to the development of shared histories found across Scotland's rural communities, many of which have long-standing historical and established heritage).

As a result of these shared histories and narratives, our degrees of social acceptance, (both of ourselves into the collective, and the surrounding collective's acceptance of us), is dependent upon mutual acceptance and alignment of our individual values with those apparent from the collective whole. The level of acceptance that we emit and receive carries a significant impact upon our overall sense of connectivity, a connectivity which manifests in response to these interactions (Cannon, 2007).

The term community itself can at personal level evoke emotions and sensations of being part of a collective. It can go so far as reducing feelings of isolation, as,

by its nature, it implies a collective where acceptance, caring, and collaboration are all intertwined. The Oxford English Dictionary (2018) describes the term 'community' as :

- 'A body of people or things viewed collectively.
- A body of people who live in the same place, usually sharing a common cultural or ethnic identity. Hence: a place where a particular body of people lives.
- A group of people who share the same interests, pursuits, or occupation, esp. when distinct from those of the society in which they live.
- A group of nations claiming unity of purpose or common interests.
- Life in association with others; the social state.
- Social cohesion; mutual support and affinity such as is derived from living in a community'.

Communities are a consistent and fundamental part of our lives, from birth until even beyond death. With the exception of the few who choose to embrace lives of solitude, each of us, to some degree or another are interconnected with various communities, those of our work environment, our homes, our physical location, our online connections and beyond.

In the context of this research body, community refers specifically to groups of individuals who all live within the same location^f. This definition serves to frame the focus of the research in exploring a small rural Scottish community and its local SME and Micro enterprises. Community was defined by the boundaries of the location. Indeed, interestingly, during the community interventions and interviews conducted, participants positioned themselves as being from the community of X and when visitors were present, they were acknowledged as

^f See also Glossary, p xx-xxvi

being from community Y or Z^s. There was a visible and palpable pride in 'belonging' to the location and to each other.

Values in communities can be identified in a number of ways, dependent upon the research directive, methods of investigation and the perspective from which the data is being gathered. Schwartz defines however that fundamental differences exist across individual and collective values based upon the 'basic requirements of function' (2011, p.7). Motivations considered within collective groups are proposed as being focused upon factors such as: 'maintaining social order; containing social conflict; encouraging productivity and innovation, and regulating social change' (Ibid, p.8). Through positioning culture as a 'latent variable measurable only through its manifestations' Schwartz proposes collective values as generating the basis of culture found in groups through determining ideals and behaviour. As such, they provide contextual positioning and identification to peoples' lives.

'By virtue of living in particular social systems, individuals experience the normative value emphases of their society's culture as a press to which they are exposed, a press that influences their attitudes, beliefs, behaviour, and thought' (Berger & Luckman, 1996 in Schwartz, 2011, p.9).

Collective values require a belief in, and a perception of a value, and as such, they also require enactment and behaviours which reflect these perspectives to be exhibited (Cannon, 2007). Values 'are used to characterize cultural groups, societies, and individuals, to trace change over time, and to explain the motivational bases of attitudes and behaviour' (Schwartz, 2012). In this way, collective values help to shape the functionality and day-to-day developments across our local and wider communities. It is the collective understandings and appreciations of right and wrong, good and bad that form the fundamental

^s Graphemes rather than location names serve to meet the ethical conditions of anonymity outlined in Appendix A.

beliefs around acceptable behaviours and actions which we learn and develop over time, and it is these which form the premise of laws, common goals and interactions.

Modal (2018) positions social values as: 'standards of social behaviour derived from social interaction and accepted as constituent facts of social structure'. They are desires of social conditions requiring the development and cultivation of environments of trust to be imbedded into the very fabric of the collective (Cannon, 2007). These objectives of social condition generate culturally defined goals and involve "sentiments and significance" which are in effect, emotionally based responses and matters of significance which function as drivers. Modal defines their functions as being:

- 1) Values provide goals or ends for the members to aim for.
- 2) Values provide for stabilities and uniformities in group interaction. They hold society together because they are shared in common.
- 3) Values bring legitimacy to the rules that govern specific activities. The rules are accepted as rules and followed mainly because they embody the values that most people accept.
- 4) Value help to bring about some kind of adjustment between different sets of rules. The people seek the same kinds of ends or goals in different fields of their life. (Modal, 2018).

Collective values cannot be considered as simply a representation of all individual parties' personal values viewed as a whole. Members of the collective believe in each-others engagement and actions as being aligned. As such, what can be identified in community and collective groups are predominant value types and motivations. The higher the prevalence of particular values, views and beliefs, the more common to the collective they are. As with individual values, it is vital that they are viewed contextually, reflective of the cultural, individual and collective behaviours, experiences and attitudes which are established in the community (Cannon, 2007).

As can be seen, social/community/communal/cultural values are intrinsic and influential upon our behaviours, attitudes and actions. They determine how we act and re-act to situations and opportunities. They shape and influence our experiences. They are the *why* to how we behave.

As such, it can be appreciated that understanding the values of those around us aids us in contextualising and underpinning our own personal and individual values. This knowledge can assist in building communication, relationships and creating mutually beneficial outcomes for all parties.

While it is possible to identify numerous business endeavours where, through a variety of approaches investigations into the needs, value structures and motivations of local community members and consumers have been conducted, the majority of these endeavours have had a fundamental focus towards instrumental and fiscally driven value types.

Within the context of this research body immanent/intrinsic and instrumental values of the community (the people who lived within the immediate area and who used the local resources) along with the local SME and Micro business enterprise community were explored.

3.4.1 Exploring Local and International Community Values

The wellbeing of business and their communities can be affected by aspects of life such as inclusion, security, creativity, sustainability, resources and environment (Kramer & Porter, 2006; Schmuecker & Wallace, 2012), all of which can be factors of instrumental and immanent value within a community. A cohesive picture that can depict both the financial positioning of a society and share valuable insights surrounding the everyday factors attributed to the needs, wants and values and motivations of a population is required to gain greater insight towards directing the cultivation of growth appropriately (Danson & Trebeck, 2011; Dunlop et al. 2012; Fitoussi et al. 2009; Schmuecker & Wallace,

2012; The Scottish Government, Scottish Planning Policy 15, 2005; The Scottish Government Planning Policy, 2010).

A drive towards other indicative metrics to evaluate and interpret wellbeing and social progress within and across nations (and at localised levels) is growing (Abdallah et al. 2013; Fitoussi et al. 2009; Hawkins et al. 2013; Legatum Institute, 2012a: 2012b; Schmuecker & Wallace, 2012; The Organisation for Economic Co-operation and Development, (OECD) 2013a: 2013b; The United Nations, 2009). A more resilient and coherent measure of societal growth and progress has now been globally acknowledged as a necessity. Simply measuring the economic environment of a nation is no longer enough to ensure lasting wellbeing of nations and individuals. Measures that can encompass and reflect a more three-dimensional perspective of prosperity are required (Fitoussi et al. 2009; Schmuecker & Wallace, 2012; Vyas & Young, 2011).

New approaches towards gathering a richer body of information around the wellbeing and prosperity of populations have been tackled both globally and nationally to address knowledge gaps. This is not a new phenomenon to occur; public and societal unrest and practices aiming to reform economic models towards reflecting non-financially oriented features have been emerging across a number of fields over the years. Fig.26 provides a small insight into some of the emergent developments in economic and societal assessment which have arisen during the past 140 years. It is by no means an exhaustive collation, nor does it reflect nuances and changes to economic models, rather it serves to establish and present that measures and approaches towards alternative value assessments are a long standing consideration. It allows us to see that there has been clear growth in momentum and action developing in recent years. For example, if we take a closer look at Fig.26 and consider the period from 1980 – 2018, it is possible to see that no fewer than 42 new indexes, metric, reports or institutions emerged, each offering insights around alternative approaches and directions for economic assessments, concepts of sustainability and improvements to equality.

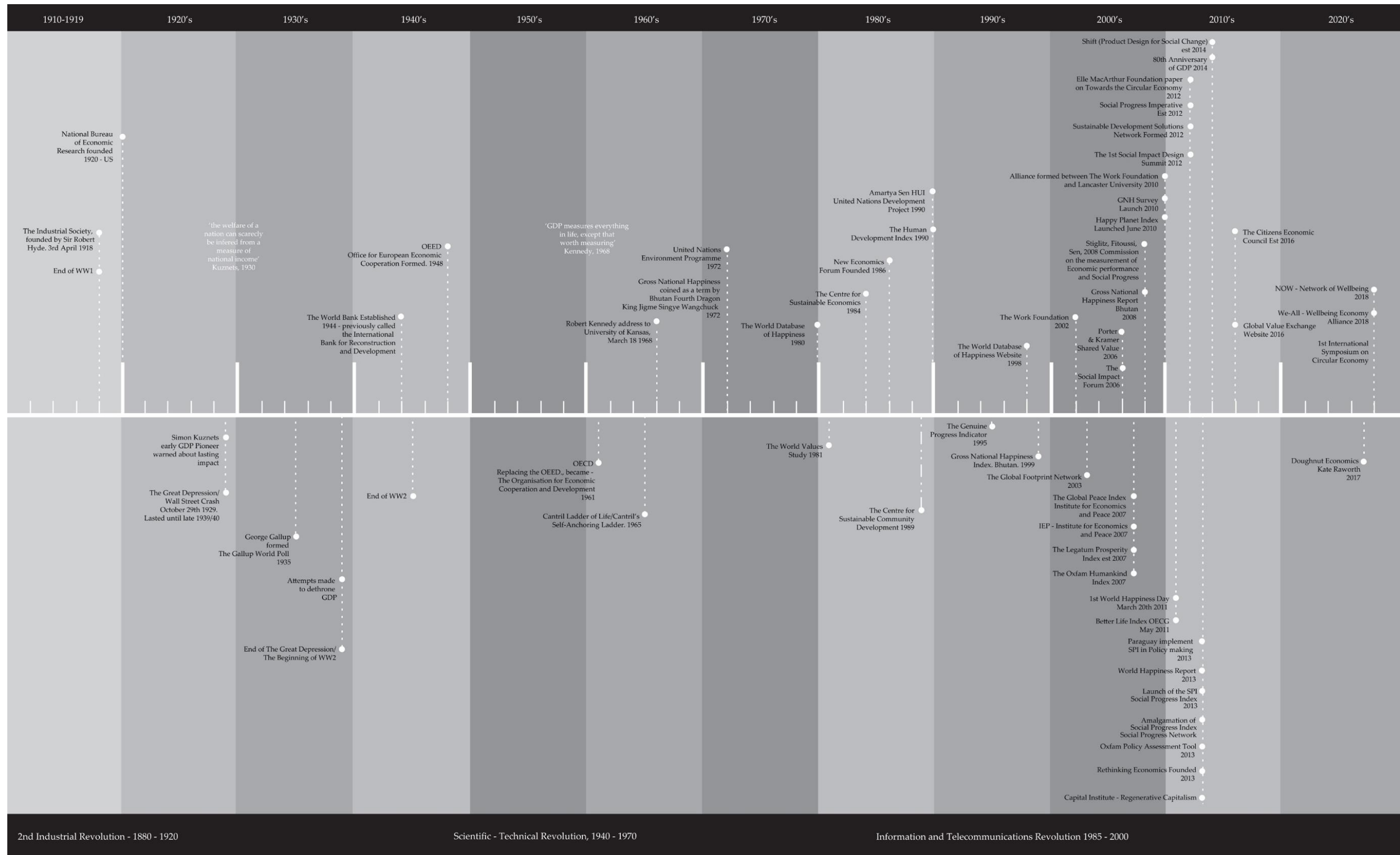


Figure 26. Developments in Economic and Societal Assessments 1880 - 2018.

Source: Amalgamation of data sources consulted throughout this study.

These actions form part of a growing global effort being made around moving away from the traditional approaches to growth, value and profit assessments associated with capitalism, towards approaches which integrate a deeper comprehension of the needs, wants, drives and sustainability of contemporary society.

Collectively these endeavours form a pool of information surrounding a wide array of societal and environmental issues. They each offer different potential avenues of action and understanding towards combatting global wicked problems and facilitate an understanding and appreciation of unseen and unheard needs and wants of people (Lindsay, 2016). When taken into consideration, they enable governments and ruling bodies to consider information not included in GDP, enriching their opinions and actions with information around factors which effect the ability to live well, reflect communities immanent, social and instrumental values and consider issues surrounding global sustainability and environmental decline.

As discussed in Lindsay 2016, considerations around how alternative insights of societal well-being and immanent values such as happiness might be integrated into the running and management of societies is not a new phenomenon. For example: The Gross National Happiness Index, conceptually this has existed for some 50 years and supports the Bhutanese legal code of 1729, which states:

‘if the government cannot create happiness for its people, there is no purpose for the government to exist’ (Ura et al. 2011, p.4).

The GNH index is a developed metric capable of considering factors which effect happiness into legal policy structure. It is comprised of 4 pillars: Good Governance; Sustainable Socio-economic Development; Preservation and Promotion of Culture; and Environmental Conservation. These are then broken down across 9 domains⁴²: Living Standards: Education: Health: Environment: Community Vitality: Time-Use: Psychological Well-being: Good Governance: Cultural resilience and Promotion (GNH, 2018).

The Bhutanese Gross National Happiness Survey was originally undertaken in 2010 and has since become an established component of policy and legal developments in the country. It is an exemplar of where government has reconsidered policies where the focus previously resided solely towards matters of instrumental value, i.e money and profit, and re-aligned their directives to support their populations in enacting and embracing their immanent value structures as well (GNH 2013). Responses to the survey are gauged through quantitative assessment techniques. Appendix I, i1, shows a sample of the questions taken from the 2010 Bhutan Gross National Happiness Survey. Through asking questions which consider for example, perceived life satisfaction, or having a sense of meaning and purpose in life, participants are enabled in considering if their life not only aligns with their personal values, (are they partaking in things which agree with their values, ethics and morals?) but the scope of questioning suggests a consideration of life in relation to those around as well. Participants predominantly rate their opinions through numbers providing a set of base line numbers. These are then complimented with short statements or specific recognition of particular aspects of life.

A more local example of alternative value collation can be seen in 'The Humankind Index and Policy Assessment Tool' undertaken and created by Oxfam (2013). This particular study gathers community and individual immanent values for consideration in the development of government policies and regulations.

Conceived in 2007/8, initial stages in its development involved consultation with 3000 people through a mixed method approach which gathered both qualitative and quantitative data. Approaches included stakeholder involvement through; A series of focus groups; Information stalls; Community workshops; Online surveys and a YouGov representative poll. Participant engagement was focused towards individuals and communities who often fall into the classifications of 'hard to reach' or 'marginalised' in order to develop a stronger understanding of

issues of real importance to people. The inclusion of the population in the shaping and development of this model indicate a step towards greater public inclusion around matters of value and importance which they feel are of significance.

The information gathered from the stakeholder discussions informed and shaped the development and refinement of the index. The work identified 14 areas of assessment for prosperity determined to be pertinent to the process:

- Affordable
- Safe
- Decent Home
- Physical and Mental Health
- Good Relationships
- Access to Arts/Leisure/Hobbies
- Being part of a community
- Sense of Place
- Healthy Environment
- Good Relationships
- Feeling Valued
- Participatory Space - Community Activities
- Culture
- Community Atmosphere
- Social Dialogue
- Service Provisions.

Through focusing upon these areas, the model aims to take into consideration and assess unseen and unmeasured details of life and prosperity within the communities of Scotland. This allows for important factors which contribute towards the ability to live well to be taken into consideration and understood by potential external and internal factors of influence, such as local council constabularies and larger government bodies. This in turn supports the secondary stage of the index's approach (The Policy Assessment Tool) in becoming influential through policy decision-making processes (Oxfam, 2013). The Humankind Index steps forward in the development and creation of metrics

which evaluate worth across non-financial environments, the worth of life without consideration of financial gain or profitability. Rather than reliance on GDP as the key and sole indicative measure of progression within societal structure, this index adopts a more holistic approach enabling foresight when determining the potential effects of new policy shifts (Ibid). Insights surrounding public perceptions and attitudes towards pending and potential constituency plans can be obtained as the tool encourages debate and engagement across multiple stakeholder groups to occur, creating atmospheres of community inclusion within discussions and decision-making processes.

Within its 'Who's Economy' seminars and papers (Danson & Trebeck, 2011) and through the development of its Humankind Index and Policy Assessment Tool (Dunlop et al. 2012), Oxfam has endeavoured to develop a variety of ways in which poverty and inequality might be tackled across Scotland. This work supports and facilitates the development of understanding and appreciation of unseen and unheard needs and wants of Scottish people. It aims to assist in the creation of a prosperous economic structure beneficial for community prosperity, quality of life experienced and business development .

The creation of the Oxfam Humankind Index and Policy Assessment Tool encourages deeper thought in relation to key features and areas of importance within communities although it does so by focusing more towards factors of identifiable instrumental value. Its line of inquiry, like that of the GNH survey, fails to offer opportunity for individuals and communities to identify and cultivate their collective and individual value positions, an opportunity which if available, could potentially aid future service/system developments. Knowledge about specific values and priorities within a community could support the inception and development of curated responses designed to meet each communities specific unique needs. Subsequently, within this process, local businesses would also have opportunity to consider in what ways they may be able to support and aid these developments.

Beyond our local efforts to explore value in new lights beyond profit margins and financial growth, there is as shown previously in (Fig.26, p.168) a global network of institutes and countries attempting to do the same, or similar, within their own boundaries. The Social, Humankind and Gross National Happiness Indices, Gross National Happiness, The Social Progress Imperative, The Happy Planet Index, The New Economics Forum and The Legatum Institute (Abdallah et al. 2013; Dunlop et al. 2012; GNH, 2013; Legatum Institute, 2012a: 2012b; Oxfam, 2013a; The Social Progress Imperative, 2013) are progressive global endeavours that attempt to comprehend needs, wants and motivations of people across the multiple facets of modern societies. Through their investigative methodologies and practices, they strive to determine productive methods of policy generation, community inclusion and progressive steps that can be taken towards creating more inclusive, prosperous, environmentally sustainable futures across the planet.

In what appears as a nod to Maslow, The Legatum Institute goes so far as to conduct their calculations through assessment of the indices called 'The 8 Pillars of Human Need'. Within this they consider qualities associated with:

- Education
- Personal Freedom
- Health
- Entrepreneurship and Opportunity
- Economy
- Governance
- Social Capital
- Safety and Security (Legatum Institute, 2012a: 2012b).

This information is disseminated to allow a richer view of overall growth across a wide range of countries, whilst providing insight around areas where concerted effort for change is required.

A key factor which requires noting, is that within the exploration of alternative metrics, it transpired that the majority of data conveyed and communicated by

each of them, is collated and accessed from the same data source, that of the Gallup World Poll.

Formed in 1935, Gallup became known for its capabilities in surveys and polls conducted across global territories. It collates and analyses a combination of surveys and qualitative studies each year to provide metrics around opinions of people from across the globe. Investigations can be shaped and curated to specific company or country needs dependent upon what specifically they are aiming to discover. Information is however then both collected and communicated through quantitative metrics. Initiated in 2005, The Gallup's World Poll is a series of studies which have been conducted across one hundred and sixty countries (Gallup, 2018). The interviews are undertaken through telephone surveys and face to face interviews which range in time from thirty to sixty minutes. Each survey batch is undertaken with 1000 individuals (per location), with additional samples taken from larger cities. This process is undertaken with 'semi-annual, annual and biennial frequency' (Ibid). The implication of the use of this poll is that alternative metrics derived and reported through its use are in fact still reliant upon quantitative, numerical pieces of data to provide qualitative information, again, the nuance and culturally specific details become lost in the mix. Each of these new approaches towards the assessment of value and values show categoric difference to those traditionally encountered within the realms of economics. They each, through their own unique styles and methodologies consider values from perspectives which go beyond finance, revenue and profit margins, placing the meaning of value back into the human realm and into the hands (and minds) of people.

3.4.2 Designs Role in Supporting the Identification of Community Values

Creative responses to current global situations, including those emerging across design-based fields, are supporting the emergence of cross-sector endeavours

which seek to impact societal growth and economic prosperity through consideration and appreciation of, multiple perspectives of values and needs. The application of design process and methods for service and business strategy boasts capabilities of increasing a company's profitability and levels of consumer engagement through exploration, understanding and transformation of actions and values (Sangiorgi et al. 2015). There are clear synergies which exist between the strategic evaluation and appreciation of stakeholder groups undertaken in the context of business models, and the fundamental, empathetic and stakeholder-oriented focus found in design thinking and across design practices.

The subject and practices of Design have gone through multiple transformations over the years (Curedale, 2013; Dorst, 2017; Leifer & Meinel, 2018; Norman, 2010; Peirce, 1998). Developing from a consumer based, product-oriented development strand, it has now become instrumental as a process for addressing complex problems in both the private and public sector, providing responses for unmet needs (The Design Commission, 2013). These capabilities are being recognised by society, businesses and governments as fundamental to problem solving and innovation in order to support the improvement, sustainability and longevity of social circumstance.

Communities across the world are heterogenous systems, full of complexities, instabilities and inequalities but the community members of these systems are the single most valuable source of knowledge (Day & Parnell, 2003). The employment of empathetic, stakeholder driven initiatives, enacted through design thinking approaches, offers us the opportunity to engage with these 'knowledge pools' in new ways, identifying new data and information which may prove fruitful for future endeavours. Westernised Society for the large part has traversed its way through a period of 'Living Well' with access to every conceivable commodity. It is now engaging in a model where the focus is upon the 'Quality of Life lived and Wellbeing'.

Through implementing and developing cooperative, human-centred practices such as participatory design, co-design, collaborative design and design thinking, design practitioners across the globe have long used the identification of human values to help shape creativity and to cultivate appropriate and suitable responses to challenges faced in the modern world (Brown, 2009; Arias et al. 2000; Papanek, 1985). Inclusion of people within and throughout the creative processes is an intrinsic and key component of Design Thinking. (Curedale, 2013; d.school Paris, 2009; IDEO, 2011; Leifer & Meinel, 2018; Sanders & Stappers, 2009; The Design Council, 2012). In fact, it is fair to say that it is a founding action intrinsic to Design Thinking as a practice.

Stakeholders must be consulted and design processes must be collaborative (to varying degrees). A creative practitioner's actions must be empathetic and show understanding of the cultural and social nuances they face. It is these actions which places Design Thinking into the 21st Century. Design Thinking steps away from the traditional and industrial age perspectives that design is merely the aesthetic finish added post-development. Instead it utilises the extensive skills, behaviours and intuition inherent to practitioners in order to create potential resolutions to complex problems (Kolko, 2015; Szczepanska, 2017; Turnali, 2016).

As considered in chapter 2, contemporary approaches towards design are taking a step away from the traditional silo model undertakings of previous generations and are comprised of a richer and more cross and multi-disciplinary set of approaches. This new appreciation and understanding of the scope of design can also be evidenced across a number of business endeavours and public and private undertakings, including governmental plans for the implementation of a new policy lab which will focus upon utilising design to 're-invigorate policy making in the UK Civil Service (Olliff-Cooper, 2013).

More traditional business model structures are finding themselves facing scrutiny and investigation as newer and more innovative practices emerge to address the needs and wants of communities and business owners. The present

conditions created by the economic climates have required traditional businesses to innovate, diversify and consider their engagement and impact across wider fields.

Colleges and universities providing design-based education programmes are considered by the European Design Innovation Initiative (EDII) as being:

‘Innovation centres oriented towards business and research, where design is a discipline of management of complex projects [which place] the user, meaning and progress at the centre of all concerns and needs’ (Guellerin, 2012).

Awareness of the potential for implementing design across business economics for the improvement of both productivity and prosperity is spreading. In support, The European Design Initiative went so far as to generate a list of 21 recommendations to enhance the role design plays across the European innovation policy. Grouped into categories, these recommendations formed 6 areas for focus and action to be driven through:

1. Europe’s Design Innovation Capability – an interconnected system of recommendations for growth and prosperity.
2. European Design on the Global stage – differentiating European design across the global platform.
3. Design in Europe’s Innovation System – positioning design within the European innovation system.
4. Design in Europe’s Enterprises – implementing design to create innovative and competitive enterprises.
5. Design in Europe’s Public Sector – implementing design to innovate across public sector parties.
6. Design in Europe’s Research System – positioning design research for the 21st Century (The European Commission, 2012).

Overall, the predominant aims of the European Design Leadership Board are to bring about the improvement of:

- The Quality of Life of the Citizens of Europe.
- The Competitiveness and growth of Europe and its region’s economies.

- The Quality and Efficiency of the public services (Thomson & Koskinen, 2012).

Guellerin, a member of the EDII, creates a compelling case for the discipline clarifying the perspective that design as a subject, is clearly well positioned for management and strategizing positions.

‘It is clear that design has become a discipline of management and strategy. Management, since design gathers the staff and their skills around the solving of complex issues. Strategy, because design uses creation and innovation as a way to project into the future to ensure the durability of the structure and its profitability. For many companies, the future will be made of innovation, adaptation, flexibility and will depend on the ability to mutate or to change jobs’ (Guellerin, 2012).

Europe is clearly engaging with and investing in design. It has developed and refined a number of projects and initiatives to support design innovation to become situated at the heart of its business, policy and public-sector developments. Design for Europe is one such example led by the UK Design Council and supported by partners from across the European Union. Its purpose is to support the European economy to experience positive growth through utilising and harnessing design as a driver for the economy.

Without this kind of research and underpinning, it is difficult to convince business, governments and the private sector of the significance of Design Thinking. Design innovation offers a vast multitude of benefits when instigated, bringing capabilities to the enhancement of knowledge around stakeholder engagement, collaboratory working and practice, business development and strategy, product ideation and creation and more.

‘Design should be applied in many more sectors and different situations, and at the same time we need to remember what it is that makes design unique – the ability to visualize, to make abstracts concrete, to influence people’s behaviour’ (Bason, 2012).

Both small and large businesses across public and private sectors are engaging and utilising design approaches in efforts to address and identify market gaps and improve service and product experience (The Design Commission, 2013). The past decade has brought with it an upsurge of public and private sector awareness as to the anticipated and interpreted benefits which can be derived through utilising design as both a method and catalyst for financially and social growth.

A new shift is occurring which places the predominant focus of business development and model emergence back into the consumer's perspective with businesses responding to anticipated needs and wants rather than creating them, established examples include the companies Apple, Nike and Ideo.

Scotland's economic climate is strongly interlinked to the success and failures of its microenterprises and SMEs (European Commission, 2015). The current economic situation faced by many of these businesses is that of uncertainty and turbulence. Businesses are now faced with taking necessary steps to ensure market position by adopting new models and behaviours, embracing 'collective intelligence' and integrating fields of knowledge into practice (Leadbeater & Mulgan, 2013).

Design thinking has a role to play in the consideration of qualitative factors of life and offers the opportunity to creatively consider the ways in which we impart, interpret and share values, (both immanent and fiscally derived) across localised and global communities.

There is a need to look at the care and wellbeing of individuals, communities and society as a whole, whilst considering underlying systems and environmental and sustainable aspects in order to create successful and prosperous atmospheres. Socially a shift is required, one which takes the perspective of Living Well to be driven by the quality of life lived and wellbeing.

3.5 Summary Discussion

This chapter set out to establish a context based upon literature at the intersection of business, community, economics, values and design. It explored how immanent and instrumental values occur at individual and collective levels and the roles they have within our lives. It considered how values are formed and influenced culturally and contextually and reflected on how they can be communicated in different formats (quantitative and qualitative) dependent upon that defined context and meaning. It also considered how these communications vary across the landscapes of communities, business and economics. It explored how even within economic contexts, instrumental and immanent values are still inherent within the picture.

It considered how businesses, communities and economic assessments and communications may benefit from exploring and recognising the variety of ways in which multiple types of values can be communicated and as such, how this can lead to greater alignment and reciprocity in relationships.

Traditional approaches to the communication of value, seen particularly in the field of economics have been proven to be biased towards fiscal and monetary growth. These communications have subsequently been misinterpreted as implying quality of life experienced. These equations lack the capacity to include or comprehend values of immanent origin. Alternative models which are emerging are presented to indicate ways in which these more qualitatively defined values have been considered and are being interpreted to support growth and prosperity in society of a new kind.

This chapter provides grounding around the argument for businesses to consider and incorporate immanent values found within their communities. Considering the stance of Cannon, who attributes social acceptability and social exclusions as cultural responses determined by behaviours, theoretically, the stronger the alignment of values between the two parties, the more acceptance develops.

Design Thinking is supporting the emergence of cross-sector endeavours which impact both societal growth and economic prosperity through consideration of the complexities related to, and interlinked with, multiple value perspectives and needs. Supporting and culturing a notion of collaboration for the long-term benefit of businesses, builds upon the local communities' 'cluster' strengths and needs to bring greater value to their collective and independent worth.

Shared value, social innovation and social enterprise are creative responses that address the needs of modern society. They look at the care and wellbeing of individuals, communities and society as a whole and consider underlying systems which are endeavouring to create atmospheres supportive of success and positively impacting quality of life experienced.

Sharing values, which is what this thesis sets out to explore, endeavoured to consider the ways in which design-led research might be able to contribute effectively and constructively to these new dialogues.

Chapter 3 addresses objectives 1 & 2 by examining traditional and alternative economic models of value assessment, and establishing a context based upon literature at the intersection of community, economics, values and design. What now follows in Chapter 4 is an exploration of the methodological approach and methods implemented within this study.

4

Methodology

Chapter 4. Methodology

While chapters 1 to 3 provided the contextual and literary frames of this research body, chapter 4 provides discussion and insight of the methodological approach implemented, Real World Research (Applied Research) as defined by Robson (1993), Robson & McCartan (2016). This chapter begins with a brief discussion of definitions and differentiations between Design Methodology and Method, determining the researcher's position. It then provides the background and philosophical underpinning of Real World Research as an established approach followed by a brief discussion of the selected location. The three studies conducted are then presented, contextualising the actions undertaken by the researcher, offering insight to the methodological strategy and methods implemented for data gathering. Processes developed and employed for data handling and analysis are then discussed. This chapter culminates with a succinct review of the ethical considerations of this research and the capabilities and caveats of the work conducted. In presenting the methodological strategy and methods this chapter responds to objective 3 by providing the rationale and underpinning of the research conducted.

'A methodology is the overall approach to a research programme, including research topic, research question, conceptual frameworks, intents and purposes, values-oriented, data collection, interpretation and analysis, validation procedures and so on. A method is a specific technique [...] to gather data, interpret [...] data through the use of content analysis, or validating a claim to knowledge through the critical feedback of a validation group'

(McNiff & Whitehead, 2011. p. 48-49).

4.1 Introduction

Before settling upon Real World Research (RWR) inquiry (Robson, 1993) as the appropriate methodology for this research, a broad scoping exercise examining alternative philosophies was undertaken including:

- Phenomenology: Edmund Husserl, (Moran, 2000),
- Heuristics: Herbert A. Simon, (Simon, 1978:1988),
- Hermeneutics: Martin Heidegger, (Macquarrie & Robinson, 1962),
- Action Research: Kurt Lewin, (Adelman, 1993); John Dewey, (Dewey, 1929;1938); John Collier, (Neilsen, 2006).

These methodologies,⁴³ regularly utilised across Arts and Humanities and in Design-led research practices⁴⁴ and similarly in Real World Research, are grounded historically in the field of Social Sciences. This initial investigation supported the researcher in identifying areas of relevance and compatibility between their own ethos and model of practice and the proposed direction and objectives of the research. Clear correlations and alignment between the philosophies of Real World Research inquiry and the researcher's own design practice of Design Thinking were identified, amongst which, the applicability of RWR inquiries as small in scale and flexible in nature, conducted in environments of complexity where conclusions are tentative and contextually positioned, gave grounds for application.

This research expands upon the work of Robson (1993) and Robson & McCartan (2016) implementing a strategy inspired by their approach to Real World Research inquiry in the context of Design Thinking to enable the identification of values in rural Scotland.

4.1.1 Method and Methodology

It is commonly accepted that whilst considerable volumes of information exist about methodologies, the availability of reference materials regarding methodologies originating from, or with applicability towards design-led

research endeavours, is significantly smaller⁴⁵ (Dorst, 2015). In direct contrast lies a vast expanse of information surrounding design methods and tools. Often the two terms are confused, misunderstood or misinterpreted (Crouch & Pearce, 2012). Cross, (1984; 1993), Dorst, (2015), Jones, (1992), Kemmis (2001), Kemmis & McTaggart, (2000: 2003), McGregor & Murnane (2010), McNiff and Whitehead (2006: 2011) and Robson (1993) are a few of those working within design and across other sectors developing design-led research methodologies and providing alternative options for design-led researchers. They have sought over the years through use of metaphor, publications, conversations, visualisations and iterative models of practice, to convey their knowledge to others in support of the development and realisation of design-oriented and design-based methodological approaches.

Through consideration of this accumulated knowledge, the position of this research is:

A methodology is philosophy in action;

It provides the structural scaffolding and guiding strategy for a research endeavour addressing the 'why' and 'how' of the research. Methods are the mechanics of action. They are the tools, materials and actions implemented which enable the initiation, undertaking, review and reflection of investigations.

4.2 An Outline of Real World Research Inquiry

This research was framed around an inquiry into methods for the identification and communication of values with the aim of supporting the development of a framework for Micro and SME enterprises and their local communities. It set out to investigate through a design-led approach, the sharing and communication of values by considering: *How do we enable businesses and communities to better understand, share and communicate their individual and collective values through design-led approaches?*

Human values are shaped through experiences and perspectives which develop over time and are influenced by social and personal factors (Ilyin, et al 2006; Merriam & Mohamad, 2000; Schwartz, 2012). Design Thinking offers approaches supportive of investigating and understanding more human-oriented aspects of life (Arias et al, 2000; Brown, 2009; Day & Parnell, 2003). These approaches are capable of offering fresh perspectives to ongoing conversations around the identification and communication of values. Real World Research inquiry is supportive of these ideals as it aims to explore 'personal experience, social life and social systems, as well as related policies and initiatives [...] endeavouring to understand the lived-in reality of people in society and its consequences' (Robson, 1993, p.3).

Real World Research is often undertaken in environments of complexity (engagement with real-time societal situations and investigations which include people fall within this category). It is an approach where conclusions which are drawn are predominantly tentative in nature and affected by the context of when, where and how they were obtained and determined (Robson & McCartan, 2016. p.4). Where traditional research methodologies culminate in final conclusions and 'complete stories', Real World Research inquiries are never entirely complete. They implement flexible design approaches reflective of a more evolving and emergent process. All information gathered through a Real World Research approach must be seen within context of its original positioning. Inquiries such as this, provide perspectives, opinions and findings based upon information obtained during a specific period of time, affected by the researcher who undertook the project, the individuals who interacted, and their internal and external relationships with the environment around them. Supportive of iterative and exploratory models of research it is open to the use and application of a variety of mixed method approaches. Its grounding in the fields of Social Science, coupled with qualitative research methods which have emerged from the same source, provide guidelines towards the standardisation of practice which can be

applied giving a foundation to the research undertaken, and to the subsequent data handling and analysis which occurs (Robson, 1993). This research was undertaken through a Real World Research Inquiry approach defined as:

‘Real world research, [...], refers to applied research projects which are typically small in scale and modest in scope. Real world research looks to examine personal experience, social life and social systems, as well as related policies and initiatives. It endeavours to understand the lived-in reality of people in society and its consequences [...] real world research can shape the world as well as explain to us why the world is in the shape that it is. (Ibid, 2016. p.3). [It is an approach which] ‘focuses on problems and issues of direct relevance to people’s lives, to help find ways of dealing with the problems or of better understanding the issues’ (Ibid, p.4).

Robson (1993) identifies fundamental differences which exist between studies of this nature and those of more traditional or scientific (and laboratory) orientation (see appendix J^h, j1. Factors such as ‘solving problems; developing and testing programmes, interventions and services; and field working rather than laboratory based investigation, reflect characteristics found within design-led research and design thinking. Practices where design is proposed as a desire to see and facilitate change, be that physical matter or experience (Alexander, 1964; Brown, 2009; Cross, 2006:2011, Simon, 1988), are all about the human experience. They consider in detail people’s needs, wants and aspirations and can serve as a mechanism to explore and facilitate change, aiding the communication of perspectives and ideals (Curedale, 2013; Day & Parnell, 2003; Leifer & Meinel, 2011; Rowe, 1987). Real World Research inquiry can be identified as an approach supportive of these ideals as it aims to explore;

‘personal experience, social life and social systems, as well as related policies and initiatives [...] endeavouring to understand the lived-in reality of people in society and its consequences’ (Robson, 1993, p.3).

^h Appendix J contains copies of the original tables/figures provided by McCartan and Robson. They are numbered according to each in-text reference, j1 through to j8.

Of particular interest within Robson's work is that he identifies many of the situations in which Real World Research might be applied as being 'inevitably political (with both a small and a large 'p') This politicisation affects the ways in which proposed solutions to identified social problems are engaged with, and in many cases, ignored (Ibid, p.4). This has bearing upon the social, economic and political implications of studies such as this, where challenging the status quo of capitalistic and consumer driven society is a driving factor. The wider governing systems in charge must be open to change in order for proposed alternatives to become reality (Danson & Trebeck, 2011; Dunlop et al, 2012; Fitoussi et al, 2009; Schmuecker & Wallace, 2010). Real World Research is arguably an applicable mechanism through which social circumstance, experiences and systems can be explored. These fundamental directives align well with the strategies and goals of design thinking.

Robson and McCartan position that, irrespective of directive, every research project must be conducted with a strategy at its core (2016). They place the strategy at the heart of inquiries, where it determines in broad terms, the actions which will be undertaken throughout the investigation. Robson (1993) identifies 9 such actions which require attention (Table 14):

Table 14. The Main Steps of Carrying out a Project

1	Decide upon focus
2	Develop the research questions
3	Determine the research strategy
4	Select the method(s)
5	Arrange practicalities
6	Collect the data
7	Prepare for, and carry out, analysis
8	Report upon findings, and, possibly:
9	Act upon findings

Source: Robson & McCartan (2016, p. xxiii)

Despite being considered by Gray (2004) as 'very simplified approaches', contributions to the fields of methodological approach and project development made by Robson & McCartan, along with those made by Gill and Johnson⁴⁶

(1997) in their 7 phase strategic action plan (which is available to review in Appendix j2,) provide with very respectable levels of clarity and clearly defined, actionable steps for researchers to undertake. Gill and Johnson recommend each aspect be 'given equal attention' as in the longer term, this proves more economical in terms of time well spent (Ibid, p.10). They highlight the requirement and need for iteration and reflection throughout the process, identifying actions which link forwards and back to different sections dependent upon how effectively the research is meeting its objectives and aims⁴⁷.

'An idealized representation of the research sequence will help the [...] researcher at this stage to review the research process as a whole and make a start; however, it rarely accords with actuality. It should be borne in mind that 'the research process is not a clear-cut sequence of procedures following a neat pattern but a messy interaction between the conceptual and empirical world, deduction and induction occurring at the same time' (Bechhofer, 1974 p.73)' (Gill & Johnson, 1997. p.9).

Gray (2004) corroborates this position arguing that reflection and iteration are a necessity within the research process, and that often researchers will encounter investigations which are shaped by the data in real time.

'complexities of researching in the real world mean that the researcher may often have to revisit previous stages in the research process. [...] it is also valid for the researcher to enter 'the field' to gather data, with only the most general of notion of what she/he is looking for, and for the data to help in the generation of concepts and theories' (p.4).

This strategy of iteration is consistent with practices of design thinking, where rapid iterations and feedback loops are a common found necessity which support the reflective qualities of designers working within a Design Thinking or design-led model of practice (Curedale, 2013; Dorst, 2017; d.school France,2009; IDEO,2012; Lawson, 1980; Leifer & Meinel 2011; Mesarovic, 1964; Rowe, 1987; Schön, 1983; The Design Council, 2005a; Watts, 1966). Within Real World inquiry, this is described as 'flexible design' where the focus of investigation may change

over time as things progress. Key features of 'flexible design' (as identified by Robson and McCartan, 2016) include:

'Multiple qualitative data collection techniques; Framed within an evolving design with the presentation of multiple realities; Informed by an understanding of existing traditions of research; Can employ multiple traditions; Begins with a single idea or problem the researcher seeks to understand; Rigorous approach to data collection, analysis and writing; Analysis inclusive of multiple levels of abstraction and; Accurately reflects the complexities of real life' (p.147). An outline of the full features are available in Appendix j3.).

With skills inclusive of: Being inquiring with a degree of emotional resilience; Capabilities in listening; Empathetic qualities; Ethnographically grounded interpretations; Adaptability and flexibility to change are identified as necessary and intrinsic to flexible design investigation (See Appendix j4, for the full breakdown they provide).

These skills resonate and align with those imbued within design thinking and design-led approaches such as; Understanding, Empathy, Observations/Research; Interpretation/synthesis, and complement behaviours required for iterative ideation and prototyping (Bason, 2012; Curedale, 2013; Leifer & Meinel, 2011; The Design Council, 2005). It is the position of this research that Real World Research inquiry, coupled with processes, approaches and skills imbedded in design thinking practices, generate a fertile environment for human-centred creative research to be undertaken.

4.2.1 Case Study

There are a number of ways in which Real World Research can be undertaken and reported. Robson & McCartan (2016) describe the predominant strategies used as being either 1) Case Study, 2) Ethnographic Study or 3) Grounded Theory (Ibid. p.146) (Table 15).

Table 15. Overview of Three Approaches to Flexible Design Research

1	Case Study – A well-established research strategy where the focus is on a case (Which is interpreted very widely to include the study of an individual person, a group, a setting, an organisation, etc). in its own right and taking its context into account. Typically involves multiple methods of data collection. Can include quantitative data, though qualitative data are almost invariably collected.
2	Ethnographic Studies – Another well-established strategy where the focus is on the description and interpretation of the culture and social structure of the social group. Typically involves participant observation over an extended period of time, but other methods (including those generating quantitative data) can also be used.
3	Grounded Theory studies – A more recently developed strategy where the main concern is to develop a theory of the particular social situation forming the basis of the study itself. Popular in research on many applied settings, particularly health-related ones. Interviews are commonly used but other methods (including those generative quantitative data) are not excluded.

Source: Robson & McCartan, (2016) BOX 7.3. (pp. 149-150)

Case studies, as presented by Yin, ‘arise out of the desire to understand complex social phenomena’ (1994, p.3), and as such they ‘contribute uniquely to our knowledge of individual, organizational, social and political phenomena’ (Ibid,p.2), a perspective and position very much in line with the principles of Real World Research Inquiry.

Perspectives surrounding the effectiveness, relevance and suitability of case study vary quite widely⁴⁸. Recent years have seen a change in trends with greater acceptance of their role in research being adopted. Previously case studies were considered as mechanisms for exploration, little more than anecdotal devices lacking meaningful worth, rather than approaches capable of hosting theory testing or description (Eysenck, 1976; Yin, 1994; 2014). As an approach now used across fields inclusive of design (Design in Action, 2016), business education (Forrester & Oldham, 1981), psychology, sociology, politics, economics, business, social work (Yin, 1983), greater acceptance and understanding of the value of case study have become apparent. Case studies have forged a position within research environments as being useful and in some cases, invaluable tools for exploration. They equip us with the tools to portray studies of small (and large) scale phenomena and have a role in supporting our research endeavours and

proposals and developments for the future. This shift can be seen quite clearly in Flyvberg's work around the 'Complementarity of Case Studies and Statistics' (Available to review in Appendix *j5*), where they are positioned as being capable of producing contextually aware, in-depth research which is understanding of the specific phenomena being explored (2011, p.314). Indeed, Yin offers that now case studies are considered to be capable of:

'contributing uniquely to our knowledge of individual, organizational, social and political phenomena [supporting] an investigation to retain the holistic and meaningful characteristics of real-life events such as individual life cycles, organisational and managerial processes, neighbourhood change, international relations and the maturation of industries (Yin, 1994 p.3)'.

This range of potential applicability supports Robson and McCartan's (2016) position that case study is an appropriate strategy for Real World Research. They identify six key factors:

- A strategy, i.e. a stance or approach, rather than a method.
- Concerned with research, taken in a broad sense and including for example, evaluation research.
- Empirical in the sense of relying upon the collection of evidence about what's going on.
- About the particular; a study of that specific case.
- Focused upon a phenomenon in context, typically in situations where the boundary between the phenomenon and its context are not clear.
- Using multiple methods of evidence or data collection (Ibid, p.150).

which place it as a strategy for research involving the empirical investigation of particular contemporary phenomenon(s) within their real-life context, using multiple sources of evidence' (Ibid, p.150).

Case studies are generally framed as fitting within one of three categories; 1) Exploratory, 2) Descriptive and 3) Explanatory (Robson & McCartan, 2016; Yin, 1994) (Fig.27). The frame is determined by the purpose of inquiry, the strategy, and the directive and needs of the research.

- | |
|--|
| <ol style="list-style-type: none"> 1. <i>Exploratory</i>
To find out what is happening
To seek new insights
To ask questions
To assess phenomena in new light
Usually, but not necessarily, qualitative 2. <i>Descriptive</i>
To portray an accurate profile of persons, events or situations
Requires extensive previous knowledge of the situation etc to be researched or described, so that you know appropriate aspects on which to gather information
May be qualitative and/or quantitative 3. <i>Explanatory</i>
Seeks an explanation of a situation or problem, usually in the form of casual relationships
May be qualitative and/or quantitative |
|--|

Figure 27. Classification of the Purposes of Enquiry

Source: Robson (1993) BOX 3.2. (p.42)

In addition to these definitions, case studies can be conducted as either singular pieces of work, or there can be multiple studies involved. Four commonly recognised types of case study design include:

- (a) single case (holistic) design,
- (b) single-case (embedded) design,
- (c) multiple-case (holistic) design,
- (d) multiple-case (embedded design' (Yin, 1994, p.38) (Available to review in Appendix j6).

Singular studies are generally used to undertake and report upon singular events, experiments or phenomenon forming 'critical case's in testing well-formulated theories' (Ibid, p.38). Singular case study models can be actioned multiple times resulting in a rich body of information and data sources which can be triangulated to generate a fuller picture of the particular phenomena examined. Cross-case comparisons can then be conducted, generating more substantiated and formed positions based upon acquired knowledge and evidence (Herriot & Firestone, 1983). This, as put by Yin strengthens the quality of the overall study as 'evidence from multiple cases is often considered as more

compelling, and the overall study is therefore regarded as being more robust' (Yin, 1994. p.45).

Multi-case study models, as presented by Yin have 3 phases, (1) Define and Design, (2) Prepare, Collect, and Analyse, and (3) Analyse and Conclude (See Fig.28).

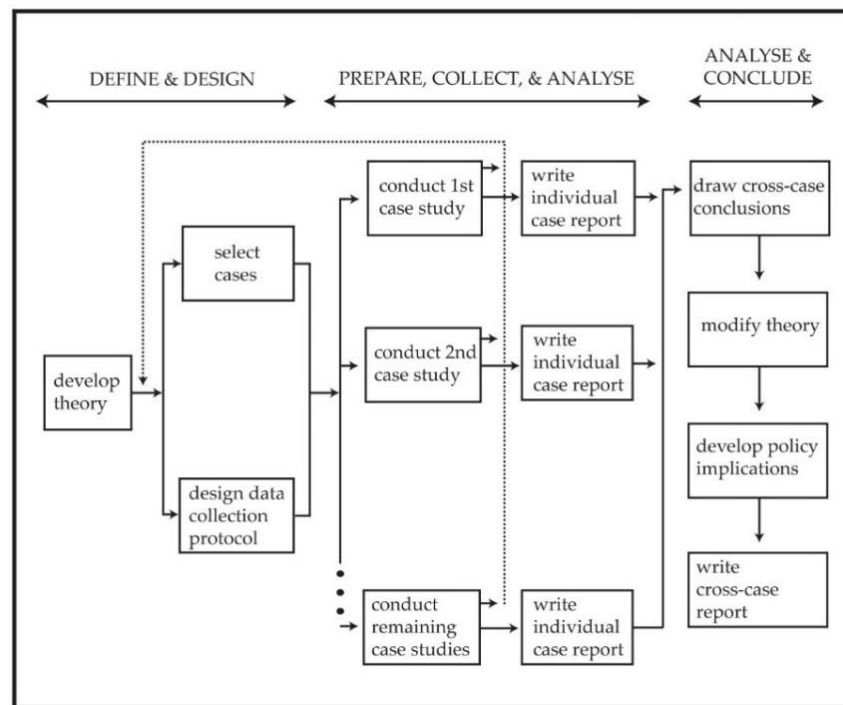


Figure 28. Case Study Method

Source: Yin (1993. p.49).

This allows for each individual 'case' to eventually be seen as a 'whole study, in which convergent evidence is sought regarding the facts and conclusions for the case. Each case's conclusions are then considered to be the information needing replication by other individual cases' (Yin, 1993. p.49).

Building upon this understanding derived by Colin Robson, and supported by the works of Yin and others, I adopted this Real-World inquiry approach implementing a multiple-case study design. Investigating multiple groups allowed for values to be considered at individual, business and community levels. The inclusion of an exploratory study considering the values of designers and their perceptions of businesses' values (both fiscal and qualitative) further

enhanced the project strategy. The combination of the two location based studies considering differing yet connected groups (business and community members), coupled with the data derived from the exploratory study with designers, provided scope to triangulate the resulting data.

4.3 Applying Real World Research into this Investigation

This research set out to explore values of SME and Micro enterprises and their local communities situated in rural Scotland. Following investigation of Real World Research as an applicable approach for inquiry, it can be determined that: This study was undertaken through Real World Research inquiry. It was participatory in nature, flexible in design, adopted a mixed methods approach for data gathering and analysis purposes, and implemented a multi-case study approach as the 'umbrella' strategy for explanatory and dissemination purposes. Fig.29 offers a visual overview of the research design implemented.

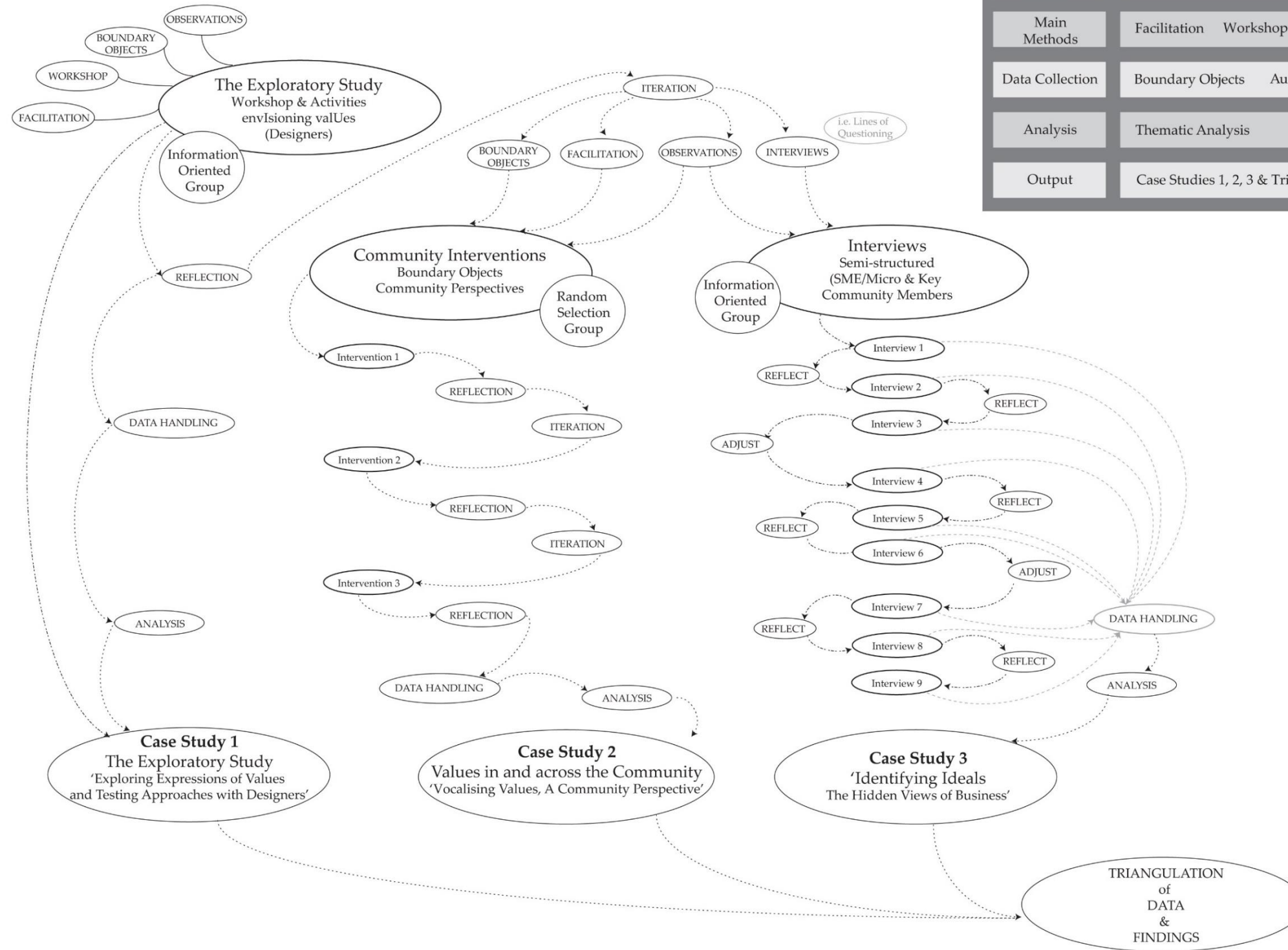
The selection of samples in case studies are recognised as having an impact upon the generalizable qualities of the resulting study (Flyvberg, in Denzin & Lincoln, 2011) with the selection of sample type directly connected to a specific purpose.

Flyvberg identifies that random sample selection is the appropriate strategy to employ 'in order to achieve a representative sample that allows for generalization for the entire population' (Ibid, p.307). He also notes that when studies wish to 'maximise the utility of information from small samples and single cases' (Ibid, p.307), information-oriented selection of samples should be undertaken. (Appendix j7, presents Flyvberg's full outline).

With that in mind, participation selection for case study 1 '*Exploring Expressions of Values and Testing Approaches with Designers*', and case study 3, '*Identifying Ideals, The Hidden Values of Businesses and Communities*' was based upon information-oriented sampling, where participants were selected specifically because of knowledge or experience.

Case study 2 '*Vocalising Values, A Community Perspective*' which sought to explore values across the community implemented random sampling which allowed and supported the participation and involvement of any member of the community. Data gathering was conducted in two phases during a limited time frame. The first phase ran over a 4 week period and involved the designers. It included the workshop and follow-up sessions. This phase provided the data for case study 1. The second phase lasted 16 weeks. During this time all three interventions and all nine interviews were conducted. These provided the data for case studies 2 & 3 respectively. A timeline of research activities and events is provided in Appendix j8. Information regarding the location of the studies is presented following Fig.29.

Research Design Strategy



Approach	Real World Research Inquiry				
Strategy	Case Study - Multi-Case Study Design				
Sample Type Selections	Random (CS.2) & Information-Oriented (CS.1 & CS.3)				
Main Methods	Facilitation	Workshop	Observation/Reflections	Boundary Objects	Semi-Structured Interviews
Data Collection	Boundary Objects	Audio Recording	Observations	Note-taking	
Analysis	Thematic Analysis				
Output	Case Studies 1, 2, 3 & Triangulation				

Figure 29. Design Research Strategy

4.3.1 Location

With the exception of case study 1, *'Exploring Expressions of Values and Testing Approaches with Designers'*, this investigation was undertaken within a rural community based in the east of Scotland. This location was selected as the result of a scoping exercise.

Initially, this research set out with the intention of engaging with three communities. Potential suitable rural locations were identified across Scotland as part of a scoping exercise undertaken during the preceding nine months. As a part of this process a number of community leaders were approached in an effort to establish and develop lines of communication and seek engagement. In many cases emails were sent and phone calls made, but no responses were received. Eventually it was determined that initiating and sustaining contact was more successful when close personal network connections were involved in the initial stages. These connections aided in the establishment of points of contact with individuals who were receptive to taking part in a research project. The researcher then went on to meet with community leaders and key community members who were friendly, accommodating and supportive of taking part with the proposed research endeavour. It was through these conversations that five potential locations were eventually shortlisted which met criteria (Table 16) set by the research design.

Table 16. Criteria for Location

1	Must qualify as rural under definitions set by the Scottish Government, Urban Rural Classification (2017).
2	Population must not exceed 3000 individuals.
3	Must be out with a 30 minute drive of an urban town or city where the population exceeds 10,000 individuals.
4	Needs to be reflective of other rural communities across Scotland with an established industrial past, and an uncertain and undetermined future direction.
5	No bias of positive finance within the community. (i.e. population required to be economically balanced with levels of prosperity and poverty). It cannot be a 'millionaires' neighbourhood.
6	Provide a representation of an average rural community in Scotland.
7	Have a mix of shops and trades both up and running and under development.
8	Be happy to engage and interact with the purposes and direction of this study.

Upon further examination only one of the locations shortlisted was identified as being suitable to undertake the research within. Table 17 offers an overview of the shortlist including rationales as to location inclusion or disqualification.

Table 17. Shortlist of Locations

Location 1	Initial contact was successful, however ongoing circumstances within the community which were negatively affecting both local industries and the wider area resulted in them opting to decline involvement. They were open to contact being made at a future point once things were resolved.
Location 2	Initial contact was successful, but the location was financially biased. The overall economic status of the population was found to be far higher than in other rural locations.
Location 3	Initial contact was successful, and the location offered a good representation of 'average' rural communities, both economically and with SME/Micro enterprise presence. Unfortunately, its high population disqualified it from involvement.
Location 4	There was a lack of uptake and engagement from both community members and SME/Micro enterprises.
Location 5	Met all set criteria, represented an average rural community. Had a positive level of uptake and engagement across both community and business investigations.

Although this meant only one location was subsequently involved in the research, it was the one environment which met all the defined criteria and was identified as being the right location for the study to be based within. It was in

scientific terms, the equivalent of finding the 'Goldilocks Zone' (Hawking & Mlodinow, 2011. p.122) to undertake this research within.

The location selected met the Scottish government definition and specifications of rural communities. Its population did not exceed 3000 individuals and its location was within a 30-60 minute drive of a settlement with over 10,000 individuals (Table 2, p.31). This positioned the community within definitions of both Accessible Rural and Remote Rural (The Scottish Government, Urban Rural Classifications, 2017).

The community was home to established and long-standing businesses along with new enterprise ventures. This provided the opportunity to engage directly with small and micro businesses with varying levels of experience. Community engagement with local endeavours was visibly high, as were levels of creativity and entrepreneurial spirit. (This was apparent through the number of creative enterprises situated within the community coupled with the number of creatively oriented activities hosted in the community). High levels of participation, and indeed, pre-existing events found across the community made accessing suitable locations in which to host the community interventions, significantly simpler.

As Arias et al, (2000) and Day & Parnell (2003), corroborate, members of communities provide an invaluable source of knowledge. Their personal, experiential knowledge about their community and its locale makes them vital to the development of shared knowledge (see also chapter 2.2 & 3.4.2).

Initial connections made within this community supported and facilitated access to the wider community and business networks. They did this through word of mouth, recommending the study to others, sharing their own contacts, making recommendations of individuals to involve and facilitated access to locations which would have been difficult to obtain without their assistance.

The community selected represented and symbolised an average small Scottish rural community endeavouring to develop and maintain both its social and

business environments. There was palpable community spirit fuelled by a sense of pride in their accomplishments (both individual and collective endeavours). Initial scoping identified that the community had faced increased financial cuts to governmental and social services and provisions. This mirrored situations found across the country. The impact of these cuts included:

- A reduced public transport service with a lower availability of buses,
- A reduction and loss of local amenities such as the loss of a local post office,
- The complete removal of trains and freight services from the area,
- Lack of access to emergency health care and hospital services,
- A reduction in social care support and provision for those in need,
- Notably fewer local job opportunities,
- A lack of activities and provisions for older and teenage children,
- Reduction in funding for community based endeavours (For further information around the realities of life in rural Scotland see chapter 1.6).

4.4 The Three Case Studies

This research implemented five main methods of investigation; Interview, Ethnographic Observation, Workshop, Facilitation and Boundary Objects to facilitate data gathering (methods such as the workshop required multiple activities to be in-built). Each method and activity undertaken reflected the specific needs of its related case study and the identified sub-questions the study was seeking to answer. (This is covered in more detail within each following sub-section).

Collectively each case study formed part of the response to objective 3: *'Apply a variety of design led approaches, new and established, to gather data from a rural community's business and community members enabling the identification and communication of values from both perspectives'*. To this end each study was designed with specific intent and addressed lines of sub-questioning geared towards the purpose of the overall enquiry.

With the exception of the data gathered within case study 2, (which allowed for both qualitative and quantitative analysis and presentation), this research was undertaken through an approach which considered information and data predominantly personal and qualitative in nature. Data handling and analysis processes for all three case studies is presented in chapter 4.5.

Focusing more towards qualitative data was rationalised as it offered the opportunity to explore values in a different dimension than is currently available through traditional and alternative value assessment metrics which, in the main, rely upon quantitative data sets.

4.4.1 Exploring Expressions of Values and Testing Approaches (Case Study 1).

Case study 1 adopted an exploratory study approach as described by Robson (1993) (Fig.27). It provided the opportunity to: Develop and refine lines of questioning; Allowed for examination of the social phenomena of values in a design-led context; Enabled insights to be drawn from the process, activities and findings which then informed and shaped future actions and steps. It also provided scope to consider and develop suitable ways in which data collection and analysis might be undertaken. Perhaps most importantly of all, it provided a space and environment to explore these aspects of the research minimising the risk of failure at a later date out in the field. As Robson & McCartan put it: ' Pilot work almost always brings out problems; better then than in the middle of a [...] design study' (2016, p.404).

4.4.1.1 The Approach

The overall purpose of the exploratory study was to support the future inquiry into values of SME/Micro enterprises and their local community. Investigation was undertaken through three frames of:

- Personal Values (Individual Participants)
- Collective Values (The Whole Group)
- Perceived Values (The anticipated values of external parties (i.e SME's/Micro enterprises)

The following lines of sub-questioning were identified shaping and guiding the study development;

- How are values communicated?
- What terminologies are used in communication of values? (regularly and randomly?)
- How can conversations be cultivated to support their expression?
- How can these expressions be captured, analysed, disseminated and documented?
- How values of others might be connected and influential across key groups?

Within the above sub-questions, the following factors were under close scrutiny and consideration.

- Common terminologies used in the expression of values.
- Approaches and methods supportive of cultivating conversations to support the expression of values.
- Potential meanings which can be derived from these expressions, and how these meanings may be determined (i.e within data handling, analysis and dissemination phase).

The exploratory study was conducted in two stages. Stage 1 consisted of a day-long workshop built around the outlined inquiries listed above. Stage 2 of the study was comprised of 32 hour-long sessions held with individuals and smaller groups. (These sessions were conducted over an 8 week period following the workshop). These additional sessions supported the iteration and development of methods and approaches for identifying values and data collection and analysis, whilst simultaneously providing the students with support as they worked towards their own personal outcomes.

Titled 'Envisioning Values' the method of workshop provided a foundation for the study. Workshops over the years have undergone extensive shifts in purpose and meaning. Øngreen and Levinsen (2017) position the contemporary application of workshops as being:

'an arrangement whereby a group of people learn, acquire new knowledge, perform creative problem solving, or innovate in relation to a domain-specific issue' (Ibid, p.71).

Attributed to the works of Osborn (1953) and associated with 'Creative Group Problem Solving', workshops as method (and methodology) have evolved over the years developing into a recognised creative approach and method which is regularly utilised within design practices (Graham et al, 2015). 'Workshops are a recognised part of design practice [...]' (Ibid, p.9), providing opportunities to explore concepts, refine problems, develop solutions, and enrich projects through collaborative practice.

It was a logical decision to utilise approaches and a method familiar to myself (as a design researcher/practitioner) and familiar to the intended participants. Workshop design and development along with facilitation are key components within my professional practice and within my duties to the wider DiA project (see Ch1). Hosting workshops for research purposes requires the researcher/designer to function in duality. They undertake and adopt a number of roles, not least of which are researcher, facilitator⁴⁹ and host. They must remain 'constantly aware of their roles and their different scopes and influences during research practice' (Øngreen & Levinsen, 2017, p.74). Adopting the role of facilitator/researcher reflects the perspectives offered by Sims (2006) which appreciates the environment of mutual learning which develops between the host and the workshop participants. The personal and individual nature of the subject material being explored also supported this stance.

The workshop consisted of six activities which were prefixed with a short presentation. The activities alternated between group, individual and paired working and encompassed space for reflection, knowledge exchange and sharing to occur. Each aspect of the workshop was designed and planned to meet the needs of the research while complimenting the students' learning. An email sent to participants prior to the workshop asked them to attend the studio for a 9am start and to bring with them an item or object with personal meaning which they could comfortably discuss. These objects subsequently played a role in the first two activities.

From start to finish the workshop lasted 7 hours. It began at 9.30am and concluded at 16.30. There was one 10 minute break scheduled mid-morning and a further 45 minute break to accommodate lunch. A detailed breakdown of the workshop with all relevant information required for replication is provided in Table 18. All handouts which were provided to participants throughout the workshop are available within Appendix K, (k1-k7) as indicated within Table 18.

Table 18. A Detailed Breakdown of the Exploratory Workshop

	Activity Title	Groups	Core Activity	Action	Purpose	Tool/Method	Time (mins)	Intended Learning for Participants
0	'Evaluating drivers and values in Design Initiatives'	Researcher's introductory presentation to group.	Presentation to provide context and information to participants.	Listening.	To provide participants with information about the research and planned activities. Also covered ethics.	PPT Presentation to participant group. Covered aspects inclusive of background information, research context, plan for the day's activities, ethics and concluded with a round of open questions. Participants given individual copy of timeline for the day (Appendix k1).	30	Set tone and intention for the day ahead.
1	'Knowing me, Knowing You'	Paired working.	Discussion around an object of personal relevance. Using Active Listening.	Participants shared a personal object and its relevance with a partner.	Exploration of the benefits of 'Boundary Objects' (Griesmer & Star, 1989) in discerning individual values.	Participants were instructed prior to the workshop to bring an object of personal relevance along with them which they would be happy to discuss. Objects ranged from small personal toys, to photographs, to miscellaneous objects.	10	Detecting meaning. Developing trust. Conversational skills. Note taking. Being Attentive.
	'All Together'	Group working.	Group discussion with each paired set communicating aspects of value and values identified and expressed back to the collective.	Conversation and discussion followed by clustering of notes made during activity 1.	To provide a collective perspective of identified values and commonality within the group.	The participants had made notes on Post-its during the previous paired sessions. These were collectively discussed and shared to ensure that everyone was happy with contents and then placed on a large wall. The group then worked collaboratively to cluster and group common terminologies and themes which were identified. This in turn allowed for the generation of macro themes to emerge.	20	Recall. Sharing and Communication. Relationship development. Complex engagement and Participation.
COFFEE BREAK 15 MIN		COFFEE BREAK 15 MIN			COFFEE BREAK 15 MIN		COFFEE BREAK 15 MIN	
2	'Seeing the System'	Individual working.	Completion of worksheet to aid identification of stakeholders connected with, invested in or interested in their work.	Create an overview of stakeholders connected with their work. Working through perspectives of primary, secondary and tertiary network levels.	Identify connections and potential avenues for final project. Considering network connections and scoping the area. This supported later identification of 'what value' particular individuals may perceive in the proposed projects.	Worksheet provided for initial scoping (See Appendix k2 'Seeing the System').	25	Mapping. Scaled scoping techniques. Identification of sources. Visualisation as a tool for understanding. Ideation and the development of value identifiers.
	'Drivers'	Group working.	Sharing back to collective personal perspective around stakeholders.	Group collectively considered each other's proposed networks and contributed towards development of map.	To share plans and ideas and gain a wider perspective from the group as to the perceived value and benefit of the project being proposed and individuals who may be interested.	Group discussion was hosted, and participants added or enhanced their original worksheets in relation to the feedback received. Large sheets of high quality tracing paper were provided to overlay above the worksheet. These were both written and drawn upon directly and post-it notes were also used to supplement areas where further details were required.		Group collaboration. Widening perspectives through collaborative thinking.
3	'What's in it for YOU?' (or them)	Individual working.	Mapping the values which may connect stakeholders to the project or connect you to the stakeholders.	Mapping over worksheet from activity 2 to connect various values and thoughts across the network.	Identifying perceived values of others. Reasoning and rationale provided in validating assumptions.	Worksheet provided (See Appendix k3).		Identifying & ideating around perceived values of stakeholders. Discussion of technique Developing understanding of physical and psychological values. Visualisation and communication of concepts.
FEEDBACK AND SUMMARY OF MORNING		FEEDBACK AND SUMMARY OF MORNING			FEEDBACK AND SUMMARY OF MORNING			
LUNCH BREAK 45 MIN		LUNCH BREAK 45 MIN			LUNCH BREAK 45 MIN		LUNCH BREAK 45 MIN	
	'Group Perspectives'	Group working.	Sharing personal perspectives back into the group, gaining collective feedback.	Discussion and Reflection	Allowing for the perspectives of others to support development of personal thoughts and ideas.	Group discussion was hosted, and participants added or enhanced their considerations in relation to the feedback received. As previously, large sheets of high quality tracing paper were provided to overlay above the worksheet. These were both written and drawn upon directly and post-it notes were also used to supplement areas where further details were required.	45	Communication development. Ideation. Connectivity. Network development. Understanding scales of value and how they vary from close perspective to distance from projects and proposals.
4	'The Many Faces of Success'	Individual and group working.	Taking a deeper look at the proposed projects, identifying where personal values align with stakeholders, areas of discrepancy or misalignment.	Mapping & planning using resources developed through the morning. Considering wider group perspectives, determining areas of strength weakness in proposals & discussion of positive actions to take.	To allow participants to consider their strategy for upcoming work, to see how they may align with their intended stakeholders. Considering their values in relation to perceived values of others and identifying areas of discrepancy and alignment.	Worksheets 3 & 4 were provided as optional. These worksheets were also made available during the subsequent smaller group and individual tutorials hosted after the workshop. (See Appendix k4a and k4b and k5a, k5b).	75	Utilising resources. Visualisation. Mapping. Ideation. Planning. Diverging and converging to refine proposals. Collective working and sharing of conceptual development.
5	'Presentations'	Individuals/small groups presenting back to the whole group.	Presentation and Legacy planning.	Presenting the plan and strategy for their upcoming projects. Considering values of self and others as identified through the day.	To develop both a personal understanding of the pending project and to convey and communicate intentions to the wider group providing justifications and potential avenues of action. To identify the potential legacy of the project proposal.	Paper, pens, post-its. Active facilitation and discussion hosted. Worksheets from throughout the day made available for use. Participants working either individually, in pairs or in small groups of under 4 dependent upon the specific project being planned.	30	Presentation skills. Communication. Strategy development. Understanding own and other peoples values. Learning how to convey values in accessible ways. Developing a plan around legacy creating for the completion of the project. Considering aspects such as impact assessments and measures.
6	'Summary & Close'	Group	Review of terminologies which had arisen throughout the day to create a 'collective manifesto of the designers'	Group discussion involving mapping, planning and building a manifesto created initially with the raw notes taken during the day.	To create an instant feedback for the group. To allow the group to consider their values as a collective whole and to consider values which they identified personally as having.	Post-it notes collected through the day were used to generate a 'collective manifesto' This was built by the group to represent their opinions and values. The first version was created on large scale paper, with a subsequent copy electronically generated (Appendix k6). Participants also provided with a suggested reading list upon workshop conclusion (Appendix k7).	30	Communication. Understanding values at both personal and wider perspectives. Considering values perceived as being inherent to their avenue of practice and how these are reflected by their actions.

Each activity and interaction was focused upon a balance of sharing and imparting information and supporting the development of mutual respect and trust. It aimed to cultivate an environment of 'Collaborative Learning' (Zelina, 2017) where the facilitator 'creates a situation where the group can learn' (p.19). This model allows for the group to be 'in charge of their own achievements. With this method, the learning sticks. Ideas and practices are pulled from the realm of theory and made a part of lived experience' (Ibid, 2017, p.19) For example: The students had a requirement within their own work around design, services and businesses to explore and understand the values of stakeholders, the value of design in these contexts and their own values as they undertook personally directed professional projects. This given, the activities included within the workshop alternated between considering personal values, collective values and perceived values whilst allowing the students opportunity to explore these areas within the context of their own work.

Early findings derived from the workshop component of the exploratory study were presented in London at the Design Management Institute Conference in 2014 and subsequently published within the Design Management Journal 2016. A copy of the publication is accessible in Appendix L, 11.

4.4.1.2 The Context

The study was conducted with 15⁵⁰ Master of Design for Services students studying at Duncan of Jordanstone College of Art and Design (DJCAD) at The University of Dundee. At the time this study was conducted, there were three master's programmes based within the design school: Master of Product Design, Master of Design for Services and Master of Ethnography. The Master of Design for Services programme had a structure which served to amalgamate knowledge from across business and design disciplines to aid the development of more effective services, systems and businesses. It focused upon the role and value (benefits), of design within business settings, and as such, this was identified as being the most appropriate and well-aligned of the available courses to use,

creating an ideal opportunity to engage with people within this domain. As defined by Flyvberg, (2011) this choice of participant selection is identified as Information-Oriented Selection (In Denzin & Lincoln, 2011, p.307).

The workshop was conducted within the student's studio environment to minimize levels of anxiety or apprehension (Greeson 1988 in Rocca, 2010)⁵¹. The particular master's course was full-time and the students had adopted their workspace as a 'home from home'. This was a space regularly used between the hours of 9-5, (often later until 21.00), and one which they had all played a role in shaping. Practicality influenced this choice of location and environment. Equipment such as projectors, seating, tables, etc, were already in situ but open and adaptable to easy reconfiguration. This satisfied a desired quality of workshop environment recommended by Sims (2006, p.26) and, due to the personal nature of the topics being explored, it was also suitable as an environment where the students had an established a sense of comfortability and confidence within.

The majority of students involved were aged mid-20's to mid-30's, with one student aged 40+. The group population consisted of 5 male participants and 10 female. Each student had a previous background degree at Bachelors (Hons) level. These backgrounds ranged from subjects as diverse as design, social care, health care, computing, management and music.

Environment and location based factors remained the same for the subsequent smaller sessions with these taking place in work-based locations of the student's choice. The students self-selected if they wished to take part in smaller group sessions or one-to-one sessions. The maximum number of students who took part in any one singular session was 3, with the vast majority being undertaken by individuals or in pairs.

4.4.1.4 Data Collection

The main approaches to data collection undertaken within the exploratory study were Observation and Note-taking. Observation is an approach commonly utilised by designers which enables them to create 'baseline' information for their investigations. Martin and Hanington (2012) propose that observations in relation to design practice arises in one of three formats: Semi-structured or casual; Structured or Systematic; Pre-structured. Many observations we make shape the ways in which we conduct our interactions and responses. These responses are prone to influence from underlying assumptions and bias which develop internally and externally (Foster in Sapsford & Jupp, (ed) 1996.p.57-93), and as a result, caution must be exercised against the formation of a bias which may emerge from the research identifying too closely with the participants.

“The researchers aim must be to balance the insider and outsider roles and combine the advantages of both; in other words, to manage a marginal position vis-s-vis subjects. Being at tone with the group and yet remaining apart, being a 'friend' yet remaining a 'stranger', can be a difficult and sometimes stressful experience. But as Hammersley and Atkinson (1983) emphasize, it is essential for good ethnographic work.” (Ibid, 1996, p.78).

The process of focusing the research and planned observations allows for the development and refinement of suitable lines of questioning. Martin and Hanington (2012) position observation as being “a fundamental research skill and one which requires attention and systematic approaches to the documentation and recording of phenomena” (p.120). It can serve to produce rich and detailed qualitative insights which contribute towards ascertaining a broad perspective of social circumstance, situation or experience. Recordings taken during data collation are also perceived as being representative of developing and emerging models of thought experienced and considered by the researcher.

Observations within the exploratory study workshop were of a semi-structured nature and were collected in real time through note taking, further supported with information collected within the worksheets and additional boundary objects used. Photography of the workshop supported reflection but was not a method utilised during stage two (the smaller group and individual sessions) where interactions were more time constrained. During stage two observations were also documented in real-time through written notes.

The workshop was facilitated but the nature of the activities supported observational notes being made during activities i.e. quick notes could be collected while participants worked on sheets and materials. Some of the activities conducted involved post-it notes which were then later collected and reviewed. The activity sheets were photographed at the conclusion of the workshop to allow for analysis. The original copies remained with the participant. It was however a difficult situation to navigate and potentially in future, documentation would be well supported through the inclusion of audio recordings to compliment written notes and observations.

4.4.2 Vocalising Values: A Community Perspective (Case Study 2)

Following on from the exploratory study plans were developed for investigations to be conducted within the identified rural community. Preparations for this involved a reflection upon the techniques, methods and processes implemented within the exploratory study. Insights derived from the exploratory phases, which highlighted factors such as:

- Appropriate ways in which to support meaningful responses,
- The scale and complexity of objects used to support participants in sharing their values,
- How to direct non-leading questions in a clear and concise manner,
- How to facilitate and cultivate an environment (both physically and psychologically) which would aid in the expression and sharing of personal values,

supported the refinement of engagement plans and the iteration of proposed activities. Case study 2 focused upon identifying, gathering and exploring values of the wider community through use of boundary objects and facilitation. Data was gathered during three events through applying these methods. This served to address objective 3 by considering potential design-led approaches and their application towards gathering, identifying and communicating values found within the community eco-system.

Ethical restrictions put in place for this study prohibit the identification by name of the location, landmarks, individuals or businesses (Ethics are covered in more detail in subsection 4.6). Therefore, for the purposes of narrative, names of all parties involved with this research beyond the exploratory study phase have been replaced with pseudonyms.

4.4.2.1 The Approach

The purpose of case study 2 was to identify values found in and across the local community. This part of the research inquiry was undertaken through use of boundary objects (Griesmer & Star, 1989; Rhinow et al, 2012) and facilitation

(Aguirre et al, 2017). This decision was informed by insights derived through the exploratory study which indicated that engagement with the subject area (and with the researcher) was supported when physical objects were in play.

Boundary Objects (Griesmer & Star, 1989) are objects and artefacts which can support and facilitate meaningful discussions and a sharing of knowledge, experience and perspectives across sometimes disparate perspectives. The tacit and interactive qualities of artefacts has an impact upon their context and application (Kimbell, 2009). They encompass the ability to create connections across divergent and intersecting social spaces and have the potential to assist with the development of shared language and levels of understanding thus enhancing the process of interaction (Griesmer & Star, 1989). Couple with design expertise and approaches, which can actively open dialogues through and into avenues previously undisclosed or unexplored and encourages the development of openings where values can be shared (Blyth & Kimbell, 2011), object creation and facilitation can create opportunities for people to come together to consider things in new ways (Kimbell 2009).

Facilitation played a key role within this phase of the research by supporting the participants' interaction and engagement with the postcards, post-box and bunting and in the facilitation of conversations around values and in explanations of the research. Design-led research facilitation, in a similar manner to workshop facilitation, now resides firmly in the grounds of a designer's toolbox (see also Chapter 2.3.3.1). Tan (2012) offers insight around the value of emergent designer roles inclusive of the designer as facilitator as being capable of 'Expanding the [...] toolbox with methods for reflection to invention' (Ibid, p.317).

Reflecting upon the five main categories of need identified by Maslow (1943); Physiological; Safety; Love/Belonging; Esteem and Self-Actualization, an intervention was designed and curated which considered community values across different factors which could be grouped as follows;

- Personal and individual, (*placed within Love & Belonging*).
- Social Perceptions (Defining the community nature) (*placed within Safety*).
- Need/Want (Services/systems/experiences of value) (*placed in Physiological*).
- Impression (Quality of environment, local culture) (*placed within Esteem*).
- Experiences (Factors of value in the community) (*placed within Self-Actualization*).

were considered. As such curated questions and prompts were generated to support the investigation:

- I value in my life.
- The word 'Community' means ... to me.
- I think we would benefit from ... in my community.
- X is a ... place.
- I want to see in my community.
- ... is a great project/activity/service/group in the community.

These were then built into postcards through which the researcher aimed to gain responses from participants. Initially these six lines of inquiry were developed to explore different facets of value in community life. (Upon reflection, two of the prompts were determined as being very similar). Insights gathered during the first intervention indicated an overload of objects to engage and interact with could cause a reduction in participation. As a result, while six postcards were used in the initial intervention, only five were used during the remaining two. (There were no responses contributed with the discontinued postcard so no data was lost from its removal from the group).

The boundary objects developed took the form of coloured A6 postcards (Fig.30), a post-box and bunting. The postcards aimed to support the participants in verbalising or visualizing their thoughts and opinions, and, usefully, provided a form of data collection for later review. This also supported the researcher by reducing the requirement for extensive note-taking while facilitating the interventions and making observations - a factor which had proved difficult to navigate during the exploratory study. The post-box and bunting provided

options for submission as participants could publicly position their contributions on the bunting or could opt to 'post' them to the researcher. This action gave an additional level of anonymity to contributions. None of the postcards requested information which could identify participants. No names or ages were required.

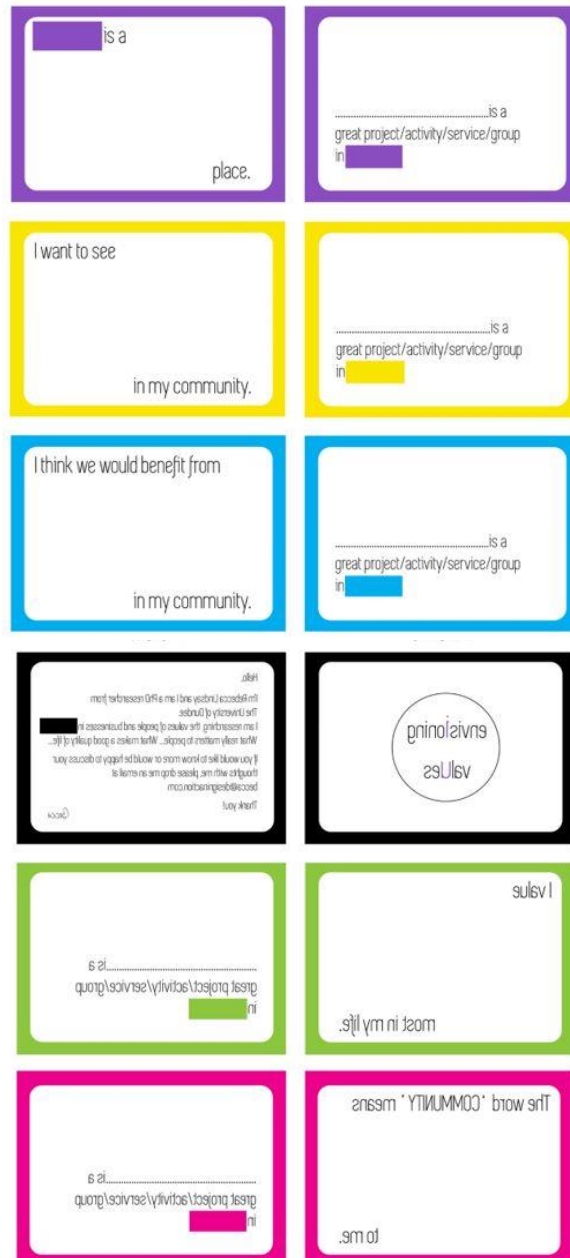


Figure 30. Postcards for Community Interventions

All postcards were double-sided and printed on good quality card. Fig.31 shows the intervention as set up for the 1st event during local Christmas fayre. Although the locations of each intervention varied, the set-up and lay-out for the objects was the same at each. Clipboards provided a surface for participants to lean upon

and the box of chocolates was a small gesture of thanks to the participants. During the second and third interventions no photographs were taken as children and families were present throughout. (As a side note, the exchange of handful of chocolates resulted in a trade: 3 bottles of fresh home-made apple juice and a slice of homemade apple pie during a conversation with a participant).



Figure 31. Community Values Boundary Objects in Situ (1st Intervention).

The scale and size of the postcards was a deliberate decision. It was hoped that familiarity with their commonly seen and handled counterparts (holiday postcards) would endear a level of curiosity from potential participants and that the similarity would possibly support a subconscious willingness to engage, in turn, positively impacting engagement. The colour selection was randomized and in line with the specific branding and colour scheme developed throughout the PhD by the researcher. It was in no way intended that the colours selected have any influence upon subsequent responses or levels of engagement. There were two available options for sharing responses. They could either be 'posted' into the post-box or hung upon bunting surrounding the post-box.

The postcards (Fig.32) were created to support the generation of a more three-dimensional perspective of values held by local community members. The interactive quality of the objects was well accepted. There was no maximum nor minimum number of cards to submit and participants selected which cards to submit a response upon.



Figure 32. Community Intervention Postcards (with contributions)

Facilitation of this intervention involved engaging directly with participants explaining their ethical rights regarding the work and presenting briefly the intention of the research project. A simple explanation around the purpose of the postcards and expectations of participation aided responses. The black postcard contained information regarding the project alongside contact information of the researcher which participants and potential participants were given. Impromptu conversations were also hosted both with and without the postcards as participant numbers increased. Participants themselves then facilitated further engagement by telling other individuals at the events what the project was and referring them on to take part. On three separate occasions participants requested

a full set of the cards to allow a close friend/family member who could not attend the event in person to take part. This was permitted and when the cards were completed, they were collected in person by the researcher during a visit to the community. During these collections the 'new' participant was met each time. Thus, confirming the contribution was their own.

As can be seen in Table 19, three interventions were hosted over a period of 16 weeks in order to gather data around the values of community members. Two were held during organised community events which facilitated access to a wide and varied pool of the local community. The last intervention was hosted as a 'pop-up' by a local community café.

Table 19. Community Intervention Details

Intervention	Duration	Location	Participants	Facilitation
1	7 hours	Makers and Crafters Sale held during Community Christmas Lights.	Toddlers 2-3 up to 100 years+. Predominantly participants were mid-level wage earners, mid-career. Majority of participants age range was 30-50.	Facilitated
2	1 hour	Community Tea Morning with Pre & Primary School Christmas performance & Santa visit.	Families, young children and older community members (Santa included). Mainly young families and grandparents.	Facilitated
3	8 weeks	Local community café.	Patrons from across the community. Predominantly older generation and young families with children under 10 years age. Average to low income.	Not Facilitated. Artefacts provided to give instruction

The first two interventions were facilitated by the researcher who provided explanations and support with participant engagement. The final intervention alternatively, was framed as a pop-up in the local community café and was unfacilitated. In place of facilitation an A4 board presenting the research project,

describing the task and requesting participation was placed with the postcards, post-box and bunting.

A clear insight was derived following the conclusion of the final intervention: Facilitation was key to supporting engagement. The third and longest running exploration of community values which was unfacilitated, delivered by far, the lowest number of responses, despite being in situ for a clearly extended period of time.

4.4.2.2 The Context

Having identified this community as being the right one to undertake the research investigation within (discussed in 4.3.1) and, in line with this research being conducted through a design-led approach, participation and engagement with members of the community was sought. Participant selection was intentionally geared towards random sampling (Flyvberg, 2011). This served to enhance the diversity of responses obtained. Undertaking the intervention at three different events, each with different participant groups enabled a larger group of responses which could later be generalized. This was further supported by there being no repeat-returners (having the same participants submit responses at different events).

Engagement with the community involved a degree of preparation and planning. Early steps involved initiating contact with key community leaders. From there, relationships were cultivated resulting in new connections with additional community members being made. They subsequently facilitated access to the wider community. Reflecting once again upon Arias et al (2000), Day and Parnell (2003), it can be said that community members are key stakeholders within research and design processes, due to their intrinsic knowledge surrounding specific nuances of their locale, in both a physical and in a psychological sense (They know well what will and won't be tolerated, along with having invaluable access to potential avenues, locations and specific groups who may be willing to

engage). It was in part, down to the openness, interest and acceptance of two key individuals approached as part of the interview phase which opened access to the wider community. They actively facilitated and encouraged the wider communities' engagement with the research project. They created access to two community based events where the research could 'piggy-back' along in order to meet and engage with other community members. They also provided and opened access to a community hub where it was possible to host a longer running pop-up intervention. These opportunities collectively enabled a rich diversity of perspectives to be gathered from across the community.

There were no age nor demographic restrictions placed upon participation. Participants ranged from very young children through to centenarians. No restrictions were put in place around vocations, occupation, employment, nor any other aspect of the participants' personal lives.

The only specification for taking part was that the participant needed to be a member of the community. They must live within the boundaries of the area. It should be noted that responses submitted by very young children, but which were illegible were documented for posterity and legacy sake, but not included in any final figures or data groups generated. Specifications for involvement within the community-directed interventions of this research are available in Table 20.

Table 20. Specifications for Community Engagement

1	The participant must live within the community boundaries. (Boundaries in this instance is identified as being the local area and its defined boundaries (For further information refer to Table 15 in section 4.3.1).
2	The participant must take part voluntarily and be given the right to withdraw at any stage.
3	There were no gender or age specifications. Any member who identified as being a part of the local community was welcome to contribute.
4	The participant must be attending one of the three interventions voluntarily.
5	The participant must be given the option of sharing their contribution within the public eye – Through use of the bunting, or in private, through the post-box. – Neither choice in this situation will bear any weight upon subsequent data analysis.
6	Anonymity is optional. (This was taken up in every case).
7	All participants to be provided with further information upon the study, ethical clearance and details for further contact to be visible at all times during the intervention.

Implementing an approach which used both objects and facilitation served to support engagement and cultivate an environment of low level empathy with the participants. Facilitation and familiarity in the objects supported the cultivation of an environment where participants felt at ease and felt safe in expressing and/or vocalising their opinions and thoughts without fear of negative repercussions.

Facilitation was focused towards empathetically engaging with participants. Empathy (as discussed in ch.2) is a core component and mindset within Design Thinking practices and is key to supporting adequate levels of understanding to develop between designer and participant. Empathy can be (and often is), employed as a way in which to motivate and engage with participants and can be ‘used as a way in which to “move” the audience to action’ (Finley, 2011, p.445). It has emerged as an intrinsic and necessary phase within contemporary design approaches:

‘ Today, designers [...]are being asked to construct and cultivate knowledge and experience with participatory design research approaches and methods to engage users *empathetically*, which involves attempting to deeply and broadly understand their experiences and social, economically and politically contextualized viewpoints. This type of designing allows designers and their collaborators to create more desirable and useful means for people to effectively confront the challenges inherent in their everyday lives’ (Napier & Wada, 2016, p.157).

It was hoped that the facilitation, along with an empathetic approach would support participants in giving more truthful and honest responses to the questions proposed. (It should be noted here that the facilitation within this case study was not that of ‘Facilitated Conversation’ most commonly associated with Douglas Biklen (2005)⁵², which is geared towards the facilitation of ‘aided’ conversations).

At no stage did the facilitation process involve the researcher physically writing any contributions made by participants. When situations arose around where a participant was unable to complete a postcard independently (due to either health situations or other impediments – i.e juggling small infants and toddlers), other participants facilitated this action on their behalf: All contributions of this nature were verbatim transcriptions and were witnessed being completed by the researcher, (this only happened on 5 occasions across all three of the community interventions). In the main, all submissions were undertaken by the participants themselves, their contributions written in by their own hand, using their own terminologies and responses.

Levels of participant engagement varied across the events. Table 21 provides a high level overview of how many participants and responses were gathered during each intervention. Influencing factors and findings related to these figures are discussed further in Chapter 5.

Table 21. Participant Engagement Information

Intervention	Location	Total Number of Responses Gathered	Number of Participants
1	Makers and Crafters Sale	137 cards	85 participants
2	Community Tea Morning	64 cards	32 participants
3	Local Community Cafe	16 cards	12 participants
Overall		217	129

The number of responses gathered is not reflective of the number of participants who provided the responses. The intervention allowed participants to select as many or few of the five available postcards as they wished. This meant that where some individuals elected to submit a single card, others opted to submit multiples. Primary coding allowed for the identification of singular or multiple submissions and aided the identification of how many participants had engaged. Each interaction was undertaken at a different location and there were no repeat attendees. Overall a total of 129 members of the local community engaged with the community engagement phase of the research. (This figure is not inclusive of participants who took part in the interview phase). Duration of interventions and further information around specifics can also be seen in the earlier Tables 19 & 20.

4.4.2.3 Data Collection

Data collection from all three events was conducted primarily through the boundary objects themselves. A benefit of this particular model was that the postcards provided the researcher with a lasting physical legacy of the participants' contributions which were then able to be analysed at a later time.

Data was also collated during the initial two interventions through observation and note taking (as was conducted in the exploratory study). The notes from

these two interventions then supported reflection and rationalisation of findings and insights which were derived.

Reflective notes were compiled around the results of the third intervention following its conclusion with regards to impact, response rates, etc, which then supported further insights around both the use of objects and facilitation to be developed.

4.4.3 Identifying Ideals: The Hidden Values of Business (Case study 3)

Addressing the component of objective 3 which sought to explore values of rural SME/Micro enterprises, semi-structured interviews were implemented in case study 3 to obtain more in-depth and detailed perspectives about their values. This decision was shaped by insights gathered during the exploratory study (case study 1) and the community interventions, (case study 2) which were indicative that inquiry based conversations, which could explore nuances and would allowed for deeper exploration to occur would be more useful in supporting participants to share detailed accounts, rationales and contexts of their values.

4.4.3.1 The Approach

The purpose of case study 3 was to explore through engagement with local businesses, the values of rural SME/Micro enterprises. Accordingly, seven in-depth, semi-structured interviews were conducted with businesses from the identified community. These were complimented by two additional interviews conducted with long-standing members of the community. Each interview was conducted in person and within the premises of the business taking part (or home in the case of the community members). All interviews were audio recorded through the researcher's mobile phone via a voice memo application.

Used across the globe, interviews are one of the most popular and widely used qualitative research methods (Crouch & Pearce, 2012). Indeed, they are now so embedded and ingrained into mass culture that contemporary society is now considered to be the 'Interview Society' Denzin & Lincoln (2000, p.633). Interviews can be conducted in person, or by phone, through video calls and applications, (inclusive of Skype, FaceTime, Messenger, etc), in groups or with individual participants. They offer far richer and more in-depth data than can be provided through questionnaires and by focusing lines of inquiry towards the subject of investigation, access to perspectives and experiences the researcher lacks knowledge of can be gained (Rubin & Rubin, 2012) thus allowing for rich

insights to be derived through engagement between participant and researcher (Martin & Hanington, 2012).

‘When using in-depth qualitative interviewing, [...] researchers talk to those who have knowledge of or experience with the problem of interest. Through such interviews, researchers explore in detail the experiences, motives and opinions of others and learn to see the world from perspectives other than their own’ (Rubin & Rubin, 2012, p.3).

Turner (2010) positions the main styles of qualitative interview as falling into one of three categories: Informal, General or Standardized (p.754-760). These styles co-relate neatly with the identified approaches to qualitative interview of: Loose format, Semi-structured or Structured (Fontana & Frey, 2000). Turner identifies defining features of Standardized Open-Ended Interviews as having;

‘Highly structured wording used for questions. Each separate participant is asked the same set of questions, with the same wording, but the style of question is open ended. This supports the participant in communicating as much or as little as they chose, whilst simultaneously supporting the researcher to insert additional follow up questions and develop the conversation.’ (2010, p.754).

In this sense, the standardized open-ended style follows the approach presented for semi-structured interviews. They can consist of a question outline used to guide the discussion thus supporting the researcher to gather the required information in a relaxed and more informal manner. This particular style and method allows the researcher to utilise discretion within the lines of conversation and questioning, shaping them appropriately to the participants needs while meeting the requirements of the defined research directive.

Interviews are accepted as being more successful when conducted following the development of a strategy and plan. The works of Turner (2010) along with those of Martin and Hanington (2012) purvey the importance of these features as carrying a positive influence across the whole research project and enable the interview(s) to be shaped appropriately and effectively (2012).

Lines of inquiry were developed in three stages: Broad topic areas; Lines of inquiry and specific questions.

Through considering the needs of the research the first stage, as mentioned, involved identifying 4 general broad topics to build the inquiry around. These topics formed the foundation for the development of the interview structure and were identified as:

- Introductory inquiries
- Value oriented inquiries (Immanent/Intrinsic, Instrumental and Professional).
- Community related inquiries
- Skill related inquiries

The second stage focused upon identifying lines of inquiry within these broad areas subsequently focusing questions around:

- Personal and contextual information
- Business Practice & Finance
- Complexities & Problems
- Experiences
- Skills
- Community

Outlining these topics and frames for lines of inquiry supported the third phase within the interview creation, that of the development of questions and inquiries which sought to identify key factors of value which the participating businesses expressed.

Creating and generating appropriate questions is an iterative process involving drafting, re-drafting and refinement, with close attention paid to the nature and wording of lines of inquiry.

'The kind of questions asked and the ways in which they are structured provide a frame within which participants shape their accounts of their experiences' (Clandinin & Connelly, 1998, p.165).

Janesick (2000) suggests that undertaking the action of reframing simple questions leads to a richer, fuller investigation, and as such, prompts:

‘answers far more textured and demanding, for example, rather than asking simply ‘what do I want to know?’, exchange this for ‘What variety of exploratory questions are best suited to my investigation?’ (Ibid, 2000, p.391).

It is important to note that throughout the interview process unintentional bias can be applied by the researcher through factors such as verbal inference, tone of voice and judgemental terminologies. These can have a direct impact upon participant responses. It is noted by Janesick that pilot test phases built into interview processes are advantageous as this can aid identification of problems at an early stage, thus allowing for questions to be iterated upon and developed. Through further reflection on the works of Maslow (1943) (Ch 3.1 Fig.20) and considering also the works of Schwartz (2012) and his definitions of Universal Values and Motivators (Ch 3.1, Table 12) along with work undertaken by other scholars discussed previously in chapter 3, questions were developed around the six lines of inquiry outlined on p.228 which sought to identify the businesses values and their motivations. Questions were developed and selected for inclusion and then adjusted in response to feedback following review by the researcher’s peer group.

The combined data generated from the exploratory study through to the community engagement and the interviews was focused upon the expression of values. Therefore, identification of predominant themes and expressions of values, along with explorations and expressions of the motivations behind the values shared which by participants were gathered. The context of these expressions was built into the data gathering and inquiry phases. Questions or propositions posed to participants asked not just ‘what’ their values were, but ‘why’ they held them. As a result, inquiries posed to the participants considered aspects of values around:

- How their core values were or were not embedded within the business
- How they may (or may not) intend to grow the enterprise
- How their own personal and business values aligned?
- How these values might be perceived or interpreted as aligning with the wider community
- What they identify as value within both business and personal contexts
(A full list of questions is available within Appendix M, *m1*).

No objects were used during the interviews. Although as previously indicated, Boundary Objects (Griesmer & Star, 1989; Rhinow et al, 2012) play a role in facilitating meaningful conversations, due to the extended and in-depth nature of the interviews it was determined that these would not be required. Interestingly however, without prompt or instruction, four of the participants brought or retrieved objects during the interview to exemplify or emphasise a specific point they wished to make. Prompts included pieces of craft they had created, works they had purchased from another, literary material and personal belongings.

All interviews were audio recorded on the researcher's mobile phone through a voice memo application. Using the mobile phone to record made the process less intrusive. Attention was brought to this at the beginning of the interview and subsequently, if matters were discussed which were not to be recorded, it was possible to show participants the material being deleted at the time. All recordings were later transcribed in full by the researcher. Notes were compiled after the interviews but never during. Each interview was conducted with the participant as the main focus. Each interview also involved a review of the ethical permissions both before the interview commenced and again after its conclusion. All ethical forms were signed voluntarily by the participants. At this time participants noted if they wished to be contacted in future by the researcher once the research had been conducted and concluded.

4.4.3.2 *The Specifics (Context)*

The aim of case study 3 was to identify values of the SME/Micro enterprise community. This information was gathered through engaging with local business owners who provided insights into their current business, it's values and the local community environment. Complimentary narratives were also provided by two key community members which served to enrich the body of data gathered.

Alongside the development of a strategy which outlined frames, questions, interview style etc, specific criteria for inclusion within the interviews was also identified (Table 22). These specifications aided the identification and subsequent recruitment of appropriate participants with whom to undertake the interviews.

Table 22. Criteria for Interview Inclusion

1	The individual actively ran/or recently ran a micro or SME enterprise within the community. An SME or Micro enterprise is defined as per The Scottish Government guidelines (see also Ch 1.6.1 Table 4).
2	The participant was a key member of the local community. In this instance is identified as being the local area and its defined boundaries (For further information refer to Table 11 in section Ch 4.3.1).
3	No gender or age specifications.
4	No specific type of business output required.
5	No specifications set around business model type.
6	Participation must be voluntary and formal ethical consent officially granted.
7	Special consideration could be granted for inclusion even if the participant only met one of the first two specifications, regarding position with either business or in the community.

Initially participation was sought through direct contact. This involved visiting each enterprise, providing a brief introduction and an outline of the research and its intentions. Researcher contact details along with ethical provisions were also provided at this time. Through this process only one participant was recruited. As such, this approach was found to be ineffective and unsuitable as a means of gaining meaningful levels of engagement. Rationales for this included: business

owners who were approached were reticent and reluctant to take part (citing reasons such as time constraints and other commitments); Businesses were closed when the researcher visited the location (attempts were made to visit during advertised hours but often the premises remained closed); or, in some cases, when contact was attempted by email or phone, no responses were received. This highlighted a quandary around finding, accessing and engaging with the right individuals to participate.

While design-led investigations and Real World Research require active participation and engagement with people it is recognised that gaining access to individuals within a community setting to engage with can be a challenge. Foster (1996) highlights that when research is being conducted in environments out-with traditional laboratory settings there is a necessity to 'negotiate access through a number of gatekeepers' (p.66). This he states, is dependent upon the directives of the research and can involve a 'strategy of sponsorship' (p.69).

'[The involvement of] an established and trusted figure within the group [...] who can vouch for the researcher and reassure subjects about the purposes of the research and the intentions of the researcher' (Ibid, p.69).

Engagement with the right individuals can make or break research projects and as such, gatekeepers are a commonly encountered phenomenon in non-laboratory based research. They are key individuals who require to be engaged with in order to gain wider access to a particular network or community. Robson and McCartan (2016) describe them as being individuals who 'often have the power to refuse access and even when this hurdle has been passed can adversely affect potential participants' willingness to be involved' (p.223).

Following this initial and, unfortunately, somewhat unsuccessful foray into participant recruitment, an approach similar to that suggested by Foster of 'sponsorship' (1996), along with an approach documented by Stenhouse (1984), (which promotes the researcher providing absolute clarity around intention,

disclosing aims, actions and intended methods) was adopted. Subsequently, all these factors were then discussed in detail with two identified gatekeepers from the community. These discussions led to supported and 'sponsored' access to the wider community (as per the interventions discussed in case study 2, ch.4.4.2), and also facilitated access and engagement from members of the local SME and Micro enterprise community.

With the advocacy provided by the gatekeepers, during the initial community event at the Christmas sale (where access was facilitated with their support), 15 individuals self-referred as willing to participate in the interview phase. Of the 15 self-referrals, 5 who met all criteria for inclusion were invited to take part in the interview phase. Four subsequently accepted. The fifth potential participantⁱ was unable to take part due to a personal matter which arose at the last minute. Additional connections were then made through referral from the gatekeepers and following the second community intervention.

A total of nine individuals took part in the interview phase of the research. Two were male and seven were female. Of the nine, two (both female) were identified as being established members of the community. They had lived in the community for over fifty years and provided a more historical and contextual perspective towards the development and evolution of the local business market and community structure. In addition, they expressed opinions and details around observable and unseen values and environments found within the community. Their contribution to the interviews was recorded as being of 'Special Inclusion'. The remaining seven individuals qualified for inclusion as micro enterprises.

Of the seven enterprises involved, 3 were social enterprises and 4 were micro enterprises.

ⁱ This participant continued to maintain a high level of communication with the researcher throughout the duration of the interventions and interview process in spite of not taking part further.

- 1 participant ran a social enterprise with the support of 24 volunteers.
- 2 aided in the running of a social enterprise located within the community.
- 1 participant ran a micro enterprise with 2 employees.
- The remaining 3 participants ran micro enterprises as sole employees.

Table 23 offers a breakdown of the participants.

Table 23. Interview Participants Information

	Participant	Gatekeeper y/n	Current or previous Micro/SME.	Business Type	Product/Service
1	Beth	Y	Current	Social Enterprise	Food – Product & Service
2	Mary	Y	No	Special Inclusion	N/A
3	Bob	N	Current	Social Enterprise	Food – Product & Service
4	Kira	N	Current	Micro Enterprise	Creative Works – Sculpture/Art
5	Anna	N	Previous	Micro Enterprise	Hygiene product
6	Eva	Y	Current	Micro Enterprise	Creative Works - Textiles
7	Aimee	N	Current	Social Enterprise	Food – Product & Service
8	Ethan	N	Current	Micro Enterprise	Creative Works - Mixed
9	Anya	Y	No	Special Inclusion	N/A

Although the interviews with the businesses had a relaxed atmosphere, the two which were conducted with the community members (special inclusion), took a considerably different tone. They were almost akin to an everyday conversation one might have with an elder. Both of these interviews were conducted within the participants' home. They both lasted roughly 2 hours and involved at least 2 cups of coffee and cake (homemade with local sourced produce). Lines of questioning, although based loosely around the pre-defined schedule developed, flowed and ebbed in response to the participants and the stories they wished to convey.

4.4.3.3 Data Collection

Data collection within this phase was conducted through audio recording. Participants were asked for their permission before the interviews began. They were also taken through a full explanation of the ethics and their rights. Upon conclusion of the interview, confirmation of permission to transcribe and explore the audio recordings for necessary data was then confirmed again (as was a second confirmation of ethic approval). After the interview had concluded notes and observations were documented by the researcher. The audio recordings were then transcribed. Areas which contained sensitive information which the participants had requested be removed were then addressed. With regards to this particular factor, on occasion a topic of discussion led to participants disclosing information they then wished to retract – at the time of interview this was dealt with by deleting the appropriate piece of the recording in the presence of the participant. The transcription check allowed for removal of any missed details etc. During the process of audio transcription, further notes and thoughts were made in relation to specific sections of the transcript as per an ethnographic review technique.

Subsequently, the transcriptions were supported by the researchers observations and notes. This provided a raw body of data for further exploration. Face-to-face interviews provide researchers with a dearth of 3-dimensional information, including the ‘nuances of personal expression and body language’ (Hanington & Martin, 2012), which can then be utilised to enrich the interview data. The approach undertaken for data handling and analysis is, as with the previous two sections (4.4.1 and 4.4.2), presented in section 4.5.

4.5 Data Wrangling through Thematic Analysis

All too often the stages of research concerned with data handling, (inclusive of reduction, collation, synthesis and analysis of data) which support and advise

conclusion drawing and the development of future advisements is perceived as somewhat alchemistic and ambiguous in nature (Cross, 2006; Dorst, 2017; Kolko, 2011; Lawson, 2005). Qualitative research can generate large bodies of data which subsequently require consolidation and reduction into workable and digestible quantities. As is found in many cases, 'there is [often] no clear and accepted set of conventions for analysis corresponding to those observed with quantitative data' (Robson, 1993, p.370).

'The most common question asked by researchers carrying out qualitative data analysis [...], and the one that is most difficult to answer, is: now I've got the data, what do I do with them? The reason it is difficult to answer this question is that there is no set of rules, no simple recipe, that one can follow with unstructured data which will always be appropriate and guarantee good results. This task is not just the assignment of data to categories, the categories themselves have to be developed at the same time' (Boulton & Hammersley in Sapsford and Jupp (ed) 1996, p.298).

Thematic Analysis, an accepted approach within Real World Research (Robson, 1993; Robson & McCartan, 2011) was determined as the appropriate response to the task of data handling and analysis for this research project. A commonly used approach to qualitative data analysis used across a wide range of fields (Ibid, p.79), it shows clear correlation with practices of data handling and analysis found within design-led research. (One of the things which design excels at is the capability and capacity to consider complex and interlinked facets of data in order to make sense of things).

Thematic Analysis is an approach which has direct connection to the research questions posed, and as such, themes identified 'capture something important about the data in relation to the research question and represent some level of *patterned* response or meaning within the data set (Ibid, p.82) with themes identified through researcher discretion. It allows for predominant patterns or themes emerging from the data to be identified, analysed and reported upon (Braun & Clarke, 2006).

Approaches to undertaking Thematic Analysis vary from researcher to researcher, with a variety of methods and protocols implemented throughout data handling and analysis phases. Through considering the works of Bouton & Hammersley, 1996 in (Sapsford & Jupp, 1996), Miles and Huberman (1994) along with those of Braun and Clarke (2006) where mechanisms they propose speak to processes commonly undertaken within design practices by allowing the data and research process to 'speak' with each other through degrees of reflection, a strategy of Thematic Analysis for undertaking data handling and analysis was developed and is presented in Table 24.

Data from all three case studies was taken through the same strategy, and findings were subsequently triangulated at the end. Thematic maps and thematic tables aided in the reduction, synthesis and analysis of the data body generated across the three case studies. Examples of these are presented alongside the research findings in chapter 5.

The data from case study 2 was the only study where a variable in the handling process occurred. The boundary objects used to gather values expressed by members of the community (the postcards) also allowed for quantitative data to be considered regarding the number and ratios of responses received in relation to each question, each individual intervention, and then collectively across all three interventions. This allowed for percentage results to be drawn and presented. These percentages were contextualised and presented in relation to all of the information available. Both the qualitative and quantitative. This stage of the process was undertaken through Microsoft Excel. The results of this phase are also presented in chapter 5.

Table 24. Data Handling and Analysis Strategy.

Phase	Description of process	Key steps taken in this research body	Implemented in case study 1,2,3.
1 Familiarizing yourself with the data - Predominantly a data handling process.	Transcribing data (if necessary, reading and re-reading the data, noting down initial ideas. Identifying and making notes of initial thoughts arising from the data handling.	CS1: Transcription of notes and observations made. CS2: Transcription of information on boundary objects collated across excel and word documents. CS3 Interviews transcribed in full and notes/observations also transcribed.	A facet of CS1 and CS2 but particularly pertinent to CS3: The Interviews. Reviewing CS1 and CS2 involved reading and reflecting upon the data collated and the transcription and expansion of notes and observations, while CS3, as it had been conducted solely through interviews, involved the transcription of all recordings and the subsequent review and transcription of notes and observations. This generated a rich body of data to explore in further stages.
2 Generating initial codes – (Making initial intuitive sense) – Predominantly a data handling process.	Coding interesting features of the data in systematic fashion. Collating data relevant to each code.	Development of a method of coding to allow for ease of data handling.	Initially conducted across each individual study (1,2,3) separately. The findings were then collated into a triangulation of results later within the process. There were two varieties of code generated for CS2, the first of which was an identifier code which allowed for insights to emerge around specific aspects such as the number of submissions made per participant, the event which they attended, etc. The second set of coding undertaken within CS2 was then created to identify predominant terminologies. This was then used within stage three, identification of themes.
3 Searching for themes. Review themes. Defining and naming themes. Predominantly this step signifies the beginning stages of data analysis processes.	Cluster by conceptual grouping	Collate codes into themes. Identify Macro and Micro themes within the data pools. Macro themes identified through the line of questioning being followed. Micro themes emerging from data gathered in response to the macro themes. Create clear definitions and names for each theme. Noting and identifying patterns and themes. Identification of particular terminologies arising. Identification of groupings of terminologies creating themes based on value types.	1,2,3. Themes were identified in each study separately then at a later stage this allowed comparisons and contrasts to be identified across the three studies.
4 See connections.	Collate codes into potential themes, gather all data relevant to each potential theme.	Create figurative groupings within the data pool – granting name and definition to themes.	1,2,3. This aided the process of comparison and contrast to be conducted. Whole data set review conducted in triangulation section.
5 Counting & Making Comparisons or contrasts.	Considering quantifiable and qualitative aspects of the data sets	Considering, through applications such as excel, quantifiable representations of data types and themes emerging.	Counting undertaken in CS2 as data set collected allowed for (quant & qual) aspects to be considered. Comparison and contrast of data sets from all three case studies was also conducted.
6 Reviewing themes	Check theme’s work in relation to coded extracts and entire data set.	Generate thematic ‘map’ of analysis	1,2,3 and in triangulation
7 Taking a monolithic look or perspective. Shifting across data forms. Factoring and noting of relation between variables	Building a cohesive picture which considers the data gathered.	Considering the implications of the data both at micro and macro levels. What it implies for this research body and potential avenues for future exploration.	Most apparent within the triangulation of data section through discussion and reflection. Implications and recommendations further explored in Chapter 6.
8 Make conceptual/theoretical coherence	Selection of extract examples, final analysis of selected extracts, relating back of the analysis to the research questions and literature, producing a scholarly report of the analysis.	Creation of findings chapter leading to a discussion of proposals/recommendations to follow in final chapter.	Findings as presented across chapters 5 & 6.

Source: Amalgamation of Miles & Huberman (1994), Boulton and Hammersley (1996) and Braun & Clarke (2006)

4.6 Ethical Considerations

Ethical considerations and permissions are fundamental to ensuring research does not abuse nor bring harm to participants. As put by Sanchez (2016), 'ethics are embedded in every design [...] [and] every planned strategy should, therefore, transcend the ethical dimension toward a peaceful planetary evolution' (p.30).

When research endeavours to support change, it should do so in a manner which brings the least potential for disruption or harm to its participants. At the heart of Design Thinking lies a drive towards positively impacting quality of life experienced. It would be oxymoronical to then undertake research which brought negative effects upon subjects. Robson & McCartan (2016) identify three major concerns which arise around research involving participation of others as:

- The use of deception
- Possible harm to participants
- The right to withdraw (p.207).

Serious consideration was given to each of these three concerns. As a practicing designer and researcher, I focused my work ethics and personal values to directly engage and reflect principles and qualities of co-design and participatory models of research. The subject matter of this study, which focused upon values beyond finance is fundamentally one of wellbeing. Our values are intrinsically linked to both our physical and mental health and to the health of our communities. This research sought to contribute to conversations around how quality of life can be improved through understanding matters of direct importance to societies and communities.

Ethical consent was sought by the researcher from The University of Dundee's Ethical Committee prior to any participant engagement. It was granted by the on 24th July 2014. Appendix A, *a1-a3*, contains copies of the ethical approval along with the participant information and consent forms used within the research body.

4.7 Summary

This chapter set out to convey the methodological underpinning of this research body and the resulting actions and approach implemented within the investigation. Through application of a Real World Inquiry approach, a strategy was identified, designed and executed as has been presented. The approach of Real World Research lent itself well to both the qualitative nature of the investigation and the practices and background of the researcher.

‘People communicate their ideas as theories for real-world practice, by explaining what they are doing, why they are doing it and what they hope to achieve. These personal theories are also living theories, because they change and develop as people themselves change and develop (McNiff & Whitehead 2011 p.15).

This research aimed to look at people’s values in context, to support the development of a strategy through which communication and relationships between businesses and communities might be positively influenced and affected. It was the development of this methodological approach which shaped and cultivated the research body as it emerged.

There are many arguments available surrounding the lack of design oriented and design based methodologies, however, appreciating and cultivating knowledge from external fields and sectors is integral to design practice. Capabilities in incorporating information from distinct and disparate areas fuels creative suggestion and leads to proposals for change.

There is apparent commonality between design thinking and Real World Research. Their shared human-centred focus and capabilities in small-scale indicative and iterative investigations allow them to speak well with each other and work in synchronised harmony.

Real World Research considers research in context and is influenced by its participants and environment of application. Design Thinking has similar nature: Its scope is often small and focused, considering and investigating the

nuances found within the day to day. In considering all the available information, complimented with the voices of all parties involved, it is possible to cultivate a more in-depth perspective within the investigation. This can aid the development and refinement of lines of future action, strategies for change and can support endeavours to understand more about the lived experiences and values of others. Methods for data gathering and analysis were developed, shaped and iterated upon in response to the research experience itself, guided by Real World Research protocols and supported by and enhanced with design processes. The experience spoke of the undertaking of a design brief which evolved towards resolution and the generation of appropriate usable output.

5

Uncovering Immanent and Instrumental Values

Chapter 5. Uncovering Immanent and Instrumental Values.

Chapter 5 presents the findings of the 3 case studies conducted. In line with the aims and objectives of this research, this chapter provides an overview of the findings which emerged from objective 3: *The application of a variety of design led approaches, new and established, to gather data from a rural community's business and community members enabling the identification and communication of values from both perspectives*, along with a response to objective 4: *The analysis of the data, in order to create a snapshot from business and community perspectives to support the development of a framework for shared value propositions which may enable knowledge exchange and the identification of values to occur in areas where there is societal aspiration for change*. This chapter works through the findings from each case study concurrently before presenting a discussion around the triangulation of the data gathered. The 14 themes identified are then re-presented with reference to pre-existing concepts and models with particular focus in this area given to the values identified in case study 2 and case study 3.

'Interpretation is at the heart of qualitative research because qualitative research is concerned with meaning and the process of meaning-making. Qualitative researchers assume that people's actions are always meaningful in some way and that through the process of engaging with those meanings, deeper insights into relevant social and psychological processes may be gained. Furthermore, qualitative data never speaks for itself and needs to be given meaning by the researcher' (Willig, 2017. p.276).

5.1 Introduction

This research set out to undertake an inquiry around how to enable Micro and SME businesses and their communities to understand, share and communicate their individual and collective values. It aimed through a design-led approach to develop a theoretical framework of methods and processes capable of supporting the communication and identification of values.

To recap, in order to explore and give indication towards underlying immanent, intrinsic and instrumental values of individuals, their local community and the local business eco-system, three case studies were conducted.

The first study was conducted with designers. This provided opportunity and scope to explore approaches and strategies through which to collect and analyse data gathered. This initial case study also provided data about the designers' immanent and instrumental values along with indicating their personal motivations. This case study also provided insight and information around their perceptions and assumptions around the values and motivations of SMEs and Micro Enterprise owners.

The second case study considered through interventions, boundary objects and facilitation, values of the community. Through participation, indications of predominant perspectives around the needs, values, wants and ideals of the collective community was discerned. These findings also shed light upon motivations of the community which in turn helped to shape and inform an understanding of their collective value perspectives.

The third and final case study provided insight into values of the local SME/Micro Enterprise owners and similarly, insights towards their motivations were also gathered. Interestingly, it was during these interviews that the phenomenon of 'values shift' came to light. (This is discussed in more detail within section 5.5.4). These perspectives were then considered and enriched with narratives provided by two established community members.

The resulting data gathered from these studies was analysed through a model of Thematic Analysis. Following on from the discussion hosted in chapter 4 which focused upon the applied methodological approach, what is now presented are the findings derived from each of the case studies.

5.2 Exploring Expressions of Values and Testing Approaches (Case Study 1)

The exploratory study was created to support the researcher in the identification of methods capable of supporting the communication of values, predominant terminologies used to express values and ways in which this variety of data could be gathered, collated and analysed. As positioned by Miles and Huberman (1994) identification of themes is often the result of 'seeing plausibility, [and] making initial, intuitive sense' (p.1870) of the data. Major or macro themes should reflect the particular rationales and lines of questioning directed at the participants, while micro and subthemes identify particular aspects of the data which emerge through data handling and analysis processes (Oxbridge Essays, 2017).

Adopting this position within the workshop, values were explored through frames of:

- Personal Values (Individual).
- Collective Values (The Group/Community) – These were values agreed by consensus across the group as being held by all members.
- Perceived Values (Perceived values of Stakeholders/Businesses).

These frames co-related to the activities contained within the workshop. Through analysis, 2 main bodies of: Designers' Values and Motivations (which reflected individual and collective contributions), and; Designers' Perceptions of Business/Stakeholders Values and Motivations were identified.

The data which focused upon the designers' values produced 5 Major themes of:

- Learning (Knowledge Exchange/Knowledge Sharing).
- Connection (Relationships).
- Creativity.
- Incentive (Motivations and Rationales).
- Emotion/Behaviour.

5.2.1 Learning

The theme of **Learning** was identified across activities. Within learning, values relating to three sub-themes of **Influencers**, **Practice** and **Experience** were identified.

The data for this was drawn from the collective body of information which considered the students' individual and collective perspectives. Conversations, phrases and terms expressed by the students, along with observations gathered during the workshop provided data from which the sub-themes were drawn. The sub-themes themselves then contained internal micro-themes which supported the data analysis.

5.2.1.1 *Influencers, Practice, Experiences*

Influencers: Influencers as a sub-theme considered the people involved in learning and how they influence and impact choices and directions taken through direct and in-direct actions and attitudes. Teachers, tutors and lecturers were highlighted for their contributions in this area as were key family members and friends. These kinds of connections were presented as influencing directions of learning taken, supporting decisions around which journey to take and as providing support and unique points of inspiration and influence upon decisions made. They could offer both guidance around experiences and knowledge for future application. Within this sub-theme it was also identified that learning was valued as it could occur anywhere and at any time. It was not an experience limited to the halls of university or classrooms. Rather, learning and opportunity to learn was appreciated as being a life experience, one which happened each day to varying degrees dependent upon experiences; Impacted upon and influenced by key relationships and specific individuals who are in turn valued for the support, guidance and knowledge which they provide.

Practice: Practice conveyed value placed upon ways in which learning occurred; That it was a fluid process which occurred over time. It could be shaped by

observation, experience and reflection. It presented the value placed upon fine-tuning and developing skills, of improving one's own, and other peoples capabilities. It also highlighted how, through sharing experiences and knowledge professionally, the students valued the opinions, thoughts and considerations of their peer group. It gave them opportunity to iterate their professional practice as they sought to use that practice to create 'ideal situations' for others.

Experiences: Experiences were recognised as both valuable and, on occasion, detrimental to learning. Personal experiences and challenges they had faced along the way were valued as they were perceived to be supportive towards the cultivation and development of empathy in the students. This is a recognised ability found to be useful and indeed, often essential to engaging effectively when engaging with participants. These personal experiences and challenges could also make learning very difficult. It was noted that during these periods support from peers and family was essential. Experiences crossed boundaries in learning, they influenced and impacted the learning being undertaken by the students, and the ways in which they, in turn, were able to share their experiences with other students.

Overall, learning was valued for the opportunities it afforded (currently and in terms of those anticipated in future). It was also acknowledged and appreciated that learning itself was not an opportunity granted or indeed even accessible to everyone. The students vocalised how much they valued having the opportunity to learn, in immediate terms of what they were discovering about the subject area, and also as a result of how these experiences were developing their understanding and knowledge of themselves as individuals. The long term impact of being able to undertake advanced higher education was one which was very much appreciated. Students looked to the future optimistically for the potential benefits that they would both personally receive and for the benefits that their knowledge would be able to provide to others.

It should be noted that the prevalence of values expressed associated with learning may well have been influenced by the particular participant group involved and the context of where the exploratory study was conducted. Each of the participants were by choice undertaking further advanced academic learning in the area of design, with the view to bringing about and creating positive changes in the world around them. Each of the participants had left alternative lines of education and/or employment to focus their attention specifically into this area. They visibly appreciated the opportunities which were being afforded them via their university experience, with special note given towards their enablement in participatory work with clients for live and actionable projects. The combination of these two factors (university and live projects) in particular were perceived as valuable by supporting the development and furthering of personal and collective learnings alongside the refinement of their models of practice. When the designers expressed value and appreciation of people connected to their learning journeys and experiences, there was great levels of affection and fondness expressed. Be they supportive family members or the lecturers and tutors, their actions were undisputedly appreciated. Overall, the participants expressed value for the support which was provided to them, the behaviours and actions shown to them and for the emotional impact it had upon them.

5.2.2 Connection

The theme of **Connection** emerged across data from both the individual activities and the collective group activities. Within Connection, two sub-themes of **Relationships** and **Interactions** emerged within which further micro-themes and values were framed.

5.2.2.1 Relationships and Interactions

Relationships: Particular value was placed upon and expressed with regard to relationships. These ranged from familial and close relationships through to

friendships and professional networks. At the heart of all of these submissions was an appreciation for the value of having a sense of connection with others. The mutual and reciprocal support which arose in these relationships was acknowledged as being fundamental to the designer's overall sense of wellbeing. Definitions ranged from discussions around the value of one's biological family and the influence and support of its members and the value of one's chosen family (individuals who the participants chose to shape their lives with, around and alongside). Chosen families were, in this particular study, found to be inclusive of other practitioners who the designers felt akin and aligned with; in the focus, direction and principles of their working practices and across areas and experiences which they found inspiring. Overall relationships were acknowledged as providing companionship, support and love, and positively influencing wellbeing and life experiences.

Time was also acknowledged as influencing relationships that were made. Time allowed the opportunity to cultivate relationships, build networks, refine skills and practice and gave the chance for participants to reflect upon their developing skill sets. It was also acknowledged as providing participants with necessary opportunity and space to develop a good relationship with their chosen line of practice.

Interactions: The theme of interaction was largely focused towards the value of communication and the effect and impact that communication could have towards shaping networks and groups. It was identified as a key component in the cultivation and development of creative outputs with an extensive range of applications and benefits, including, amongst others, the sharing and development of ideas and the testing and refining of plans.

Interacting with others and communicating through visual and oral formats supported the sharing and exchange of knowledge, ideas, opinions and experiences. Cultural differences and social variance were also valued and appreciated as they provided participants with a wider scope of knowledge

through different and alternative viewpoints and perspectives. This was again reflected in the identification of people within the theme of interaction, as being influential towards work and creative practice. Other findings derived activities such as stories and conversations which were again valued for their ability to contribute towards interactions and in aiding the enrichment and development of relationships. Different forms of communication and interaction were revealed varying from oral interactions, visualisations and drawings, through to the use of more tactile and physical three-dimensional artefacts.

5.2.3 Creativity

The theme of **Creativity** hosted values associated with one of two sub-themes, **Actions** and **Mindsets**. Within each of these further micro-themes were identified which ranged across Hobbies, Friendships, Family, Challenges, Time, Practice and Learning.

5.2.3.1 Actions and Mindsets

Actions: Actions viewed as valuable within the theme of creativity were inclusive of those which encouraged and supported the sharing of knowledge and skills and those which promoted the development of creative abilities. Hobbies were given particular prominence as they allowed the participants to maintain a creative output throughout their lives, even when they found themselves having to take on particular lines of work or having additional commitments that were not creatively driven. The time involved in skills development, ideation and realising and experiencing creative work in live situations was valued for the experiences it afforded, the learning and knowledge gained and for the allowance it gave to enact and see outcomes of creative processes and actions.

Mindsets: Value was also placed upon the variety of mindsets and 'thinking hats' which arose from and through being creative. Of the most popular, the ability to think creatively and consider old things in new ways gained significant mention.

Mindsets served to support challenges which arose both professionally and personally. The mindsets of family were reported as influencing and shaping creative outputs. Interestingly, these were identified as being both valuable and on occasion detrimental (this feature of the benefits and negative impacts around family were also apparent in values associated with family within the theme of relationships). Personal beliefs and personal health were also identified as impacting upon mindsets which could either support and benefit actions and decisions or could create hinderances. Having set and strict boundaries between relationships of personal and professional nature was also identified as being beneficial to wellbeing. Being able to differentiate between the two was seen as contributing to productivity and inspiration.

5.2.4 Incentives

The theme of **Incentives** related to two main sub-themes found within the data sets, that of **Physical (Tactile/Experiential)** and **Psychological (Emotional)**. Physical within this context was indicative of factors of both instrumental and immanent value found within the participants lives. They were perceived as motivational and as supporting the participants in the quality of life they experienced and in the development of their professional practices.

5.2.4.1 Physical and Psychological

Physical (Tactile/Experiential): Physical factors of value identified within the data ranged from Relationships, Travel and Experiences. Relationships, inclusive of family and friendships, were valued as they supported the rationalisation of actions and served as influential quantities which could shape decision making processes. These relationships were also identified as a valuable source of inspiration for the participants. They were viewed as tangible and physical features within their lives, (as the participants were expressing associated value to an object or person, thus giving the sense of value a three-dimensional anchor rather than an emotional expression). Travelling and experiencing multi-cultural

events and different locations were identified as valuable as they fuelled and helped form lines of inquiry, provided inspiration and influenced decisions. New environments were also noted as influencing actions and behaviours exhibited by others and by the participants.

Psychologically (emotional): In psychological terms, expressions of value proclaimed memory as being highly valued and treasured with considerable impact upon the participants lives. Memory influenced the direction of their practice and impacted upon associated actions and decisions they made. It was also appreciated and recognised as having the same level of impact upon their personal lives. Memory and emotions were closely connected with contributions which focused towards the value of tradition and how heritage and traditional practices can shape the future if considered in the right ways. The lessons to be learnt from both memories and tradition served as key motivations in the participants' inspiration.

5.2.5 Behaviours

Values associated with the theme of **Behaviour** emerged across two rather closely linked sub-themes of **Actions** and **Attitudes**. These themes identified valued actions and behaviours of self (the participant) and of others and were noted as behaviours which the participants enacted, anticipated and desired.

5.2.5.1 *Actions and Attitudes*

Actions: Particular behavioural patterns and actions were expressed by the participant group individually and collectively as being preferable, valued and appreciated in themselves and in others. These behaviours and actions included;

- Being supportive of others and being brave in addressing personal needs and in addressing the needs of others
- Being open and honest and able to reflect upon personal actions and experiences
- Being passionate about the subject or area they were working within.

In section 5.2.6 which presents the summary these behaviours and attitudes are also reflected and expressed in the collective manifesto which was developed during the conclusion of the workshop.

Attitudes: Displaying and enacting attitudes which aligned with the types of behaviours and actions previously expressed were considered to be of value to the participants. Attitudes and mindsets which respected the past as an important line of connectivity and knowledge, the ability to be empathetic and thoughtful and rather interestingly, being able to connect with others through acknowledging their past and their experiences were highlighted as being particularly valued. This feature in return reflected the value which the participants placed upon having and developing relationships of quality.

It can also be noted that when entering into a collective discussion around their own personal values, greater levels of emotionally charged and behaviourally descriptive terms began to arise. These expressions were formed through discussion of behaviours valued in others and behaviours valued by themselves as portrayed and perceived by other individuals. How the participants chose to treat others and how they wished to be treated themselves clearly impacted their sense of self-wellbeing. It carried positive impact upon their mental state and that was a feature they hoped to share and convey to others.

5.2.6 A Summary of the Designers' Values

What became apparent from the expressions made by the participants was that factors surrounding relationships, behaviours and learning all held great levels of value at both personal and collective levels. Motivations and incentives were rarely considered in terms of instrumental gain, rather the focus was predominantly geared towards more immanent and intrinsically natured values.

During the workshop personal values were shared and discussed across the collective group a number of times and as a final component of the day, the generation of a 'collective and personal' manifesto was undertaken.

To accomplish this the participants were presented with notes and observations which documented phrases, expressions and terms which they had expressed repeatedly throughout the day through their discussions of personal and collective values and motivations.

Through working collaboratively as a group, the manifesto was developed. This served as both an instant record of feedback to the group about data which had been collected whilst simultaneously providing them with an opportunity to bring together their own individual perspectives and understand how their individual values aligned to indicate a form of shared, collective values across the group. Fig.33 shows the final manifesto created. The process of generating the manifesto also aided the clarification of findings and sub-themes which were identified within the theme of Behaviours. The collective consensus was that the manifesto gave good indication towards both actions and attitudes that participants aimed to exude, as well as representing the kinds of actions and attitudes which they hoped to see and experience from others.

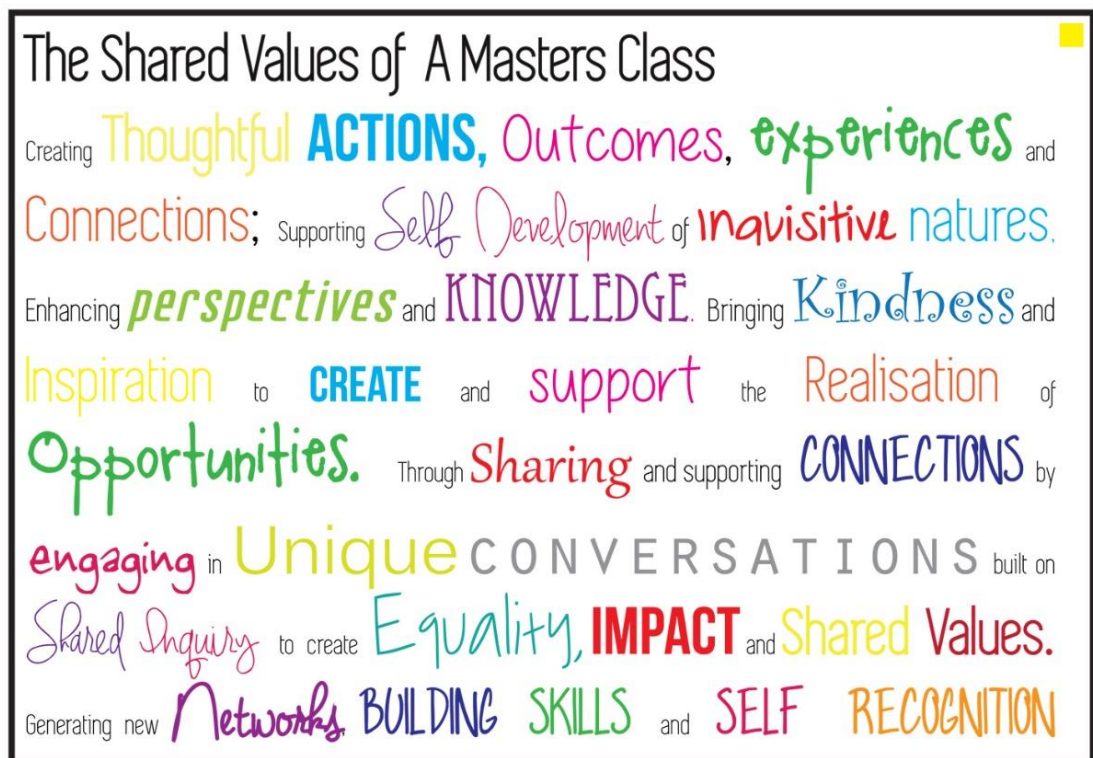


Figure 33. The Manifesto of The Master of Design Students.

Subjectively, the designers expressed their personal and collective values in what can be perceived as relatively idealistic terms. There was an apparent degree of naivety and innocence in ideas and understandings which surrounded how and why they, as professional designers may positively influence the world. This is by no means an attempt to negate or reduce the potential impact of this kind of work ethic or value expression, rather, it is noted as surprising to encounter such fresh (and potentially unjaded?) perspectives being vocalised so passionately. This was particularly pertinent given that each of the participants had previous and established work experience in alternative professional environments, (most of which were not creatively based), and that each had each voluntarily left their previous positions to retrain under a new hat. This same level of idealism also became apparent when data gathered around discussions of their perceptions of the values of stakeholders and business values were examined. Tables which supported the breakdown and dissemination of micro-macro themes relating to both individual and collective value expressions from the designers are available in Appendix N, *n1-n2*. (These also provide an exemplar of working process undertaken across the three studies).

5.2.7 Designers' Perceptions of the Values and Motivations of Businesses and Stakeholders

The second major frame which emerged through the workshop was identified as being: Perceptions of the Values and Motivations of Businesses and Stakeholders. The workshop had sought to identify factors within this area through a selection of included activities. The activities undertaken drew responses from the participants in a number of ways. They began by initially exploring and identifying current, pending, future and aspirational connections and were supported in creating a visualisation of their network. They did this by mapping primary, secondary, tertiary and aspirational connections (as discussed in

Chapter 4). Through these maps^j participants were then encouraged to consider underlying rationales and values which the identified stakeholders and businesses may have towards their proposed projects. This was done by using multiple layers of high-quality tracing paper sheets placed over their original maps. Following completion of this, the participants then mapped their own values and motivations on a final top layer. Fig.34 offers example of a participant's worksheet in development).

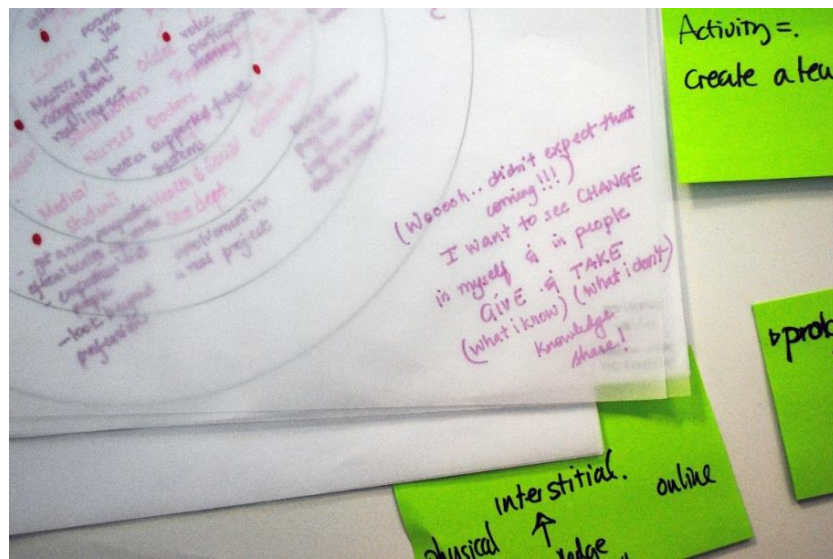


Figure 34. Participant Worksheet Under Construction.

Analysis of these sheets identified further personal values and motivations of the designers in line with their practice (Table 25, (5.2.7.1) along with identifying their perceptions and assumptions around the values and motivations of stakeholders and businesses (Table 26, (5.2.7.2)).

^j The maps and additional materials used within this case study are available in Appendix K, k1-k7. The specific tools discussed above are k2 & k3

5.2.7.1. Values and Motivations of Designers

Table 25. Values and Motivations of Designers

Values and Motivations of Designers	Associated Theme
Reciprocated give and take in relationships.	Connection
Generating positive change in self and others	Creativity
Building empathy with clients and stakeholders	Connection
Supporting communication between various groups	Connection
Giving the under-represented a voice	Creativity
Employment (Having a job)	Incentive
Curiosity – having a personal interest in the project/proposal	Emotion
Desire to create change	Emotion
Willingness to help	Emotion
Travel – local and international opportunities	Incentive
Opportunities and new experiences – including meeting new people and experiencing new cultures	Learning
Future collaborations – projects creating avenues for future lines of work and engagement	Creativity
Network generation – building their own professional networks	Connection
Kindness – of others and in own actions	Emotion
Being able to help	Incentive
Impacting the workforce – creating change	Incentive
Making a difference to people's lives	Incentive
Improving engagement	Connection
Improving the quality of a service	Creativity
Changing and challenging interactions	Creativity
Generating awareness of issues	Learning

These values and their associated motivations were explored and analysed and major themes identified were recognised as reflecting collective and individual values expressed in the earlier activities although slight variability in context arose occasionally. In brief, values and motivations of designers were identified as emerging within themes of: Learning; Connection; Incentive; Creativity and Emotion in the following ways:

Learning:

The designers recognised that aspects of value and motivation were involved in opportunities and new experiences. (This was inclusive of introduction to others and engagement with people) and that these values and motivations emerged because of the (potential) knowledge and experiences which could be gained as a result. Being able to highlight issues which they felt were key and important to the wellbeing of others was also viewed as an opportunity to both personally learn, share and educate others with that knowledge.

Connection:

Value was identified in the sense of connection derived from reciprocated relationships. The empathy both felt and received, and the value and importance of building empathy with stakeholders and clients was considered as being particularly motivational and valuable. Being able to facilitate the sharing of knowledge from different groups and support the development of lines of communication was also personally and collectively valued. Atop these factors, the development of networks for professional practice were viewed as near critical for expanding design practices and developing their own capacities.

Incentive:

Incentives identified were more focused towards motivations than values. Factors of value included relationships and experiences, tactile encounters which brought knowledge, experiences and inspiration. These also aligned and outlined motivations and incentives, such as Travel. Travelling was expressed as valuable for its cultural and experiential benefits, the ability to meet new people, forge relationships and expand knowledge. It was simultaneously appreciated and valued as being an incentive to work within specific sectors or fields. It offered opportunity for adventure and for personal development.

Factors of psychological value identified within this theme were also strongly indicative of memory as both influence, inspiration and incentive. Memory

served to shape opinion and behaviour and was respected as a key component in ensuring the longevity and continuity of skills and abilities. Personal memories incentivised work and gave drive and rationale to decisions and simultaneously provided inspiration for particular projects.

Creativity:

Values and motivations aligned with creativity included the wide range of potential opportunities and experiences which could be gathered through future collaborate work. Other recognised factors which were valued and appreciated included being able to actively improve services or facilities through creative means and knowledge, along with being able to give a voice to the under-represented. This particular vein of thought granted value to both the designer undertaking the action and value to those affected or involved i.e. The designer undertaking the project could support and respect the values of those they were aiming to help, thus meeting their personal values of helping others. In having factors within their own personal values respected, including their voice and opinions, recipients of the project gained value from the experience and end outcome. In this light the process, not just the output becomes about values.

Emotion:

Emotion captured values and motivations which leant more towards kind behaviours and the enactment of kindness to and from others. Additional features within this area included; Being curious and being able to actively engage with that curiosity, which by proxy would drive a personal interest and personal investment in the project or brief; Having the desire to support change and being willing to help; Working in areas that the participants were passionate about and doing work which they felt was of meaning and importance to others met personal values around being kind and doing the right thing whilst also benefiting others, thus enhancing personal and collective senses around wellbeing.

5.2.7.2 Perceptions surrounding Values and Motivations of Businesses and Stakeholders

Table 26. *Perceived Values and Motivations of Stakeholders and Businesses*

Perceived Values and Motivations of Stakeholders and Businesses	Associated Themes
Mutual inquiry	Learning
Idea exchange and development	Learning
Participatory engagement with clients/customers/stakeholders	Connection
Opportunity – business/service development	Incentives
Creating something meaningful	Creativity
Love – of their work/business/project. Caring for the outcomes	Emotion
New ways of working – Learning opportunities	Learning
Increased equality – both internally within the business and externally across local communities/groups/stakeholders	Incentives
New skills and knowledge development	Learning
Collaboration/Networking – building professional networks and working with new people.	Connection
Replicable model generation – supporting future business growth and development opportunities	Incentives
Self-promotion and growth	Incentives
Satisfaction	Emotion
The development of trust – internally - between themselves and stakeholders and/or their business and its clients.	Connection
Similar values and directions to those being offered by the proposed project	Emotion
Knowledge exchange and sharing	Learning
Evidencing and sharing stories	Connection
Undertaking models of best practice – both as a business strategy, and as morally right.	Incentives
Promotion, Power, Money, Security	Incentives
Experience – new experiences shaping the development of personal and professional skills business/stakeholders	Learning
Sustainability in environmental terms and in longevity of business/services	Incentives
Alleviation of workload – reducing workload through streamlining processes and practices.	Incentives

Perceptions and assumptions around the values and motivations of stakeholders and businesses were explored through the same micro themes as identified within the data regarding the designers. A higher prevalence of values associated with the theme of Incentives was identified, while a significantly lower level of values and motivations attributed towards the theme of Creativity was apparent.

Learning:

Values associated with the theme of learning in this area (i.e values which could potentially be held by business and stakeholders), were identified as being inclusive of motivations, the perception shared by the designers was that these values could not exist without having an aligning motivation. Findings drawn included:

- To learn for the benefits of personal and professional development (personal in this context would then impact professional).
- To gain the opportunity to exchange ideas and potential avenues for the business.
- To adapt and adopt new ways of working.
- To develop and refine new skills and expand upon personal knowledge (again for the benefit of the business).
- To share professional knowledge with others (thus expanding own knowledge and professional network).
- To gain new experiences which might positively influence the future development of the business or positively impact upon professional skill sets.

The perception held was that learning, if beneficial for the business would be valued by the owner/stakeholders. There was no reference to learning as a valuable experience for purely personal reasons, rather it was rationalised as being a potential factor of growth or development for the business.

Connection:

The participants proposed that businesses and stakeholders would welcome and value the opportunity to engage with new people and new networks making

connection both motivation and value. Furthermore, perceptions around the theme of connection also considered that taking part in participatory processes of design would appeal to the businesses because of the anticipated future value and benefits (both socially and fiscally) which could be achieved for themselves and others.

In addition, having the capacity and opportunity to exchange stories with others was also highlighted as a feature that businesses and stakeholders would value. Engagement with external parties (i.e. customer bases) was viewed as enabling the sharing of values, support and cooperation. It was also anticipated that through implementing design strategies within business practice, or through taking part in external projects led by design and engaging in client/community engagement, an increase of trust across both parties would emerge.

Incentive:

Involving design in small scale projects or within their business development was perceived as contributing towards support in identifying models of best practice, both in a literal sense, and in the sense of doing what was morally right. Promotion, Power, Money and Security were all also highlighted as potential incentives and aspects of value which may motivate businesses and stakeholders although they were very lightly mentioned and positioned as by-product rather than an active motivator. (This was one of the few occasions within this case study where fiscal/economic/numerical value was referred to, and rather exceptionally, the only occasion where it was implied as being a personal, immanent value, rather than a motivation or incentive). In fact, if we recall the works discussed in Ch3, money in this particular context would be considered as holding instrumental value for the businesses, and that it's instrumental value would form the motivation and incentive for its acquirement.

A raised awareness of the sustainability of their business in environmental terms and in terms of creating a business which would last, along with alleviating

workloads and streamlining processes and practices were additional factors of value which the designers anticipated being of meaning to the businesses/stakeholders.

These kinds of value begin to step away from personal values and become more in line with motivations and incentives for particular behaviours. Aspects of self-promotion and growth along with generating replicable models to support future business growth and development were considered to be motivating features for businesses and stakeholders as were actions and behaviours perceived to bring equality across business models and local communities.

Creativity:

The designers proposed that being able to create something meaningful, be that for the environment, or the local social structure, community or another external group would be a welcome and valued opportunity, and that in itself, the ability to bring about something with deeper meaning and impact would serve as motivation. In this light, the designers were expressing a presumption that the businesses would hold the same values as they did regarding positive behaviours, both given and received. They positioned creativity as something which the businesses could be supported in doing for the benefit of others. It was assumed in business terms, that the benefit of design would reside in the value imparted to others, (potentially the creation of artefacts or matters of instrumental value, but also inclusive of the creation of immanent value and quality of life experienced) rather than the value of creativity directly upon, within and for the business or its owner themselves. The designers also presumed that the businesses and stakeholders would possess a high degree of pre-existing knowledge around design and creative practices.

Emotion:

Responses which fell within the theme of Emotion considered perceptions of both motivations and values of the businesses and stakeholders. Of these,

satisfaction was identified as a particular embodiment of immanent value which would be sought. The want to experience satisfaction would motivate and as a result, experiencing satisfaction would be valued. This in turn was reflective of beliefs which positioned businesses and stakeholders as loving their work/project/business and caring and valuing the outcomes. Having their personal values align with proposed projects or actions was also identified as being a motivation.

It is possible that this prevalence in the participants focus towards incentivisation and motivations was the result of the particular focus of the subject being explored. Participants were asked to consider the underlying rationales as to why businesses and stakeholders would choose to engage with their project or proposal and to consider the values which they perceived these businesses and stakeholders as having. Within this line of inquiry, it is arguable that the designers may well have inadvertently developed a 'personal rationale' to their lines of response, i.e: In questioning factors such as 'Why would the business want to be involved?' they internally reshaped the inquiry itself to be more along the lines of 'How do I engage them in involvement, what do I think would make it worth their while?' It needs to be acknowledged that considerations such as these may well have shaped the designers' responses, even if unintentionally, as they sought to identify what they perceived to be the values of businesses and stakeholders.

5.2.8 General Observations and Reflections from the Exploratory Study

Throughout the study the researcher documented and noted re-occurring terminologies, expressions and phrases as they emerged. This process was done openly and when noted upon by the participants, they were encouraged to view and pass comment on the documentation to ensure they agreed with data being collated.

On occasion a participant would offer clarification towards a note the researcher had made, explaining the 'why' or 'context' of the documented expression. This process was also seen reflected within the community interventions (covered in case study 2) where participants would actively stand and wait to hand over their cards, offering explanation and details which exceeded what they had written down. This appeared to be an insurance that they knew the researcher fully grasped the exact meaning and context of their contribution.

A further observation which emerged through consideration of the exploratory study focused upon the development of relationships and communication between the researcher and participants. For example, the lunchbreak of the workshop did not follow its anticipated pathway. The participants were instructed by the researcher to take their lunch and have a clear break away from the space and environment where the workshop was being conducted. This was done to alleviate tiredness and to allow them to 'clear their heads' in order to be fresh for the afternoon session. However, although all participants did (individually or in pairs) leave the room briefly to obtain food, they all also self-selected to return early in order to discuss previous activities conducted, share their thoughts and to converse with the researcher.

With regards to the data collected and analysed, initial connections can be drawn across the personal expressions of values made by participants and how these carry influence in their work and shape and inform their personal ethics.

The terms and phrases they used were reflective of a consistent 'type' or 'theme' of communication which was apparent throughout the day. Terms and phrases repetitively conveyed a focus towards the longing and need to make and contribute towards positive changes in the world around them. Most of the participants had previously worked in fields outside of design, but all had taken up the service design route of study as they viewed it to be an effective way in which to actively influence the world around them and bring about positive change.

There was also a strong theme of altruism apparent throughout all of the participants' communications. It should be noted that, at only two points during the workshop was finance mentioned. When it arose, it was brought up it not discussed in anticipated terms of financial revenue and gain (in either context of designers or businesses), rather it was discussed in more negative terms with financial incentive being neither driver or motivation within their own personal value constructs or of those perceived to be held by businesses. It was on one occasion brought to light but framed as an instrumental value with the underlying motivation of having it being driven by further fiscal requirement and obligations which the businesses would be subjected too. On the second occasion that it arose, it was discussed briefly and viewed as something without meaningful value, to be ignored or disregarded. It was perceived as a means to an end, purely functional for maintaining essentials.

5.2.9 Summary

The exploratory study proved a very beneficial and informative experience. It allowed the opportunity to consider the expression, conveyance and capturing of values and motivations. It also granted scope to test the use and application of objects in facilitating responses and engagement. Undertaking the study in an environment familiar to both researcher and participants potentially enhanced the sense of familiarity which, on reflection, potentially supported participants in giving honest and frank responses.

Somewhat surprisingly, fiscally oriented values and motivations based upon financial gain received only minimal consideration. Across all the data gathered it was noted as only being mentioned on two occasions. Financial gain was recognised and framed by the designers as a by-product of what they perceived to be the real value of design: Being a part of shaping or enacting change and improvements and positively impacting the world and people's lives. This personal position of fiscal gain as by-product carried over into the designers'

perceptions surrounding the values and motivators of businesses and stakeholders.

Overall the predominant focus of the values and motivations of the designers were largely positivistic in perspective. They expressed a more altruistically focused set of values, where bringing positive change to the world around them was a driving factor. In addition, actions and attitudes supportive of empathy, being open, honest and trustworthy were all mentioned with significant levels of importance.

In considering personal values the participants focused their responses more towards key relationships within their lives. They were appreciated as factors of influence which shaped and supported their personal and professional development. The relationships ranged from close social connections to those found within their biological families and those with whom they shared a cultural heritage. Further influence from 'chosen families' along with professional and extended networks were also identified as valuable and as a source of incentive and inspiration.

Perceptions surrounding the values and motivations of business also carried on in line with this trend towards idealism and altruism. The designers attributed businesses and stakeholders with values and motivations driven by social and environmental awareness. They were also perceived as being driven by a need to aid and affect positive changes in social environments around them.

It was assumed by the designers that businesses and stakeholders would both appreciate the qualities and opportunities that implementing design may bring them, and also that they possessed a degree of knowledge around design which would support that line of thought. This presumption surrounding pre-existing knowledge and understanding of design practices, its potential applications, uses and impact in turn led to further assumptions that, as a result, businesses

and stakeholders would welcome the opportunity to engage in participatory approaches.

The designers also believed that businesses would automatically view sharing their stories and experiences with others as beneficial, and that their engagement with design practices would further aid them in meeting and addressing an underlying want to have an effect and impact upon shaping social fabrics. This in turn reflected assumptions around businesses having values shaped around empathy and communication, and that as a result of these values, businesses and stakeholders would engage in activities and actions which would reflect these personal principles.

The thematic maps which supported the analysis and interpretation of the data are available in Appendix O, *o1-o4*.

5.3 Vocalising Values: A Community Perspective (Case Study 2)

Through the overarching lens of Community Perspective, five frames of inquiry around values were identified:

- Value (Personal).
- Social.
- Need/Want.
- Impression.
- Experience.

From these frames, through analysis and handling of the data body, major themes and associated sub-themes were determined as:

- Connection - People, Self, Place.
- Belonging – Relationships, Behaviours, Attitudes.
- Enablers – Environment and Impact.
- Properties/Qualities – People, Place.
- Attractions – Professional, Public.

Within the sub-themes further micro themes were then identified. The interventions were conducted through use of postcards, post-box, bunting and facilitation with some objects contributing multiple responses to single inquiries (Fig.35).

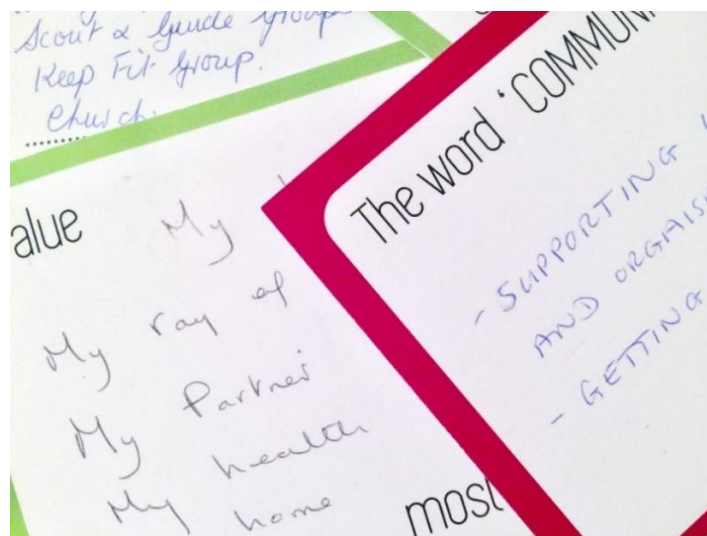


Figure 35. Example of Postcards with Multiple Responses.

Participants were able to determine exactly what they would contribute. This was true for both the written and oral contributions they made and the number of boundary-objects they wished to submit. Each of the postcards were made available and participants made their own selection. Even if they took one of each card (5 postcards in total) and then later decided not to fill in a couple, this was neither a problem, nor was it a recorded occurrence. Submissions per line of inquiry from across all three interventions are presented in Table 27.

Table 27. Submission Rate Per Line of Inquiry.

Question	Total No of Cards Submitted	Total No of Responses
Value (I Value Most in my life)	72	153
The word Community means ... to me	46	94
We would benefit from ... in my community	39	49
X is s place	52	92
X is a great project/service/system	61	107
TOTALS	270 cards	495 responses

Overall, it can be seen in Fig.36 that across each of the questions posed there was a relative degree of balance in relation to the number of contributions made with a variant of 3%, however, this did increase to 10% variant in contributions which specifically considered what participants valued most within their lives.

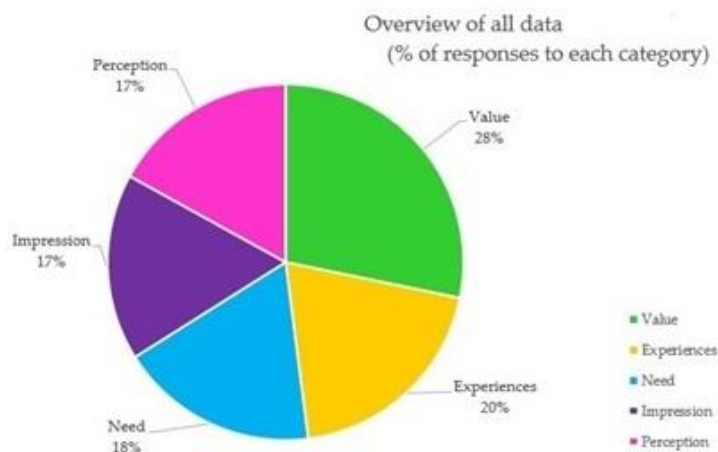


Figure 36. Percentage of Responses Submitted within each Category.

Table 28 presents each frame and its connected major, sub and micro themes. What then follows is a presentation of the results identified from each inquiry, which culminate with a brief summary before highlighting some key reflections identified within this research. The thematic maps which supported the analysis and interpretation of the data sets relating to case study 2 are available in Appendix P.

Table 28. Identified themes from community interventions.

	Frame	Major Theme	Sub Theme	Micro Theme
1	Personal I value ... in my life	Connection – People, Self, Place	Relationships	Personal Affection
				Social Affection
				Social Interaction
				Companionship
			Emotion	
			Behaviour	
			Wellbeing	Physical/Psychological
	Quality Time			
	Skills	Creativity		
	Environment	Location		
2	Perceptions	Belonging Relationships, Behaviours and Attitudes	Relationships	Personal Affection
				Social Affection
			Environment	Place
			Emotion	N/A
Behaviour	Attitudes and Actions			
3	Need/Want I think we would benefit from ...	Enablers Environment Impact	Want	Location
				Services/Facilities
			Value (Would have and do have)	Wellbeing
				Communication
	Satisfaction			
4	Impression/Belief	Properties People & Place	Relationship	Social Affection
				Social Interaction
			Emotional & Behavioural	
Environment	Location			
5	Experiences	Attractions Professional, Public	Community Groups	Child
				Elderly
				All
			Community Events	Range for all .
			Community Ventures	Range for all.
			Education	Local Services
			Technology	Social Networks
Business/SMEs	Local Enterprise			

(An extended version of this table is also available within Appendix Q, *q1* which incorporates examples of quotes and submissions made across each category).

5.3.1 Value (Personal)

From the data gathered through the frame of Value (Personal), where participants were asked to share and express what they valued most in life, the major theme of **Connection** was identified. Within this theme, three subsequent sub-themes, of **People**, **Self** and **Place** emerged, each of which then hosted their own set of micro-themes. People, Self and Place were based around micro-themes of: Relationships, Wellbeing, Environment, Emotion, Behaviour and Skills. Each shaped the theme of Connection as all were representative in some form of a point of engagement, be that; Connection with self through personal wellbeing and skill development and sharing: Connection with other individuals and the community; Sense of Connection with the location and the community within.

5.3.1.1 CONNECTION: *People, Place and Self.*

People: Amongst values expressed by the collective of the community, connection was identified as being of fundamental value and importance. Ranging from close personal and familial relationships through to extended networks, friendships and the local community, contributions which listed at least one (predominantly multiple) example of connection accounted for 59% of all submissions received. 'Friends and Family' was by far the most highly contributed response. Connections were given credit for providing support, reducing anxiety and isolation and positively influencing ideas and notions of time well spent and quality time. Behaviours aligned within these relationships, such as:

'doing little things for each other' and

'people being happy to acknowledge and talk to each other'

along with individuals being identified with qualities inclusive of ...

'Compassion', 'kindness', 'love' and 'giving'

all supported the focus and importance placed upon connections with other individuals.

Contributions also placed importance upon aspects of health and the environment, but these in turn were viewed as a reflection of their connectivity and their relationships. Connections between sub-themes revealed motivations such as;

'feeling safe'

'supportive relationships'

'reducing isolation'

'quality time' and

'experiencing nature and the outdoors'

which served to enrich the themes of Connection - People, Place and Self. Connection was expressed as supporting and influencing participants overall sense of wellbeing, both individually and collectively. Within these contributions participants also reflected that the maintenance, continuation and success of their connections and relationships was key to their personal and community value structures.

Place: Contributions which were indicative of connection to place, (which are also recognised as relating very closely to factors identified in 5.3.2.1 Perceptions) reflected ongoing work and events in the community which were geared towards focused upon development of community spirit in the area. Significant levels of work had been undertaken over the preceding years by members of the community as they sought ways to sustain and support each other and their way of life Whilst acknowledged as relatively new, the atmosphere developing across the community and the sense of engagement and connection were identified as being valued highly at both individual and collective level. Connection to place

was also identified as reflecting the specific location and its surrounding environments. Responses expounded and highlighted the perceived benefits of the natural environments which both surrounded and wound through the area. An appreciation for the scenery, walks, access to the countryside and the open water of the inlet and rivers were all highlighted as being highly valued and treasured by the participants.

Self: Contributions identified within this sub-theme reflected values which expressed the participants personal sense of self. Expressions shared in this area focused more towards skill development, autonomy and independence. The ability to make key choices independently, having freedom to act, along with sharing knowledge and experiences with others were of particular note. Connection to self was also highlighted through contributions which focused upon personal development, the learning of new skills, the ability to be creative, (and possibly most importantly), and reflective of the collective nature of the community investigated and have the ability and opportunity to share this knowledge with others.

This particular line of inquiry gathered 153 responses. Within the submissions, some contributions were indicative of more than one kind of specifically held personal value through analysis and grouping, the responses were broken down and analysed across the 6 micro-themes. Overall, 59% of all submissions were indicative of relationships and personal attachments. 14 % indicated factors of health and wellbeing. 9% focused upon specific behaviours and actions along with the quality of interactions experienced and 10% of responses focused upon the surrounding environment as it was shaped and influenced by those living there. (Fig.37).

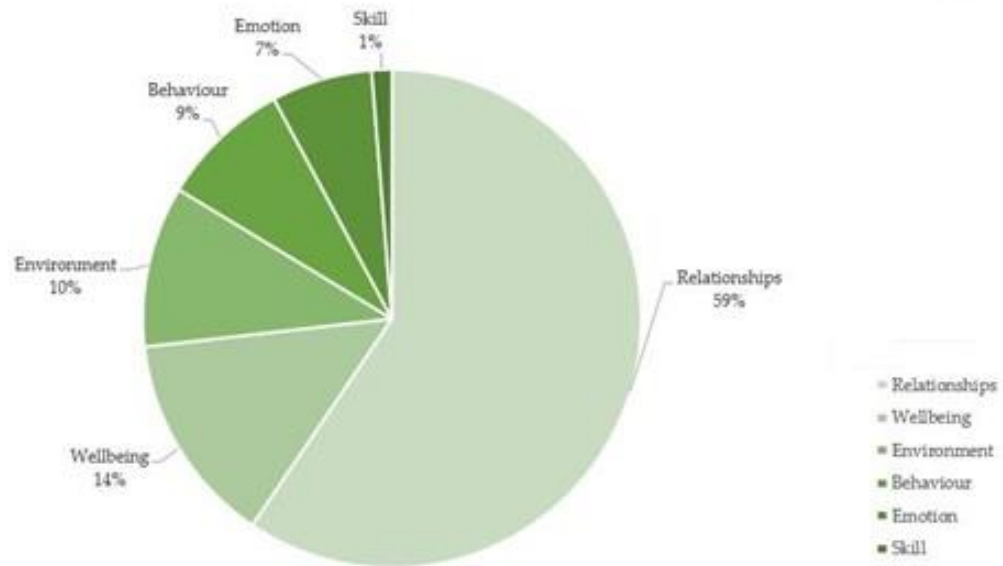


Figure 37. Percentage of Responses to Personal Frame Inquiry.

5.3.2 Perceptions

Within the frame of perceptions, (which identified the value and meaning attributed to 'community' held by the participants) the major theme of **Belonging** emerged. From here 3 sub-themes which influenced and affected participants' sense of belonging were identified; **Relationships, Behaviours, and Attitudes.**

5.3.2.1 BELONGING: Relationships, Behaviours and Attitudes

Relationships: Contributions were sought which expressed what community meant to participants, what features or components of their community did they value and why. Focal points within the submissions ranged across areas including:

- The relationships which form communities,
- The behaviours and actions of people within the community and
- The emotions and attitudes anticipated and interlinked with the creation and maintenance of a community.

Examples of contributions which embodied and represented the sense of belonging and community both observed in actions of participants and shared in their submissions included:

*'Being caring and concerned about others, without being "nosey"
supporting community events and helping to support community
facilities (you never know when you might need them for yourself or
your family)'*

and

*'Sharing a common bond that is creating a sustainable, interesting,
supportive place where residents feel secure'*

Interestingly, relationships highlighted in this area were less focused upon familial relationships (unlike the previously discussed inquiry). That is not to say that it was not present at all, rather, where it arose, familial relationships contributed positively towards both the development of a community and shaped intuitive understandings and appreciation of what a community might be. Relationships within this inquiry arose more in the form of social cohesiveness and social connection with friends, colleagues and neighbours. These reciprocal relationships were valued by participants for the benefits, both emotional and physical, that they brought to their lives. Indication of the impact of shared experiences and shared collective perspectives clearly influenced levels around how much an individual felt they 'belonged' to the community.

Behaviours: and actions such as:

*'working together',
'being linked through values and
'creating a social caring environment'*

carried greater impact in reinforcing community belonging whilst actions inclusive of:

*'pulling together to make a great place to live' and
'Having people who work together, play together and create a life
together, it is hard to find in today's world'*

reflected the high levels of community engagement and support which were observed. These appeared to be central to the residents focus and were clearly valued for supporting and maintaining the quality of life they experienced.

Attitudes: Attitudes and qualities which were expressed as being valued by members of the community;

'an openness to share',

'to engage',

'to look out for one and other'

'being friendly',

'trustworthy' and

'approachable'

all influenced the sense of belonging to the community. As such, it was identified that within the values expressed, relationships, behaviours and attitudes, shaped by the nature of communications, experiences and engagements contributed towards the sense of collectivise creating an environment with a strong sense of belonging which shaped and influenced the overall community. A clear exemplar of this collective, belonging behaviour was observed during the initial community event (Fig.38).

At one stage during the first of the community interventions, a gentleman, who had previously been working upon a stall providing hot beverages, suddenly pulled up a stool, retrieved a violin and began to play. Within moments, a woman from a different stall promptly stopped what she was doing and disappeared, returning moments later with a violin of her own. In the space of 10 minutes, there were no fewer than 14 individuals, all with various instruments ranging from bodhráns, to penny whistles, accordions, violins, guitars, all engaged in sharing and experiencing live musical performance. Customers stood back, laughing, chatting and not at all fussed about the lack of stall holders to perform purchases. The focus was clearly upon the value of the experience, the collective sense of belonging. Family groups appeared at tables, sitting down with drinks and food, chatting with each other, singing across the room to other groups they clearly knew. The music played ranged from slow ballads to lively traditional jigs, quiet and subdued songs, through to renditions which were clearly favourites in the community. All pieces played were Scottish in origin. The performance then continued through the afternoon, with players stepping in and out as they chose for the remaining time. Both observers and musicians were exhibiting a value for and of: Music, Performance, their heritage and history, shared experiences and friendship. They enacted the sense of belonging and connection which they valued.

Figure 38. Observation Notes from Community Intervention 1.

The behaviours and actions of the participants which manifested within the community event made the sense of community inter-connectedness and engagement visible. Across each of the events there was visible appreciation and social value directed towards locations themselves, activities that were hosted there throughout the year and again, further appreciation for the specific event ongoing at the time. Each of these events mattered to the people. They were viewed as valuable experiences which were important to take part in. It also mattered to those hosting these events that their local community turned out to support them. There was instantly visible and palpable gratitude and happiness at seeing neighbours and friends arrive to take part. What made this all the more lovely was that, the community members who had turned out en-masse in support had come along of their own volition. They did not feel obliged to

appear, rather they wanted to be a part of things and wanted to support those around them. Observations corroborated the sense of connectivity and belonging which was conveyed. Participants shared an appreciation and interest of similar things and similar actions, all of which were perceived to contribute positively to the community as a whole.

There were 46 cards submitted within this inquiry which collectively contributed 94 responses. As with the personal values inquiry, responses often ranged into multiple contributions placed upon a single card. 27% of all responses related to environment as a determining factor in community, while Behaviours, Emotions and Relationships accounted collectively for the remaining 73%. Interestingly, within the contributions of environment, physical location was rarely mentioned; rather the perception was that the impact of behaviours, relationships, and attitudes shaped the environment (Fig.39).

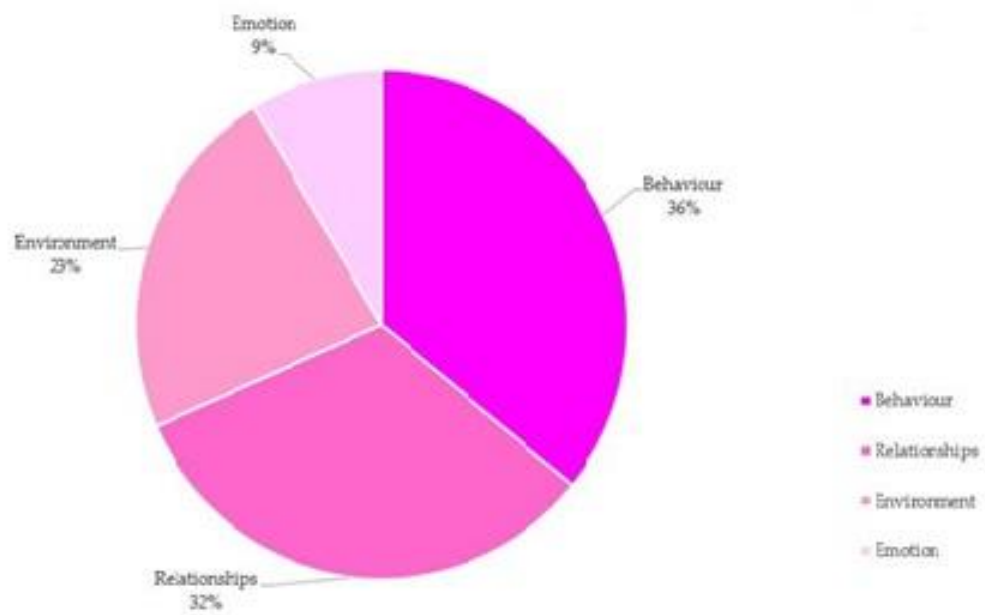


Figure 39. Percentage of Responses to Perception Frame Inquiry

5.3.3 Need/Want

The frame of need/want identified factors which brought instrumental and immanent values to community. The major theme identified within this frame was that of **Enablers**, which subsequently led to identification of the sub-themes of **Instrumental Factors of Value** (which represented services and facilities across the community which were sought after and valued for the practicalities they afforded) and **Impact** which was indicative of the realised and anticipated extended immanent personal values which they created. The sub-theme of impact was shaped by three micro themes: Wellbeing, Communication and Satisfaction while Instrumental factors were considerate of the micro themes of Location, Services and Facilities.

5.3.3.1 ENABLERS: *Instrumental Factors of Value and their Impact*

Instrumental: Of particular prevalence across contributions was transportation systems, which ranged from cycle lanes, to bus and train systems. These were sought after and appreciated for the value which they could provide to the quality of life of the residents and the positive impact they could have upon their lives and autonomy. Transportation was regularly mentioned along with affordable housing, and access to leisure and social activities. In this specific light the value perceived around these services, systems and products is instrumental. From considering the instrumental value provided alongside the rationales given in contribution it is possible to then identify the intrinsic and immanent values which are underlying.

Public transportation, both train (which had been completely disbanded with the station now permanently closed) and bus (which had gone through significant reductions in scheduled visits) was identified as a fundamental need and want in the community and was perceived (and corroborated with findings from Impact) as a way in which to reduce isolation and disconnection from surrounding areas. This reflected community values which expressed autonomy, freedom, connectivity and relationships as values within residents lives.

Beliefs and values about wellbeing, connection and relationships made these factors of instrumental value highly sought after. They were appreciated for their ability to positively effect community and individual wellbeing and independence, reduced isolation, and increase life satisfaction. These beliefs were so strong and the perceptions of the underlying value and benefits which could be gained with their return so anticipated and wanted, petitions were underway and community and group gatherings were organised which sought to support the re-installation and return of these key services. Additional facilities and services which were identified within the contributions included improved housing availability, multi-generational leisure activities, educational facilities, communication services (such as the return of the post office) and play and group facilities for children and teenagers along with an increase in cultural and historical features and landmarks. Additional safety features for the benefit of the young and older generations of the community were also highlighted. For example, speed bumps and restrictions running through the main street were identified as a definite requirement.

Impact: At practical level, the reduction of public transport carried significant impact across factors of life such as how well and easily members of the community found accessing required health care support and leisure activities. Although some residents owned or had access to private transport, the remote location of the community meant that those without their own transport were at highly disadvantaged. This became particularly problematic and noticeable over weekends, in evenings, and very notably, throughout the winter months, when bad weather could (and did on multiple occasions during this research experience) isolate and cut-off the community from surrounding areas and hinder easy access to important services along with reducing residents capabilities to interact with each other.

They believed in the value and benefit of having a good public transport system. They valued and appreciated the public transport system, so therefore

collectively, they enacted behaviours specifically focused towards efforts to return the object of collective value back to the community. This in turn met both their 'collective' values (wellbeing, connectivity, independence, etc) and, their individual values. The impact of the transport system was perceived as valuable through the opportunities and benefits it brought to them directly as individuals, and collectively as a 'shared' experience. Community members even expressed the value for local businesses through improvements as being a positive factor for trade and the exchange of goods and materials. It would enhance their consumer base, their capabilities and as such, support their way of life.

The location of the community and the layout of the village meant that often drivers who were commuting passed directly through, and in doing so, regularly breached speed safety levels which in turn endangered members of the community. The inclusion of additions into the community such as speed bumps offered increased safety for residents, particularly the younger and older community members. This increase in safety would then positively impact their autonomy and their wellbeing. Overall, identified features of instrumental value and their resulting impacts from their potential inclusion into the community were anticipated as holding the potential to positively impact quality of life experienced by residents and the maintenance and sustenance of their way of life.

Identified impacts resulting from the addition of features contributed ranged from:

'Creating greater opportunities for cross-pollination with people near and far'

'An increase in openness and acceptance'

'Stopping people from having to leave'

'Growing the community'

'Improving the Environment'

'Sustainability'

'Increased sense of contentment'

'Increased social awareness'

'Increased independence' and

'Enhancing experiences in nature and the outdoors'.

These in turn were associated with an increase in contentment, better physical and psychological wellbeing, improved life satisfaction and reduced isolation.

39 cards were submitted to this category containing 49 responses. When exploring and analysing the data, it was interesting to find that the level of contributions to this question created an exact 50% split between identified needs of the community and the anticipated and/or experienced impact of solutions (Fig.40).

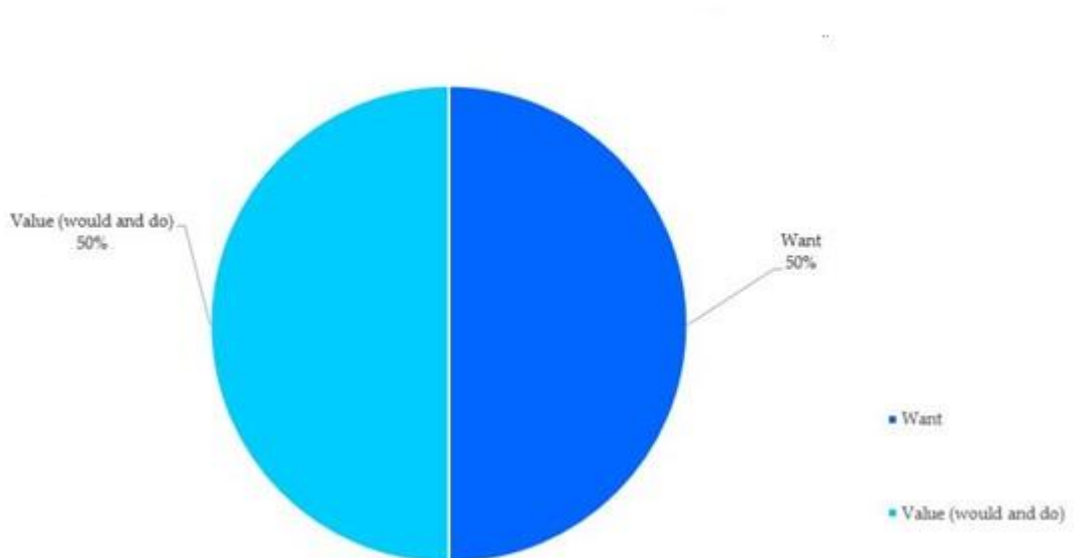


Figure 40. Percentage of Responses to Need/Want Frame Inquiry.

It should be noted that this did not arise from participants identifying a need, i.e better public transport, and then providing justification of 'reduced isolation' etc in the same contribution. The body of contributions itself were split by response. Some participants just listed features, services, businesses, activities etc that they believed would be of benefit in the local community. For example:

'Post Office' or 'Open the Train Station',

while other participants gave more detailed and nuanced responses which focused towards contributions such as;

'We would benefit from more affordable housing as it would encourage younger generations to stay in the local community'

or alternatively, they would make contributions which considered external perceptions of the currently available experiences and facilities found in the location such as;

'We have lots of community activities, People from outside are always shocked by the level of community support provided for projects and activities here'.

5.3.4 Impression

The frame of Impression was used to support inquiry around the environment and the local culture. This served to identify features and characteristics which the population valued within or about their local community. The main theme of data from this inquiry emerged as **Qualities** of which **People** and **Place** were identified as the sub-themes.

Overall the contributions to this category presented the participants' impressions and opinions of their immediate location and provided perspectives of a highly engaged and collaborative community with a culture shaped around being supportive, creative, helpful and caring.

5.3.4.1 QUALITIES: People and Place

People: Relationships identified were broad in scope, ranging from family through to neighbours and networks. However, the prevalence within these contributions definitely lay more towards social affections and interactions rather than immediate and personal relationships. The ways in which the community

and place itself was described bore similarities to the tone and terms used when participants had discussed personal values within their lives and were also reflective of qualities identified in the definition and values expressed in relation to their notions of community with phrases such as;

'caring',

'welcoming',

'friendly',

'everyone pulls together',

'strong community spirit' and

'close knit',

arising with regularity. As such it can be interpreted that the nature of the community shaped by the environment they created and their behaviours was a valued commodity to the residents.

Connections and relationships commonly found out with familial boundaries, such as friendships and the local community members or neighbours were all connected to the sub-theme of people. The contributions which fell within this category also identified qualities of individuals which impacted and shaped the relationships. Behaviours which were valued included being:

'supportive',

'caring',

'creative',

'welcoming',

'friendly',

'kind and considerate'.

Community spirit was also identified as a factor which aided the development of these kinds of relationships. Terms and phrases contributed which related to the

micro themes of emotional and/or behavioural constituted 21% of responses and generally corroborated opinions submitted to alternative inquiry lines.

The interconnected nature of the community was noted in observations and raised through contributions. In fact, it was this nature which had facilitated the research being conducted and had also supported the development of the intervention and interview schedules. Everyone knew everyone, and therefore word of mouth carried considerable weight and impression. Residents valued and trusted each other's judgement. Contributions highlighted how the nature of the community facilitated and supported '*care across*' and '*care for those in trouble*'. Community members were all valued and appreciated, and as such, were treated as being of value and worth.

Place: The location itself, through the theme of Place was noted as being particularly welcoming with a very nuanced 'personality' all of its own. Many contributions had a degree of personification in their presentation regarding what kind of a place the location was. For example;

'welcoming',

'friendly',

'quirky' and

'couthy',

were used in description of the actual location, not in relation to the residents, but the physical place itself. The heritage and history of the location was a source of pride. Factors including access to the outdoors were mentioned, along with aesthetical qualities found in the buildings of the community; its rich heritage and history alongside the social, intrinsically focused value which was placed upon its local wildlife and scenic vistas. It was presented as very family friendly and crime-free and described as a beautiful and peaceful place to live within. It was qualities of these kind which were valued by residents.

Anomalies among contributions within this particular theme included;

'drive-through',

'challenging',

'being intransient' and

'self-isolating'.

This reflected the general opinion voiced, that although a lovely area and community, it was often overlooked by people passing through as a good place to visit. These perspectives were informed and developed in response to negative factors which affect rural living, such as isolation, lack of transport, the failure and closure of public services and so on. There was, as put;

'opportunity to disappear and be forgotten living out with the city'.

This lack of external engagement was further compounded by a lack of suitable transport options and business opening hours.

Contributions shared a formed the picture of a location which was appreciated and valued not only for its local natural beauty, but also for its warm, fun, creative and open environment. The behaviours and attitudes of the residents shaped the overall opinions of the community and influenced how it functioned. Their behaviours also impacted and influenced perceptions and opinions of people (from outside the area). It was felt to be a neighbourhood that was creatively driven, entrepreneurial in spirit, and one where caring for neighbours, friends and those who live around the area was a highly important and valued quality. It was deemed as an appropriate environment for families to live within given the levels of safety expressed and this was attributed, in part, to the good nature of both environment and residents. The supportive qualities embodied and enacted by local residents was identified as contributing directly towards the strong sense of community spirit.

52 cards were submitted to this inquiry containing 92 responses. It was apparent throughout both the high level data sweep and the furthermore in-depth data analysis conducted that opinions around this particular area were strongly held and well considered. The majority of responses submitted were highly detailed containing multiple contributions. It was as though it were of the utmost importance to the participants that they fully and accurately represented their views about the location and environment and why they valued it so highly (Fig.40). It was also noted in observations that this line of inquiry drew more people over to the stall to converse with the researcher as they submitted their responses. They did so in order to elaborate further on what they had written. From the observations gathered during these interactions it can be said that the residents had palpable pride in their community, its location, its residents and the environment they had created.

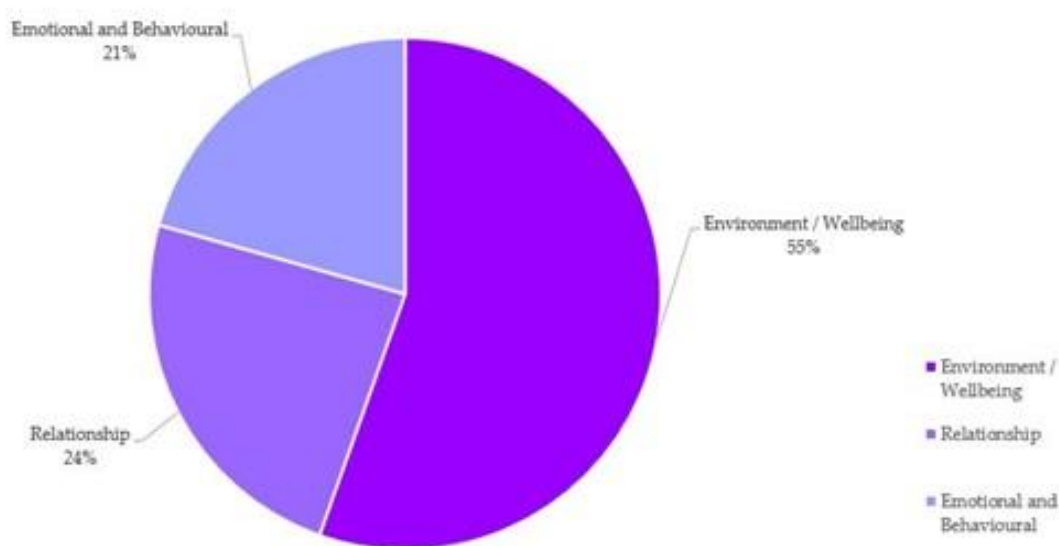


Figure 41. Percentage of Responses to Impression Theme Breakdown.

5.3.5 Experiences

This line of inquiry varied slightly from the previous ones posed. It looked to identify services, systems, facilities or groups within the community which were highly valued and to uncover rationales as to their perceived social value. As

such the major theme identified was **Attractions** with connected sub-themes of **Professional** which considered businesses and enterprises included in contributions, and **Public** which looked towards community based and community organised groups, events and ventures. Ethical boundaries laid out for this research body meant that information submitted in relation to valued community features was anonymised before being written up.

Overarching groups were formulated such as 'Business', 'Children's Groups', 'Reading Groups' etc and each submission, (after removal of any external identifying features) was placed into its appropriate group. The number of mentions made in relation to each location or grouping was documented which, along with rationales provided and observations noted, served to indicate levels of popularity (and how valued it was) by the participant group. Supplementary information provided within the contributions which provided the rationales for the attraction's inclusion were also considered within the identification of value. For example:

'[X] is an amazing shop, there's so many interesting things, and everyone is so helpful' or 'do you know that [Aimee] provides youngsters with activities and work when the weathers bad and no one can get anywhere'.

This particular inquiry received 61 submissions which collectively contained 107 responses (Fig.42). More often than not participants provided more than one response, and usually with multiples, the attractions were listed in order of importance from greatest to least.

5.3.5.1 *ATTRACTIVEIONS: Professional and Public*

Public: Within this theme the most popular submissions were focused upon community directed or community based events/groups/projects and services. They were a clearly appreciated and valued feature of community life. They positively impacted ideas and impressions of quality of life experienced and

enhanced feelings of community and belonging within the area. A wide range of options were available with suitability of the attractions and activities ranging across all age groups.

Community ventures were identified as the second most popular kind of experience within the theme of public and contributions highlighted how these ventures had carried positive impact into participants' lives, or into the lives of people they knew;

‘[.Mary.] gave me experience and that allowed me to have something to put on a C.V’, ‘Let me build some confidence up’, ‘[.John.] was really flexible and supportive when things were hard’.

This narrative around support and self-development became a regular tone of conversation around these particular kinds of ventures.

Creative activities and creative experiences fell across the themes of Professional and Public, as some were organised by community members while others were the outcomes, activities and result of professional creatives working in the area. Collectively receiving 14% of all submissions, creatively oriented activities and experiences gathered strong recommendations and were expressed as being highly valuable and valued across the community.

A particular community location was submitted which was revealed to be specifically creative and it received one of the highest documented levels of support shown in any submission made. In such a small community, this particular location was seen as key and central. It had supported the development and nurturing of the community and the sense of community spirit over the years and provided residents with a range of opportunities and experiences that they otherwise would have been without.

Professional: Contributions which were themed through Professional pertained to specific businesses which were identified as having positively contributed to

the community development. These contributions ranged from providing financial and/or material support and time to community events. Additionally, some of the businesses which were contributed were recognised as providing such a beneficial contribution or experience to the location and its community that it received social and personal value from the participants. Also identified within this area were services which provided indoor and outdoor models of education which complemented those provided by the local council. These kinds of opportunities occurred more rarely but were identified as being worth the wait and valuable to those who took part. They provided qualitative experiences and knowledge to those who took part and as such can be recognised as holding instrumental and immanent value within the community.

Interestingly the lowest submission rate belonged to technological systems within the community. They had an acknowledged role in supporting the community and helping with communication and interaction, and as such, reduction in isolation, but they were not deemed as being fundamental to the community longevity nor to relationship or community development. Technology was viewed as a tool with specific functions and purposes. It could tell people where to meet, or what was going on, but it was not used as a way to hold collective conversations. Rather, forums and online systems were implemented as electronic noticeboards. Technology was expressed as having a minor role in supporting communication and interaction, it was not attributed with holding a key or fundamental position. It was very much viewed as a tool to be utilised for specific purposes.

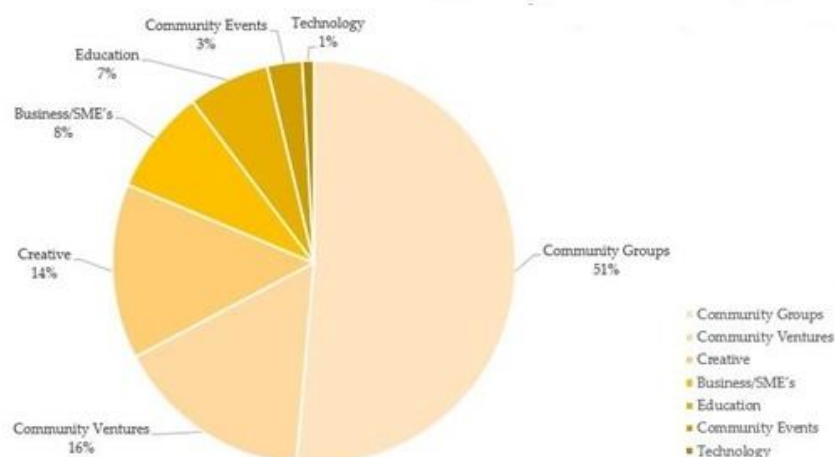


Figure 42. Percentage of Responses to Experiences Frame Inquiry.

5.3.6 General Observations and Reflections from The Community Interventions

The postcards allowed for privacy and were designed to be untraceable to participants. An interesting observation noted that more often than not participants would take a selection of cards and return with them completed at a later time. They would also wait and hand cards over directly rather than 'posting' them or putting them on the bunting. Some participants specifically requested their cards be made public, others, after discussion with the researcher about their contribution, would either post their cards in the box provided or ask the researcher to do so on their behalf.

Often participants stopped for at least 5 minutes to discuss their contributions. There were a few exceptions to this where participants stood for up to thirty minutes discussing their thoughts and opinions, ensuring that their contribution was understood in relation to very specific contexts. A further observation of this phenomena was that if the researcher was engaged speaking to one participant, another would acknowledge the conversation, then leave and return a short while later, thus allowing privacy for discussions. This was not a planned nor scheduled action. It emerged naturally and indicated levels of respect for each other's right to space and privacy.

The participants for each intervention came from a wide cross-section of the population as is discussed in Chapter 4, Table 20. At the first intervention the age range varied from the very young to the elderly. The participant group included: Parents; Single individuals; Whole family groups; SME and Micro enterprise owners; Crafters; Artists and Makers. The second intervention played host to Farmers; Crafters; Local community members; Older residents; Young residents; Santa Clause; A reindeer and Snowmen, all topped off with a small choir of pre-school children. The final intervention was hosted in the local community café where the clientele were mainly older residents or young families. It can be noted that this intervention as the only non-facilitated exploration failed to generate as successful and rich a response rate as the two previously conducted. This allows for consideration of the role of facilitation as a specific mechanism in drawing information from stakeholders and participants. Without the researcher present to engage directly with participants and members of the community, the pop-up version of the intervention did not produce nearly the same level of responses or engagement.

The rates of engagement encountered overall, did not correlate to the length of each intervention. A longer intervention did not result in a larger body of data gathered. Of all three interventions, the shortest, (the second intervention hosted) was by law of averages actually the most successful in gaining interaction and engagement with community members.

5.3.6.1 Inquiry Observations

The following observations were drawn in relation to Inquiries 1 & 2. Inquiry 1 focused upon what participants valued most in their lives, whilst Inquiry 2 sought insight towards communal perspective of community held by residents.

Inquiry 1 & 2: In a location where a stranger stands out a mile there is nowhere to hide. Residents in the location were incredibly friendly and ready to strike up a conversation at any time. The location appeared to be full of incredibly curious,

friendly and engaging individuals. When engaging in an environment such as this, with individuals who are as welcoming and interactive as those encountered by the researcher, it is important to respect and acknowledge this type of cultural behaviour.

The failure of intervention 3 on reflection, came as no real surprise. Given how willingly the participants engaged and interacted with the researcher in the initial two interventions, intervention three's distinct lack of personal connection with participants placed it against the behavioural norms of the community. This is also reflective of findings identified previously where relationships stand as a fundamentally valued factor within this group (In particular 5.3.1 & 5.3.2).

This small village was filled with people who smiled in the streets; said hello to strangers and stopped to chat. They were engaged in a whole new dimension of interaction. Each with words of advice providing guidance as to who would be good to talk to next and where might be advantageous to visit. Everyone had their own unique personalities but they were also clearly part of a community with palpable pride in their collective home. The phrase 'Small but Mighty' is a highly fitting description of the overall atmosphere. With very little funding, in some cases none at all, and with a very small level of tourist potential to draw external finance in, this village engaged with each and every opportunity to bring locals together. Activities ranged from music nights in the local bars, to craft events, children's activities, Christmas lights, floral displays, historical society gatherings, communal gardens and so on.

Inquiry 3: Inquiry 3 was focused upon identifying the 'needs' of the community, considering which specific service/artefact /activity/event did they value so much that they noticed its absence? And what this might identify about other aspects of life in the community. A striking finding exposed the levels of isolation which were felt.

A significant number of contributions gave indication towards isolation and as a collectively felt problem. This in turn raised consideration around isolation as a factor driving community interactions and engagement. And potentially as a motivator, supporting the alignment of collective behaviours and values along with influencing the bonding and sense of community spirit which was clear across the village's population?

It became apparent through both the initial analysis of this section of data, (combined with the spontaneous conversations which occurred during the method trial and the more in depth interviews conducted with the local SME's/ Micro enterprises), that for all the benefits which this community experienced, such as their high level of interaction, engagement and community centric focus, they did feel remarkably isolated.

Without personal transportation such as a car, the lack of provisions in public transport make it a very hard community to access. This fact has an impact on every generation from the young to the elderly. It increases complexities surrounding essential and non-essential activities such as being able to get to the nearest local hospital for a scheduled appointment. Plans must be made far in advance and when the already limited public transport fails to appear, is cancelled, breaks down, or when the weather becomes less than hospitable, it makes it impossible to leave the village. Any excursion requires almost military planning. There is however no lack of service points and there are (multiple) petrol stations nearby which makes it all the more peculiar. In addition, the village is host to a train station, where active trains do pass through, however they are unable to stop as this location is no longer on their destination list. It transpired that the train service to the community was halted some time ago as part of widespread governmental funding cuts.

Inquiry 4: Considered the individuals perspectives towards their feelings for their home and gave a much more subjective and personal expression of their values in relation to each other and their community.

Within the contributions made to this line of questioning a number of the more behaviourally and emotionally directed responses emerged. In a village so isolated from other areas, and yet so intrinsically connected internally, behaviours both positive and negative clearly carry impact. For example: The closeness and integration of all facets of the community generate interesting techniques for supporting and 'handling' wayward, possibly slightly bored teenagers who can occasionally cause mischief. The methods are less geared towards punishment and more towards changing attitudes, mindsets and behaviours. Teenagers are given responsibility to maintain areas and need to clean up any mess which they have made. They are given roles of responsibility across features of the community and are granted a level of ownership over these areas. Through discussion it became apparent that this approach has been well received and appears to be effective in supporting continued harmony of the village.

Inquiry 5: Allowed participants to identify specific services, groups, activities or projects in the village which they valued. There were a number of submissions made within this category with over 40 venues/activities/groups identified as being 'great' engaging and highly valued. When conducting the first two interventions, participants would stop to discuss the locations they had submitted, providing further information about their contribution and offering advice and suggestions for the development of the research based upon their own local knowledge. This behaviour resonated with the works of both Arias et al, (2000), Day and Parnell, (2003) and Bruce and Baxter, (2013) (discussed in Chapter 2.2), where developing an understanding and appreciation of location specific knowledge held by community members is identified as being of benefit and importance to the design process. Amongst information offered by participants were: Proposals of individuals to engage further with; Workshops which were ongoing and access points; Small businesses and enterprises and

direction to other potential candidates they felt would be well suited to the research being done.

Inquiry 5: Post-engagement phase it came to the researchers attention that the 5th line of inquiry should have been placed upon an individual card rather than the back of questions 1 through 4. It was a well engaged with line of inquiry and offered the potential to aid investigations around mapping community facilities.

As a small side note and contrary to the experiences found by the researcher at most other events facilitated out-with this research body, none of the equipment provided to participants went missing, everything was, without fail returned, even if a number of weeks had passed between visits.

A final general observation relates more towards the nature of the location. There is a very clear divide within the village. It is one which exists between those who have lived there for generations and those who have recently moved to the area but commute out of its boundaries for work purposes. It is such a clear divide that each 'faction' has their own name. There is a perception which becomes apparent through engaging with long-standing community members that those new to the area are not as engaged nor as invested with the community and its many different activities. This creates a clear point of contention for many community members and echo's findings from other collective social value studies which are indicative of the emergence of problems when behaviours, actions and values misalign or are determined as being incompatible (Abreu, 2006; Abreu, et al. 2008; Cannon, 2007).

The longer standing community members would on one hand prefer much greater engagement and involvement to occur but are also slightly reticent to any significant change happening. They would like to believe that with greater engagement the community would thrive more but have an imbedded belief that new people in the area won't and don't care as much as they do about the area's longevity, survival and community spirit.

5.3.7 Summary

This case study offered the opportunity to explore within a rural Scottish community personal collective and individual values. It also explored factors of value expressed across needs, wants, perceptions and experiences through inquiries which examined current, past and anticipated services and systems within the community. The community which took part represented an average rural location, with a history encompassing the rise of industrialisation and then the demise of industry, the exodus of population, and in current terms, a community which like much of the country has felt the lasting effects of austerity and governmental reductions.

What was somewhat surprising within this study was that of all the responses gathered (of which the total exceeded 400), money and finance received minimal mention. When it did arise, it was framed in relation to wellbeing, where financial security was considered as having an impact upon individual's levels of stress and concern. Beyond this, money and finance were neither raised during conversations held with participants nor were they offered in other contributions made through the boundary objects.

Consideration of the collective body of data gave indication to predominant trends of values and motivations found across the community. Results gathered indicated a prevalence of value placed upon connections and relationships which served to enhance the sense of belonging. These relationships shaped lived experiences and provided quality and positive impact across multiple facets of experiences had by participants. These relationships in turn were influenced and shaped by the behaviours and actions of community members along with emotions exhibited.

As Cannon (2007) presented, collective value structures can, and do, influence ideas and notions of acceptability and engagement in communities or collective

groups. They carry enough influence that deviation away from perceived 'normal' or 'acceptable' behaviours can result in rejection.

Connections and interactions were valued, they reflected expressed values focused towards sociability, engagement and a reduction in feelings of isolation. There was also a significant call for services, facilities and activities which could reduce feelings of isolation. Isolation was a significant issue which clearly influenced residents and impacted the area. Facilities and services to support independence and autonomy along with services which could positively impact the local environment were desired and valued. Additional factors which were indicated as contributing towards positive quality of life and were valued for their impact included communication and connection at local and global levels, along with:

'feeling at home',

'feeling safe' and

'the ability and opportunity to self-express'.

Appreciation for the impact that connections and interactions carry towards individual and collective wellbeing was apparent. Even within the internal micro-category of Skills, it was recognised that possibilities and opportunities and even businesses could emerge through connectivity with others. Self-expression, self-development and the growth of knowledge and personal skills could be enhanced through engagement and interaction with others. Definitions around expected and anticipated behaviours which were valued, were identified as compassionate, caring, helpful and trustworthy. There appeared to be an expectation of residents to hold similar values, and to enact accordingly, which collectively contributed towards a positive effect upon the social fabric of the area.

The contributions indicated that the community residents perceived their home as a positive environment to live within, one that required work and care, but

one that was worth the effort. Behaviours both observed and submitted were necessary to ensure the smooth day to day running of the community.

When viewed in its totality, the data gathered created further insights around motivations and key areas of social value found across the community. These tell the story of an integrated society that is supportive, where people feel they belong. Its rural location brings the benefit of access to, and experience of, nature, the outdoors, and historical cultural factors which the residents feel are beneficial for their individual and collective wellbeing and for their sense of belonging and heritage.

If we return to Maslow's 5 levels of human need, inclusive of: Physiological, Safety, Love and Belonging, Esteem and Self-Actualisation, the actions and values of the community align well across the board. There was less prevalence of responses which could be connected directly to practical physiological needs such as shelter, food, etc. What was interesting to find was that a prevalent feeling expressed and one which participants valued greatly within the community was that of safety. The location was perceived as being overall, a crime-free environment, where residents felt safe to

*'leave the door unlocked' and
'children are still able to play in the streets'.*

One contribution described it as

'A couthy place... a town that keep an eye out for its old folk (and drunks!) ... a place where kids still play outside without their parents...a place where folk give you a smile because they know you belong to [...]'

The values and factors of value expressed by residents and the behaviours and actions identified as preferential across the community, can be viewed as beneficial features towards attaining each of Maslow's needs. The values

expressed within this study also align with 9 of Schwartz 10 universal values (Table 12, Ch.3.1). The only value which very notably did not correlate from Schwartz work is that of Power, where social status, prestige, control or dominance over people and resources is highlighted. Given the collaborative and collective nature of the residents which was observed and documented, it would be surprising to encounter a phenomenon such as this within this community. The core behavioural structures and actions exhibited, would as Cannon framed, make actions determined as being negative towards the whole, very difficult to enact. In relation to this, it can be proposed, that new businesses, and those established in the community must be seen to align their actions and behaviours with the collective community value structure, in order to endear and encourage their support in the longer term, as actions which stand against the status quo will not be tolerated or supported.

5.4 Identifying Ideals: The Hidden Views of Businesses (Case Study 3)

The interviews conducted within this research body constituted a key component of the whole investigative process. They provided ideal opportunity to explore in greater detail and depth, values, perceptions and motivations held by business owners of SME/Micro Enterprises and key individuals from the community. (As mentioned in ch 4.4.3.1, a list of the questions posed during this phase is available in Appendix M, *m1*).

The interviews were all of a semi-structured design, with the order of questions and conversational prompts varying dependent upon the flow of the discussion and the participants' responses. This was predominantly an intuitive action as this happened in 'real time' during the interview. Questions and responses were also reflected upon post-interview and as such each one influenced and shaped the subsequent interview.

As discussed in Chapter 4, lines of inquiry were developed around 6 frames of:

- Personal and contextual information.
- Business Practice & Finances.
- Complexities & Problems.
- Experiences.
- Skills.
- Community.

In addition, general questions emerged over time, such as inquiries around legislative and regulatory requirements and potential avenues for future support. Shaping the inquiries around the above areas allowed for the creation of a body of data from which the following themes were identified;

- Influences: Drives and Motivations.
- Relationships: Networks.
- Impact.
- Skills and Experiences.
- Additional Factors of Influence.

These themes and the associated definitions and meanings were derived through analysis of the data from the interviews which was supplemented with observations undertaken at the same time. The businesses involved were all either Micro enterprises or Social enterprises. Each was run by a single individual with the exception of 1 social enterprise which was staffed by (at time of interview) 24 volunteers. All names have been changed to respect the anonymity indicated within the ethics.

5.4.1 Influences

There were a number of influencing factors and values identified when exploring why these social and micro enterprises had been created. Analysis of the data relating to influences led to the major theme of **Drives and Motivations**, within which three sub-themes of **Personal advancement**, **Ideological Advancement** and **Social Advancement** were identified. Each sub-theme was related to the value(s) which inspired the owners in their actions.

5.4.1.1. *DRIVES & MOTIVATIONS: Personal, Ideological, Social Advancement*

Personal: Personal advancement was attributed to values which emerged around personal growth and development. Predominant terms which arose included: Independence, Freedom and Autonomy and Happiness. The participants placed significant value upon their wellbeing and happiness and attributed their ability to be independent and to have the freedom to make their own choices and decisions as fundamental to their personal life choices (examples of contributions are presented in Fig.43, Fig.44 and Fig.45).

'You don't get told what to do, you have to get on and do it yourself.'
(Ethan).

Figure 43. Quote from Ethan on Motivations in being Self-Employed.

'to be able to support ourselves, not have to be responsible to, to not have anybody else so you know, we could, um, I suppose, just having a bit of freedom, have a cup of tea when we wanted a cup of tea, sit down when we want to sit down [...] because both of us working for other people, in retail tho, em, for years n years n years, and you can only have a break when they say you can have a break. I mean I found that hugely satisfying, it sounds like a very minor thing but then we would also make people who came in cups of tea, so it became this kind of big huddle thing and people would come in, you know [...] it was just about you know, having this table and having people round it, and people from all different places and people would come from Glasgow and these people would come from up the road and I'd make them a cup of tea and it was, that's what I think was fantastic and also just helping people. (Eva).

Figure 44. Quote from Eva on Motivations in being Self-Employed

'We wanted to work for ourselves, not for someone else' (Anya).

Figure 45. Quote from Anya on Motivations in being Self-Employed

There was also indication that an awareness of their own specific personality traits perhaps influenced their choice to work in a self-employed format rather than working for a separate corporation *'I'm not very good at taking orders from anyone else, just eh...I've always been that way. [...] For a few years I worked for other people, but never for terribly long.'* (Ethan). *'I'm just being, I'm a very independent person and so I had to go down that route'* (Bob).

It was also identified that the decision to be self-employed might support other life choices such as having a young family or travelling abroad or moving continents (Fig.46 & Fig.47).

'My job was previously working as a ranger, and then I had my family, so I was self-employed from that point until, when the kids were older, I went back to college [...]' (Kira).

Figure 46. Quote from Kira on Life Choices and being Self-Employed

or moving continents:

'we had been living in America, I was in America for 18 years, and while we were in America I had all sorts of visual merchandising jobs and opening stores and renovating stores and these sort of things, and then we started to, in our time off, we started to learn, well I re-learnt to knit, and Alistair learnt to knit and then we learnt to spin and weave and dye while we were there, and when we decided to come back here, at that point we were knitting things and selling them, little things. And em, when we decided to come back, we wanted to have a business' (Eva).

Figure 47. Quote from Eva on Life Choices and being Self-Employed

The opportunity and ability to do things differently, be independent and to work within the bounds of their own capabilities were noted as valued qualities and benefits of being an independent trader or being self-employed. The flexibility offered in self-employment along with the independence and freedom acquired from working this way supported lifestyle choices such as; Choosing working hours around life and commitments; Being able to take time off when you chose; Having the opportunity to follow personal interests and passions and Developing personal confidence and skills and The ability and means to be self-reliant through an action which was personally enjoyable , *it's been a good move I would say, wish I'd done it sooner. Met lots of very interesting people, some really lovely people* (Ethan).

Ideological: Personal and social values associated with ideologies and beliefs were attributable to motivations where the owner was very focused upon the benefits of the business for those around it. Within this, contributions were made which showed that the more an owner believed in the particular product/service they were providing, the more strongly they felt that it should be experienced by others, hence motivating them to develop a business (Fig.48).

'I just thought, I just love doing this and I wanted to share it with people, cause I just felt that they were such good products. So, I decided to try and build it up into a business (Anna).

Figure 48. Quote from Anna on Motivations in being Self-Employed

Market awareness and self-motivation also played a role in determining focus of the enterprises (Fig.49).

'I thought, eh, there was nothing like this here in [...] and I've always been a believer that if you put on a good show, the people will find out. [...] I believed in my own convictions,' (Ethan).

Figure 49. Quote from Ethan on Spotting a Market

These personal beliefs in markets/products/services were valued as they provided the impetus and motivations for the individuals to take their ideas and concepts forward. This implies a degree of instrumental value towards the market/product/service as a facilitator of motivation and drive in the businesses involved.

Social Advancement: Social advancement was not a singular experience, rather it implied a consideration for the advancement and benefit of the group or community. Although driven by personal motivations, actions were undertaken and businesses initiated for the good of others. Personal motivations were shared along with values surrounding social influential factors such as; The opportunity to share knowledge; To educate and contribute to the experiences of those directly within the surrounding community along with the experiences of the client groups and; To help support the continuation of historical skills and capabilities. *'the teaching was originally a HUGE part of it because it's what drove our sales, [...] it was a good thing, but also we, Alistair and I just love teaching. [...] we taught so many people, so many things, so it was a hugely, for us, a hugely, um, satisfying thing'* (Eva). *Teaching (of craft, traditional skills and knowledge) was an activity noted as having spread into the schedules of local schools and groups as businesses sought ways*

in which to engage and integrate themselves with the local community. It was also an activity which became sought after by services and facilities further afield than the boundaries of the community as word spread of how inclusive, engaging and beneficial the classes were (Fig.50).

that was the [...] Museum, yeah, At the end of it I felt like crying I was so, I mean they couldn't believe it, I mean people with Cerebral Palsy and they couldn't, all they could do was bang like that, at the end of it they had these things that sat up! like, you take the ball out and it's a vessel, one looked like a map of the world, it was fantastic.

Figure 50. Quote from Eva on Unanticipated Value of an SME

A further case where the social value and impact of a business emerged conveyed inclusion and connection as fundamental to their role. One social enterprise involved within this case study specifically drove all its efforts towards aiding and helping community members in whatever way they could manage (Fig.51).

What is the best, or better aspects of doing all this?

'Well, the social bit's good and also, we can, like, we've got an old folk's home, and they've got a newish unit now, that people are not necessarily old, but they've got learning difficulties, and they try to put them out of what would be maybe the equivalent of Liff? and get them into a more independent living unit. I think that they thought they would then move them there into wee flats, I don't see that ever happening, because they do need much more support, but it's just down the road there, n' some of them are allowed out on their own, and they can trot up here and I wasnae expecting that. Others come up with a career, and, we've got the time to spend with them, they could make the wee mess, whereas I could imagine if you were, money making concern...

Bigger businesses or restaurants, they don't like it?

Yeah, they don't and you know, young mothers with families, and prams and kids either...

You wouldn't be scared to come in here tho...

You get to know them and they come around and they pick the flavour ice cream they want, they clear dishes for you, and they want to help. And we also have, not as much cause they're back at school, but during summer and the October holidays, you've got the teenagers will come in and volunteer for a couple of hours and they get to share whatever's in the tip jar, I mean its volunteering, but they get, I mean I know even now, £5 to a teenager now is nothing, but still...

Figure 51. Excerpt from Interview with Beth on Social Enterprise Impact

5.4.2 Relationships

There were a number of relationships presented as valuable across the interviews. Each type of relationship brought different meaning and impact to the business and to some degrees, the success and longevity of their markets. The major theme of **Networks** was built around relationships formed across three sub-themes of **Personal**, **Professional** and **Community**.

5.4.2.1 NETWORKS: *Personal, Professional, Community*

Personal: Relationships fell into categories of personal and professional value across the interviews for a number of reasons including the support and aid they could provide, both emotionally and practically.

One business in particular noted that a previous experience had only been possible as it was a joint venture undertaken by both herself and her then husband. They had developed a strategy where one worked part-time each morning elsewhere, before focusing upon the joint business, while the other worked full-time but would then come to the premises in the evenings and at weekends where together they then both taught classes and hosted activities. It was described as a particularly difficult and tiring situation; however, it was one which led to success with the business in a very short space of time and was referred to with fondness. This placed personal value upon the nature of the relationship and embedded that value into the narrative of the business development making it considered to be a collaborative labour of love.

Personal relationships were also valued for the support they provided to the enterprises in their earlier days. Through buying products, making requests for products and through recommending the business to others, personal relationships were viewed as valuable towards marketing and advertising and generating a customer base.

Personal relationships external to those of the enterprise owner also arose within this theme. Being able to witness and create positive experiences for client groups

of families and their friends allowed the participants to witness their impact on these relationships. (This was particularly the case with the creative enterprises). One participant discussed how much enjoyment she felt when hosting a class with children which drew their parents in through the process. Experiences like that made the social and human value of her work visible and gave her a sense of fulfilment (*Kira*).

Personal relationships were also noted as having the potential to negatively affect an enterprise. If for example a relationship ended, where previously additional benefit and instrumental value of the relationship had been found in accessing particular sources or additional networks, the conclusion of the relationship which had supported and facilitated these factors resulted in a reduction in contact and access to the sources. One documented example of this resulted in a fundamental shift in the business structure. The venture which had been both a cash business and an alternative currency business was directly affected by the end of a relationship (Fig.52),

*'When my boyfriend and I split it was a bit – oh sh*t! and it made it a bit more difficult to access things. I wasn't travelling up to there [where he had stayed] anymore, which meant I had to rely upon a different model of sale. [Then the supplier changed policies] and it became not worth my while. I eventually had to switch to a purely cash business which I eventually had to pull out of all that' (Anna).*

Figure 52. Quote from Anna: Personal Relationships and Impact

The breakdown of the relationship led to the business shifting its entire currency model twice, and then finally folding due to a lack of financial capacity.

Professional: Professional relationships were valued and appreciated for the support and guidance they could provide alongside the ways in which they 'enabled' others. Enabling could take many forms including supporting the sale of goods by providing an outlet where products could be purchased. These relationships included individuals such as accountants, wholesale retailers,

inspectors, business gateway specialists along with fellow micro enterprise owners, (Fig.53).

'there were several who did, Eva in [...], she ended up actually taking some of my things into the shop and she was very good at kind of like, promoting what I was doing, and I did the stalls at the makers market for a while, and there were several other people like that who I connected with (Anna).

Figure 53. Quote from Anna: Enablement

Within these networks instrumental value was also attributed to individuals working for local councils and regulatory bodies for the support and guidance they could provide to those who were developing new (and sometimes established) enterprises (Fig.54).

'I mean when the chap from the environmental health first came in, you know, and they're there to help you, they dinnae come through the door to close you down, and they come in the door to tell you what to do, and what's right and what's wrong, which is really helpful, because I mean, you've got basic common sense, and most o' it is common sense. You know, but em, I mean the just basically, I mean there were one or two wee bits and you've got to do this, and you've got to do that and em, aw your different colour chopping boards and, you know. And then they come back to make sure you've done it aw and then send you out your certificate, so there's aw these things that you dinnae think about when you first open the door, but in saying that, you have to do it, I'm glad we've done it and em, it was a lot more straight forward than em I actually thought.

Figure 54. Excerpt about Support from Beth

Failure to act transparently and honestly could also negatively affect the perceived human value and social worth of another party. This was particularly prevalent in situations where financial considerations had arisen (Fig.55),

'we had a couple of problems with suppliers, [...] they started like we did, on a small scale, and then going big and selling wholesale, and we were buying at a price that was lower than the customers could buy, [...] like you could buy as a, just as a retail customer, but eventually you were buying it lower than I was buying it, because they hadn't made a wholesale price, a retail price. [...] We've encountered that twice from 2 suppliers who I still deal with, but we had a big um falling out about that cause I realised I could be just buying it as a retail customer, I could be buying it for much cheaper, and so supply issues like that' (Eva).

Figure 55. Quote from Eva on Trust and Honesty

In this specific instance, the personal, human value attributed to the party related to their trustworthiness. In concealing key information from the business regarding other possible supply routes (and as such, cheaper finance), they lost their instrumental value to the business (the value they had gained by being a supplier) and also their human, personal value (which they had gained by being trusted by the business).

Community: Community was a term which was raised throughout each of the interviews although definitions were found to vary. Its range covered residents within the local area, close business related networks, similarly minded people working in creative industries, networks further afield and client bases. In all cases the community was a very valued, important part of the enterprise ecosystem. Of particular note was how much the quality of reciprocal relationships of support which developed over time were valued. Residents were appreciated

for contributing towards the instrumental value of the enterprise through trade (Fig.56),

'They're very good, they'll come in and buy a card or two, thank goodness, as I say, you can come in here and spend £1.95 and still go out with something you've got to use, and they're art cards, so people come in and buy them and put them in frames, you know, because they're lovely cards. But yeah, the local people have been very supportive, they've tried to come in here as often as possible, buy things, they buy gift vouchers and give them for weddings or anniversaries, so even if they can't choose something, they give them the card [...] and they can come in and use it towards something, [...] even if they just bought a £50 gift voucher, somebody wants to come and spend, you know, £200, at least they've got the initial £50 to start. They're good, I've been delighted with the support, it's a good town

Figure 56. Excerpt from Ethan on Local Community Support

and also acknowledged as providing more immanent value to the enterprises through levels of social connectivity, support and letting people feel at home (Fig.57). The businesses noted increased satisfaction and happiness with their work as being related to the positive levels of community support and engagement they received. This in turn enhanced motivations to engage with the local area further in order to reciprocate.

it's very supportive, and I get, you know, there's a craft group and there's a knitting group and all that and you know, they've been supportive, just helping, yeah and I do things for them, and they do things for me, yeah, you know, they put me forward for things and working in the school and right, so they've been supportive.

I'm, you know when we came we, because we realised that there was this, there were a lot of new, [...] people, but they weren't, it was funny because this place was completely different when we came and they were just beginning to do things, change the housing and paint it and that, and what we thought was right, we can see this divide. What we're going to do is we're going to put stuff in every coffee morning, prizes. We're going to do, if they want us to help, we'll help, and so um, we set up little stalls, did felting with the kids and some of their big activities.

We've done felting with the kids, we've done it down at the school, showed the primary 1's how to spin on a wheel, every year and that sort of thing. So, we did a lot and we just kept doing it even though, it was 'oh we don't want to do it' because most of the time it would be on a Saturday or at night and that's paid off and that has really paid off.

So, I feel like we've integrated ourselves really nicely and there's still people who don't come in, tho they did when we lost him (Nicey) [the cat], and they did when we got burgled and they did when we got our windows smashed. People came in who don't shop in the shop and asked 'are you ok?' and the fact that, people did that, and that was really nice. But yeah, we thought that was very important, just to get, is to get accepted by the community.

Figure 57. Excerpt from Interview with Beth on Relationships between SME and the Community

Lines of communication with communities varied and it was also noted that the shape of communities connected to the businesses were changing and evolving. Previously mailing lists for example would result in an influx of customers to one of the businesses, which would by proxy positively impact the local business community. *'we used to just rely on people coming from all over and we had a massive*

mailing list, 4000 people on our mailing list, posting mail, it's different on the email, but as soon as we would do the posting, people would come and flock and then all the businesses would benefit' (Kira). The advent of technology and in particular the internet was noted as having directly impacted and influenced client based communities (This is discussed further in 5.4.5 Additional Factors of Influence).

Immanent values were expressed in relation to the local community of residents for the support which they provided which manifested in a number of ways. One social enterprise touted 24 volunteers who all lived nearby as highly engaged. This particular situation was very much a reciprocal one. There were identifiable benefits for both the maintenance of the social enterprise and the personal development of the volunteers. The underlying principle of the social enterprise was to support and create a steady flow of income to support future community ventures. It was modelled on being social, pleasant and inclusive and aimed to provide opportunities and experiences to local residents (Fig.58).

1 in particular, she's, her wee girls now at school and she's, and her confidence, you know, em, and just some retired people do, do a few hours in, everybody's got different skills to, but she's great. Ach n they're making, it's just sociable and, I mean, what would I be doing, sitting watching loose women n, you know, to me, and even for the older folk that come in and help and I mean I've got one girl, and she comes in and she's doing her Duke of Edinburgh, so she's to do 2 hours volunteering a week, so she does that, eh, another young, well and older teenager, 19/20, and she was between jobs and came in for a while and when she was able to get a job we were able to give a reference, so, I mean, It gets them into a routine, you know, so, It could be, It could be developed a lot more in that sense, but, I'm just letting it evolve, and serve what other purpose people want it to serve. [...]

If I could say, right, I would really like to, source more, I mean we do even cards, that folk make locally, or jumpers or necklaces, you know an outlet for eggs, jams, an outlet for what, we did the plums, we did the apples, so anything that anybody crafts or fruit, or jam, anything that they want to sell could be sold here, they could either take the money back or donate it to whatever. So that side, I would like to you know, and em I've got a lady who, she's knitting these wee things, They're just wee Christmas puddings, they're Ferrero Roche -, and people just have them for their Christmas dinner table, so you know, a lady came in with them, you know, but it's just having the time to chase people up and, because so many people think they're no good. it's all 'oh naebody, no one,' and I say 'they would! They would' I mean it's no gonna turn you into a millionaire, but it's gonna make you useful and you've got something to do and, em, so eh and we're able to use it too, and we're able to use it more. I mean, like the raffle in the window for the fundraising for the lights, we could use the window space for anything, you know there's a girl who does wedding cakes, the most beautiful wedding cakes that you've ever seen, and you know, I was going to say to her, I mean I think she gets probably enough to do, but if she wants to do a mock wedding window & display her cakes, birthday cakes, anything, well maybe everybody doesn't know that, but it would be an outlet for her and em, and if folk did things like that then, they can have the window free and if they want to put a donation into the Christmas Lights then they can, you know there's no hard and fast rules.

Figure 58. Interview Excerpt – A Story from a Social Enterprise

What was particularly interesting with this specific model was the extent to which its values aligned with the identified community values. Upon further investigation it transpired that key community members were the driving force behind the enterprise, hence the emergence of similar value alignments. The enterprises also presented and communicated some of the values (both instrumental and immanent) which they believed they brought to the community as aligning with ideologies of localism, affordable products, engagement, an appreciation of subcultures, knowledge of heritage, development of skills and a sense of community.

5.4.3 Levels of Impact

Running a micro or social enterprise carried impact across the participants' lives. Within the major theme of **Impact**, sub-themes of **Personal**, **Financial**, **Opportunities** were identified. The enterprises involved were attributed with positively impacting for both the owners and the wider community through providing positive experiences.

5.4.3.1 IMPACT: Personal, Finance, Opportunities

Personal: The personal effects of running an independent enterprise on participants ranged from positive to negative. It was acknowledged that many of the enterprises had, particularly in the early days, needed participants to work at least part-time in another position until the business developed. This was seen as a valuable life experience; however, it was also noted as having an impact upon quality of life, and overall life/work balance. More than one participant noted having to hold down multiple jobs while trying to set up and develop a business. This in turn left no time at all for anything else. However, having worked so hard to attain their current positions it was unsurprising how much the participants each valued their individual ventures. These were businesses that were deeply cared for. That had been cultivated and nurtured over long periods of time.

The enterprises were valued for the personal and external impact they had across quality of life experienced. Each of the enterprises involved in the interviews self-identified as life-style businesses. Their predominant focus was geared towards experiences rather than profit driven growth. Their enterprises positively contributed towards their perceptions of their quality of life, influenced their sense of wellbeing and were valued as positive endeavours which they loved to do. They were formed upon the basis of strongly believed and held values and principles, of personal, social and ideological premise which supported the participants in identifying the importance of what they were doing, both for themselves and for others.

Working in a location where a number of the businesses were SME or Micro in scale meant that they found themselves working alongside likeminded people which was also seen to be a valuable experience.

Financial: As lifestyle businesses, each aimed to generate enough in profits to maintain their lifestyles. The businesses appreciated turning a profit, and by doing so, engaging with something they loved, was an additional bonus.

Financial insecurity is a really big issue and, concerns at that scale can and do impact upon creativity and how well other factors do. Lacking financial capacity to work full time is also recognised as detrimental (Fig.59 and Fig.60)

'Making things into something that doesn't look homemade, into something really professional, I just didn't have the money, or the expertise to do that bit, but without that bit it was quite difficult to take it from being something evolving from a hobby into something that was a full time business' (Anna).

Figure 59. Quote from Anna on The Pressures of Financing

'Alleviating those sorts of pressures, like having enough money to pay the bills and not having that concern, that affects quality of life [...] I think, running a business, it's very difficult when you've got lots of other concerns, and em, so, you know, it helps when your head's clear, put it that way, clear of other worries and pressures, you should. Running a successful business really does absorb a lot of one's energy. So, keeping healthy (Physically and Mentally), as I say is really very key to running a business (Ethan).

Figure 60. Quote from Ethan on The Pressures of Financing

Opportunities: Each enterprise involved in this case study had a different focus. However, every one of them valued having the opportunity to do what they loved in order to generate an income, whilst simultaneously supporting and aiding others. To them, their businesses held and embodied instrumental and immanent values. For example, one enterprise was particularly focused upon people working in the creative industries and within that area, their main line of focus was towards young art graduates. The ability to give emerging artists a starting point and to offer them real life experience was considered to be very important at a personal level. The perception was that the value to the students was the real experiences being afforded to them, while the value to the enterprise ranged from having good and interesting stock, through to being able to appreciate that stock for its aesthetic qualities (working in an environment which exhibited artefacts they considered to be well crafted and/or beautiful), through to being able to split profits generated from eventual sales. The enterprise in this particular case held a strong opinion that that the universities were failing to adequately prepare students for the realities of working in industry and it was this opinion which had grounded, shaped and influenced their decision to engage and work with such a particular group (Fig.61).

'I literally went, used to go to all of the graduation shows, used to get a lot of artists from [,] I used to exhibit their work, try and help them out. Not easy, cause they get fed a lot of nonsense. And also, of course when their doing a degree show, they're painting on HUGE canvases that, which is their one opportunity to, which no-body, anybody, can put in their homes, because they're way too big for anything else, but, boom, loads of pezaz for a degree show, but, then I've got to try and convince them to paint smaller, continue painting, because they lose their impetus very quickly, cause, they're, all of a sudden they're in the, they've got all these dreams and aspirations and then they go - wow, nobody wants to buy my work. They're not prepped by the tutors as well, and also, so many tutors try and, they want, they're trying to mould that person into what they want, what they want to see them produce, not actually allowing them to find their own way there, you know, and that annoys me.

Figure 61. Excerpt from Interview with Ethan.

An additional valued feature of running their own businesses expressed by participants was their appreciation at having the opportunity to raise awareness of key issues through their lines of work. Focusing attention towards factors of environmental sustainability, through product use, craft development and educational lines supported the participants in reflecting their own personal beliefs about the world to others (Fig.62).

'I make a big effort to have minimal environmental impact and that's a big part of what I do [...] There's an awareness raising thing there, like if I'm working with the earth pigments, there's always a story behind it as to why, the history of it, and how these were the original paints and how these are non-toxic materials which are inert, compared to artists' pigments, which can be, you know, talk about cadmium, but people usually ask questions about that because they don't know that usually, but not in a teachy preachy way, it's more like it comes through conversation, but the message is always there and it's just because it's my own interests (Kira).

Figure 62. Interview Excerpt from Kira

5.4.4 Skills and Experience

Participants' pre-existing knowledge, their cultivated skills and personal and professional experiences were identified as a major theme of **Skills and Experiences** valuable influences towards and upon their current ventures. As such **Skills, Capabilities and Previous Influences** along with **Rewards and Self-Creativity** were identified as micro themes for discussion.

5.4.4.1 SKILLS AND EXPERIENCE: Skills, Capabilities and Previous Influences and Rewards and Self-Creativity

Skills, Capabilities and Previous Influences: The participants involved in the interviews had each transitioned to SME/Micro enterprise ownership from a different background. As such there was an extensive set of skill and knowledge possessed across the group. Each of them valued their previous experiences and perceived them as being beneficial to their current positions.

When considered closely, lines of connection between previous employments and experiences could be seen reflected in the models of the enterprises they had developed and were currently working within. For example, Beth, who ran one of the social enterprises and whose primary focus was towards creating an environment and culture of sharing, support and positivity, in her previous life she had been a social worker. It was following her retirement that she had taken on the enterprise and that had now become her main focus. Through it she was endeavouring to support and nurture the younger generations of the community in a very practical way. This was reminiscent of her work with troubled youths during earlier years. This background also influenced the ways in which she navigated challenges with some of the residents youths *'I'm a great believer in everybody can contribute something, everybody, really, no matter what their ability, age, they've all got something, and get them a wee job or ask them, I mean I've got this wee chap in his 70's and the boats, when they get a bit scab looking I'll say to him, those boats need a wee paint [...] and you can include aw sorts, an everybody does a tiny wee bit and it just keeps things tickin over you know'*

Ethan, who ran a micro enterprise which aimed to support young aspiring creatives, had a background in creative practice having studied interior design and other crafts. He used his visual eye to create what he hoped was an appealing environment (Fig.63)

'I reckon, yeah, it's much better than, you look at some shops and you can't even see in them because they've got so much stuff slapped on the windows, or, they just, I don't know, to me, this is a touch of class in here. You can't drive past this place at night and not go - oh, that looks nice, cause it does. It's in what is a pretty grey, grey, world, don't get me wrong, [...] is beautiful and it's got lovely architecture, but you know, we're in winter, it's nice to see something gleaming in amongst all of that, full of beautiful things and colour and yeah, to me, that, that always brightens people up. (Ethan).

Figure 63. Excerpt from Interview with Ethan

His knowledge of art, of design and of composition influenced directly which pieces he agreed to sell. His personal student experiences also influenced his decisions around the market model he developed. He provided an experience for others which he would have valued himself and produced instrumental, immanent and financial value for others and himself by doing so.

Having experience in interacting and engaging with a range of people from different cultures, with different practices and interests was also raised as a developed skill responsive to personal and collective experiences.

Sharing personal experience such as skills core to specific lines of work, or skills which enabled practitioners to create objects of their own were identified as highly valued opportunities afforded as a result of being an SME/Micro enterprise. At this stage values were associated clearly with the emotional and physical benefits which could be gathered from the experiences, rather than the financial worth of any of the artefacts created or that the business model generated.

Being able to provide actual experience and support for young people as they navigated industries was also raised as a valuable factor. Early career students benefited from the knowledge of business owners and gained insights which they were able to then apply to their own practices moving forwards.

Rewards: Health and wellbeing were amongst attributed values which could be associated to ventures. The social, cultural and close nature of relationships which developed as a result, coupled with the sense of wellbeing gained through running the enterprises were identified as bringing the owners a sense of wellbeing and happiness. The reward for their hard work as such, was seeing customers and clients' desires being met. Values associated to the sub-theme of reward were also connected to engaging with other enterprises, and/or other communities in pro-actively contributing towards environmental or societal wellbeing.

Self – creativity: The tactility of products and materials; Providing an experience (often attribute to both the environments created by the premise of the enterprise and also the experience of travelling to the location as an outing for customers), The energy to be creative; Sharing skills and knowledge and Inspiring people through giving them new opportunities and experiences were all considered to be valuable components connected to the experience of running a micro/social enterprise. Indeed, the micro-theme of education was rich with examples of where the businesses were contributing towards the development and sharing of skills and knowledge. In one enterprise, a foundational component of the whole model was based around teaching. There were no age limits, nor pre-requisite skills, the business benefitted by sharing the knowledge of how to use and implement its tools. The owners valued the pleasure they gained through watching and supporting new clients as they developed knowledge and the business benefitted through creating future clients.

Other valued factors related to the businesses were identifiable through micro-themes around education and learning and local heritage. Most of the enterprises

provided some form of knowledge sharing and in some cases knowledge exchange with the local community and their client base.

5.4.5 Additional Factors of Influence

Within the data gathered during the interviews and through the observations, realities of having an SME, Micro or Social enterprise came to light which were not directly attributable to values or motivations but did clearly impact each venture. As such they are documented below to give indication towards some of the complexities which are faced by those working within the Micro/SME sector.

- Big business is perceived to impact smaller trade lines in a number of ways, not least in the pricing of products , *'you have to do a lot of educating when you're, you know, for example I was, I sold a lot at the farmers' market, [and] some people would say, why, why's it more expensive? when you can go to Tesco and buy cheap shampoo, why should I pay more, so then you've got to do quite a lot of explaining to do'* (Anna). Big companies can buy in bulk which lowers pricing. Items are not as rare, nor do they often have the same levels of craftsmanship nor skill involved in their creation, another factor which impacts cost. The consumer market has created an environment of low cost and mass production which smaller enterprises struggle to compete against. (The emergence of mass production and the impact of industrialisation is discussed within ch1).
- Problems with factors of scale go beyond big business and spread over into legislations and regulations. They also impact on things such as VAT registration *'we then hit the VAT threshold quickly and that changed everything and then we had to do payroll and all of that so and had been a business we really loved and it was easy to be in, Alistair's time was tied up with all this other stuff which he couldn't stand. That was really difficult, I mean we never really, I mean the business was always about the same size, it was in that shop up there, but we*

were bringing in more money, we needed more people, but we were, I felt, heavily penalised for doing so. So, I've cut right back, the business went down anyway, so I've managed to get it under the VAT threshold, and I'm really trying, ok I'm going to try, it's not at that point yet, but I'm really going to try to keep in under the VAT threshold because it just changes everything. Your levels of paperwork and responsibilities for it is just awful (Eva). In more than one enterprise, very intentional actions were taken to ensure that VAT thresholds were not breached as it was felt that the legislations and regulations in place took a lovely business and made it into a '*glorified tax collector*' (Ethan). When large companies exceed the VAT bracket their profit margins can allow for the bills to be paid comfortably. When a smaller business breaches the bracket, but only just, they face significant work and charges to fall in line. This makes the process unattainable and results in it being avoided.

- Alleviating financial stress and concerns can affect perceptions and attitudes towards complexity no 2 surrounding the problems involved with tax and legislations in the entirely opposite way *'I'm so pleased, last year, for the first time, I actually had to pay some tax because I earned more, I don't view it as a burden, I'd be happy to pay tax because it would mean I was actually earning [...] It has bugged me all along, that since graduating it's been a struggle to get even up to the level of personal allowance allowed in terms of income, so it became a symbolic kind of Yahay! I'm paying tax this year!'* (Kira). Being an SME, micro, sole enterprise owner or being self-employed comes with a degree of unpredictability. It can be a situation of feast or famine in relation to workloads. Financially this creates an unsecure and unstable environment to live within. This is particularly notable when external factors such as mortgages, bills and family are reliant upon the generation of a suitable level of income.

- The lack of suitable and accessible support in both financial and in practical terms necessary for sole traders to work on skill development which would enable them to compete more effectively in contemporary markets has a direct impact upon the survival of some independent traders. *'Funding, funding for time... if I was able to get some kind of funding to, for moving things forward...The contracts have dried up so much I need to do something. I need to generate business and I need to generate it beyond where I am now. To be honest I think most of what I've got the last 10 years has been word of mouth. I'm assuming I'd have to figure out how myself and do it online, but the funding would provide me with time'* (Kira). The reality is that each of us requires some form of income to survive day to day. When working in such unpredictable areas, relying upon lots of short term contracts does not provide financial security. Funding would alleviate stress and worry about the day to day survival and allow greater focus to be placed upon the development and evolution of the business.
- Markets are fluid and flexible and businesses can thrive and fail unexpectedly. Having the means to diversify and change approaches and strategies is both beneficial and necessary to ensure market success. An anomaly exists around beliefs that success should be sought through only focusing towards a narrow consumer market. In reality however, some independent traders and micro enterprises actually require to take quite a wide sweep with the products or services they offer in order to ensure their survival *'I did sometimes think, I just really need to concentrate say on one thing, like, shampoo, or moisture cream or perfume and just do that. That would have taken again, a lot of investment, to actually do that to specialise enough and to get a market, where as the stalls I was doing, everybody came up and said, 'do you have this' or have you got that, and if I just had one thing it would have been quite difficult to make any profit'* (Anna). This is a highly arguable point as in the development of business models the advice is to identify your market and

shape your offering accordingly. Being too widely diversified can stretch capabilities too thinly, however, when trying to gain work and contracts the ability to be flexible, adaptable and able to change tracks at short notice can make a more appealing offering. It also widens the pool of available work that can be sought.

- Deciding to maintain the scale of an enterprise or business at a smaller scale is perceived to reduce stress and complexities which may emerge in the business. This also relates back to complexity 2, surrounding legislations and tax obligations (A lower profit line reduces the levels of legislation and tax encountered) Four participants all at one point or another presented a variety of problems which had resulted from having employees involved in their enterprises. None of the situations discussed were successfully resolved. This led to the consensus that although it resulted in higher workloads, remaining small, independent and a sole trader was the preferable option in the longer term. *Rural* locations are different to urban ones. The environment, culture, behaviours and attitudes of residents are not the same as those found in cities *'There are a lot of people who do do things, and who make things that they enjoy doing I think, more so than the people you meet [in cities]. There is a different attitude to life, not necessarily slower, just different and I think there is more dependence upon, maybe not dependence, but the networks here are really quite strong. Everyone knows everyone and people go by recommendations.* The nature of relationships found in rural areas showed strong connections existed with a wide range of people. The lack of amenities and services which are prevalent within urban areas seemed to inspire participants to take up activities and hobbies, which they in turn would share with others. It was noted that isolation was a theme which arose repeatedly across all aspects of the research conducted. It was also noted that the levels of engagement witnessed appeared to be treated as an antidote to said isolation. A

small rural area with a limited population and limited access to more populated parts of the country resulted in a collective, collaborative and companionable atmosphere. People made time for each other, be they friends or strangers.

- Technology and the internet have significant negative and positive impact upon Micro enterprises and SMEs in rural locations *'When [X] opened it attracted people from far and wide because they were doing specialist wools and stuff that wasn't readily available anywhere else. But [...] a lot of other places have opened up and people aren't travelling the distance to come here because they can get it online, so as you see, she's had to shrink the business [...] I sell things from the net sometimes, but it's normally someone looking, spotted something, then they'll contact me, and then we'll really chat but I don't do the shopping basket. No, no, you can't do a purchase online, because, it's for me especially, paintings and art-work, you need to see it'* [Ethan]. *'Online has had a big effect, I don't think it's maybe effected everyone else as much as it's affected us because we were selling yarn and yarn's a big thing to buy online and everybody's selling it, from warehouses and no overheads and no I don't know, it's a difficult business but this part'* (Eva). The spread of the internet and growth of online shopping has been recognised as having had considerable impact upon urban highstreets, the same can be said for their impact upon rural communities. Online stores do not have the same kind of overheads as faced by sme, micro or sole enterprises. They do not have to pay for a store front and all the expenses which are wrapped up in that package. This in turn impacts costs and profit margins. They are able and enabled to ship works globally with little effort and can access an enormous market with the click of a few buttons. Limitations around the availability of broadband across rural areas has been seen to impact rural areas and their ability to stand on a level playing field. It is accurate to say that people do not travel to stores in the same manner they did previously as pointed out

by Ethan. The internet makes things accessible from the comfort of your home. When a community is hard to reach, with no meaningful transport system and when it will take time to travel, particularly when weather is inclement is it any surprise that customers decide not to travel far and instead shop from more easily accessible sources.

- Rural communities need to develop a better understanding of the actual value that SMEs bring (regarding financial and instrumental value), and the hidden values (the immanent/instrumental, social and personal human values) which are spread across the entire experience including environmental and sustainable impact, localism, supporting community trade. Often the only value provided by SME, Micro enterprises and sole traders which is communicated resides in realms of fiscal growth and monetary gain. SMEs and Micro enterprises in rural communities provide a plethora of benefits for their local community (and as is discussed in Ch1, the wider nation). Stories of their actions and communications regarding the additional, personal and social value of these institutions is not however communicated easily with their surrounding community, nor the wider populous.
- As an SME, finding support to protect your IP and business models is really difficult and is a problem which needs addressed. *'You know what's happened to me a couple of times with clients, is I've gone in and done a couple of courses for them, and then a year later I've found that they're running them themselves, and I've thought, I don't know if I should be grumpy about that, or pleased that they're spreading the word about the thing that I was interested in, and then thinking, hud-on, no that was intellectual property, I did all the research for that. The techniques are simple but the idea wasn't. Like this stuff, I did all the development work on that, accessing it's easy once you know what to do. (Kira).* The process of obtaining IP is long, drawn out, and seen as convoluted by

many of the participants. Often the advice given is 'rather than trying to protecting your IP, aim to be the first to market'. SME and micro enterprise owners are often left to their own devices with regards to protecting their IP and in ensuring no one steals their ideas. They are also self-reliant when it comes to protecting their own work. With limited time and resources, it becomes very difficult to both check that no one has copied or stolen work, and mounting legal challenges against larger companies is, for many, a financially unfeasible option.

- The economic crash was noted as having impacted and affected the needs of SMEs to diversify and develop their businesses. In some ways the drive to innovate was seen as beneficial, however fiscal impacts meant that there was a lack of financial capacity. In a financially turbulent time, where priorities are focused towards ensuring bills are paid and that needs of those reliant upon them are met, finding time to innovate and develop new ideas and proposals becomes a luxury. The focus is geared towards ensuring that the financial flow keeps delivering. Reduction in clients (less money to spend, no wage increases, less likely to travel due to financial restrictions), had led to a number of closures within the immediate vicinity. less traffic passing through the location also had a direct impact upon the strength and wellbeing of local trade lines. The result was that a society developed where individuals work multiple jobs (mostly lower wage) while trying to set up their businesses in order to pay bills and live. This was also an emerging trend across established businesses, owners had more than one kind of income stream to rely upon. Income in general was identified as being supplemented by other kinds of employment , or supplementary to pre-existing finance such as pensions, benefits or savings.

5.4.6 General Observations and Reflections from the Interviews

On reflection of the body of research conducted, an interesting occurrence was noted as happening with each interview conducted, it was an unintended, unplanned shift in tone.

Each interview was handled in the same manner and with the same protocol by the researcher. The process began with providing the participant with an introduction and a brief overview of the purpose and aims of the research. This was followed with a run through of the ethical considerations and consents (a factor which was then repeated on conclusion of the interview to ensure participant satisfaction). Permission to audio record was then obtained, once granted the device was set up. Finally, the questions which would shape the interview, (which were printed on a sheet of A4 paper) were brought to the participants attention. The researcher retained the question sheet and directed inquiries to the participant.

On reflection, what happened next in every interview mirrored values which had been identified within the community interventions regarding connection and relationships. Each interview although guided by the question list, dropped into a format reflective of a friendly kind of conversation. Although the interviews were designed to be semi-structural, the pace of inquiry ebbed and flowed in response to the needs and expressions of the participant. There were no uncomfortable silences and occasionally participants made unprompted contributions of interest in relation to the wider subject areas, shared anecdotes about the community, other members of the business community and themselves. All of the participants spoke with such a degree of openness and were so willing to share their experiences and knowledge that rarely did the interviews ever feel like formal inquiries, rather the tone was more reflective of a neighbourly conversation.

The only exception to this occurred during an early interview when the participant was asked about what they considered contributed to a good quality of life. When this question was posed, the participant was visibly thrown off rhythm. For the first time in the whole interview the participant stammered and appeared unsure of what the 'right' or 'anticipated' answer was. When this occurred further questions from the list were then posed. When rhythm began to re-establish, the problem question was re-phrased to a more discursive tone which the participant was better able to engage with and give a considered response.

A further observation reflects upon the realities of engaging with SME and Micro enterprise owners. These are individuals who are very time restricted. They run and manage every aspect of their enterprise, and as such, taking part in activities such as interviews requires them to give up time, they could be spending working, or relaxing. In order to address their needs a very flexible approach to the rhythm of the inquiries was adopted. One example of this occurred with a participant who was very keen to take part and contribute their knowledge and perspectives, but who was incredibly busy (even by the already high standards set by the other businesses). In this case the solution was to conduct the interview across multiple sessions. In the end four sessions were held which were spread across two days. Each session lasted approximately 20 minutes. This allowed the participant to engage with the research in a manner that worked for them and allowed them to maintain the necessary level of focus upon their business. All of the interviews conducted with the businesses were hosted in their premises or studio space.

The two interviews which were conducted with community members were unique experiences and provided narrative histories about the location and how it had changed and evolved over the years. Both of these interviews were held in the resident's homes at their request. These interviews were conducted over cups of tea and homemade cake and jam. They were very conversational and flowed

easily. Beautiful stories and narratives about a community of people who liked to show their care for each other emerged within these interviews. These stories corroborated the findings drawn from the data and the observations which had been made surrounding the community spirit and supportive nature of the residents. These interviews portrayed that the connected and caring behaviours and attitudes observed were embedded in the community and were a cultural phenomenon. Simple acts, such as always ensuring that each grave in the local cemetery had a few flowers on it once a week was an established action that dated back nearly a century *'Everybody should have somebody remember and look after them'* (Mary) and *'Everyone can contribute something, no matter how small'* (Anya) embodied the community spirit. Residents engaged with activities that brought them together and also with activities which focused upon the environment they lived within. Things like painting flower-beds or collecting stones to decorate the root areas of trees on the street, upcycling old boats into flower beds for national and local competitions happened on a regular basis. They were proud of their community and of the quality of the location. As such they worked collectively and individually to maintain and improve features wherever they could. Even the Christmas decorations were a feature which the community funded every year. But not only that, they chose each and every decoration, and facilitated both the, set up and dismantling and storage as a collective. It was not dealt with in any way by local council teams.

5.4.7 Summary

As anticipated the interviews undertaken with the business owners and key community members provided opportunity to explore personal and professional values and motivations in more detail and depth. The interviews also allowed for the businesses to express the personal value and appreciation they held for their community. As a result of how much they valued both the local community

and its residents, the businesses were motivated to positively contribute towards the local social fabric and sense of community.

The focus on relationships varied between the personal values of the owner, and the value systems they adopted as part of their professional practice. In the main, values expressed by the business owners aligned well with those expressed by members of the community. For example, considerable importance was expressed in relation to: Family and friends; Belonging to the location; and residents of the community.

An interesting phenomenon which emerged during the interviews saw the businesses giving personal responses rather than professionally aligned responses. This required re-adjustment of lines of questioning in order to separate and explore their professionally oriented values. When the contextual framing of their values was accomplished, their expressions and contributions were seen to shift^k. For example, where inquiry had sought insight around values relating to connections, where expressions were initially reflective of personal relationships and connections, the re-direction of questioning saw the participants share contributions which in fact related to their professional networks and associated communities and clients.

In this light it can be seen that relationships were valued, in a professional context, for the support and assistance that they afforded. Where family members had contributed towards factors of this nature, the appreciation shown was then framed through the business and not at a personal level. Participants were noted as then talking in terms of 'the business/enterprise' or 'I/me/we', which served to provide clear delineation between the two. This occurrence became considered as the 'value shift'. It only occurred with the business owners and was not an observed feature in the previous case study.

^k This phenomena of 'values shift' is discussed further in section 5.6.

Personal values which had shaped decisions to embark into the world of self-employment were found to be based around independence, freedom, autonomy and happiness. Participants had specifically chosen their livelihoods based upon intrinsic beliefs and personal values which reflected their need to work independently. Ideological and social rationales also formed grounding for the life choices made around running their own enterprises. The want and need to share and exchange knowledge, offer opportunities to others and to support local endeavours all contributed to the businesses current position and value structures. These features underpinned their motivations.

Interestingly, and unlike the contributions made within case study 2 by members of the community, the interview participants willingly discussed matters of finance and the positive and negative impacts it can hold for SME and Micro enterprises. Suitable finance was seen as valuable as it afforded further opportunities. None of the participants were interested in striking a gold mine and making a fortune. They wished to generate enough income to maintain their quality of life and to pay their bills. Their interests lay in having a positive impact upon others. Money was seen as a contributing factor which could either support or end an enterprise, a necessary part of the businesses but one which was in no way the driving force. The instrumental value of finance was appreciated for the practicalities it granted in terms of facilitating exchange and trade. It was also appreciated beyond this for the immanent value it can bring towards wellbeing: Through gaining suitable levels of finance through endeavours, stress and concerns around meeting external obligations were reduced, thus positively affecting mental wellbeing.

Contributions also indicated that participants felt government and local council regulations and legislations to be lacking in meaningful worth. They were instead perceived as adding further layers of complexity to an already difficult line of work. This perspective of regulations coupled with a distinct lack of available support to navigate the required processes further compounded the lack of value

attributed to them. The businesses involved often felt their value as an enterprise was perhaps not as appreciated, well communicated or visible to external parties (such as their local consumer base within their community and further afield at council and government levels) as it could be.

SMEs bring invaluable support and financial and social value to their local communities as well as providing much needed stability to the national economy (as was discussed in ch 1). Unfortunately, attitudes and beliefs around cost, pricing, value for money (how profitable an exchange is in terms of gaining goods (fungible resources) through fiscal exchange) and a much tighter economic situation had clearly influenced and impacted clients' behaviours and actions towards shopping at small local businesses. The general view expressed was that atop the regular problems faced, a rise in online shopping models and large low-cost, discount business models had further reduced small businesses consumer markets. These kinds of complexities were viewed as further complicating the already complex and difficult reality of making a living through an SME or Micro enterprise avenue.

The interviews also revealed a number of complexities and problems faced by SME's and Micro enterprise's. Although lines of questioning were focused upon the values and motivations of the businesses, through discussion, rationales and motivations were often derived in response to some of the concerns they raised. These complexities shape and influence the eco-system within which these enterprises exist, and as such, they influence decisions made by their owners and the human values embedded within these ventures.

5.5 Triangulating the Case Study Data

To recap, the three studies undertaken gave opportunity to explore:

- Case Study 1: Values and motivations of designers and their perceptions of the values and motivations of businesses and stakeholders.
- Case Study 2: Values and motivations of SME/Micro enterprises in a small rural Scottish community.
- Case Study 3: Values and motivations of community members from the same rural location.

Each study was undertaken through a different approach and utilised different methods for data gathering (This is also discussed in chapter 4).

- Case Study 1 was conducted through workshop, using boundary objects, facilitation and observation.
- Case Study 2 was conducted through interventions which used boundary objects and facilitation.
- Case Study 3 was conducted using interviews and observations.

Data gathered from the three studies generated 14 themes based upon the values and motivations expressed by participants. There were 5 major themes drawn from case studies 1 and 2 (CS1/CS2) and 4 from case study 3 (CS3):

CS1. Exploring Expressions of Values and Testing Approaches.

- Learning
- Connection
- Creativity
- Incentives
- Behaviours

CS2. Vocalising Values: A Community Perspective

- Connection
- Belonging
- Enablers
- Qualities
- Attractions

CS3. Identifying Ideals: The Hidden Views of Businesses

- Drives and Motivations
- Networks
- Impact
- Skills and Experience

Table 29 offers an overview of the themes (along with a reference to the frames of inquiry and associated sub-themes) from across the three case studies conducted.

Table 29. Overview of 14 Identified Themes

<i>CS1. Exploring Expressions of Values and Testing Approaches (Designers & Designers Perceptions)</i>					
Frames of inquiry	Personal Values, Collective Values and Perceptions of Business/Stakeholder Values				
Theme	Learning	Connection	Creativity	Incentives	Behaviours
Sub-Themes	Influencers Practice Experiences	Relationships Interactions	Actions Mindsets	Physical Psychological	Actions Attitudes
<i>CS2. Vocalising Values: A Community Perspective (The community interventions)</i>					
Frames of inquiry	Value (Personal), Perceptions, Need/Want, Impression, Experiences				
Themes	Connection	Belonging	Enablers	Qualities	Attractions
Sub-Themes	People Place Self	Relationships Behaviours Attitudes	Instrumental Factors. Impact	People Place	Professional Public
<i>CS3. Identifying Ideals: The Hidden Views of Businesses (The interviews)</i>					
Frames of inquiry	Personal and Contextual Information, Business Practice & Finances, Complexities & Problems, Experiences, Skills, Community.				
Themes	Drives and Motivations	Networks	Impact	Skills and Experience	
Sub-Themes	Personal Ideological Social Advancement	Personal Professional Community	Personal Financial Opportunities	Skills, Capabilities, Previous Influences. Rewards and Self-Creativity	

Triangulation and cross-study comparison supported exploration of the relationships between these themes and supported grouping for discursive purposes. Table 30 provides an overview of each grouping, the major and subsequent sub-themes they contain, and identifies which study they were drawn from.

Table 30. Grouping of the 14 Identified Themes of Values

Group	Group Title	Case Study 1 Theme & Sub-Themes	Case Study 2 Theme & Sub-Themes	Case Study 3 Theme & Sub-Themes
Group 1	People and Interactions	1) Connection 2) Behaviours	1) Belonging 2) Connection 3) Qualities	Networks
		1) <i>Relationships Interactions</i> 2) <i>Actions Attitudes</i>	1) <i>Relationships Behaviours Attitudes</i> 2) <i>People Place Self</i> 3) <i>People Place</i>	<i>Personal Professional Community</i>
Group 2	Knowledge	1) Learning 2) Creativity	Attractions	Skills & Experiences
		1) <i>Influencers Practice Experiences</i> 2) <i>Actions Mindsets</i>	<i>Professional Public</i>	<i>Skills, Capabilities and Previous Influences. Rewards and Self-Creativity</i>
Group 3	Motivation	Incentives	Enablers	1) Drives and Motivations 2) Impact
		<i>Physical Psychological</i>	<i>Instrumental factors Impact</i>	1) <i>Personal Ideological Social Advancement</i> 2) <i>Personal Financial Opportunities</i>

Group 1 contains 6 similarly oriented themes based around people, behaviours, actions and attitudes. Similarly, Groups 2 and 3, which each contain 4 similarly oriented major themes are focused upon; Knowledge: Values expressed in relation to the skills, knowledge, learning, creativity and experiences of the participants, and; Motivations: Values and motivations expressed in relation to incentives, enablers, impact and drives and motivations of participants respectively.

5.5.1 People and Interactions (Group 1).

This group hosts the six major themes of **Connections. Behaviours. Belonging, Connection and Qualities**, and **Networks**. Within these themes similarities across expressed values and motivations were found to relate to relationships and behaviours and actions of self and others. Sub-themes included: *Relationships and Interactions. Actions and Mindsets. Relationships, Behaviours and Attitudes. People, Place & Self. People & Place and Personal, Professional and Community.*

What now follows is a brief summary of the findings from each of the themes identified in relation to their associated study. These are then discussed collectively to explore relationships and differences between the presented values and motivations and expressions made by participants. Each grouping then culminates with a reflection of the identified values and motivations in relation to the work of previous thinkers discussed in ch3.

5.5.1.1 CS1 Themes: Connections and Behaviours. Sub-Themes: Relationships & Interactions. Actions & Attitudes.

CONNECTIONS: Relationships & Interactions.

Participants in case study 1 considered close and personal relationships to be highly valuable. These relationships were viewed as being vital to both their personal and professional lives. Positive and negative experiences which emerged through these relationships were also considered to be valuable. In this context participants cited that useful life lessons, resilience and inspiration could be drawn from either experience. Close relationships were also associated with maintenance of the participants personal and professional wellbeing and were also identified as inspiring and motivating their practice.

Participants valued their professional networks and connections (with both educators and peers) as positively influencing their educational experiences. The benefits derived from these relationships were viewed as critical in the creation

of positive experiences throughout design projects and briefs and successful end outcome generation.

Communicating and interacting with others also gained prominent note. This was seen as fundamental to the successful development and shaping of networks and groups. Exchanging and sharing knowledge, ideas and opinions with new and old connections were valuable experiences in the participants professional and personal lives. The forms which interaction could take ranged from direct engagement (i.e. conversations) through to more creatively oriented activities. Stories and the outcomes of interactions were viewed as informative for successful development and resolution of design propositions. Interactions and communication were appreciated as something which could be facilitated through conversation, imagery, craft, drawings and tactile three dimensional objects. Participants also expressed that having previous experience and skills in these areas was a highly valued ability.

BEHAVIOURS: Actions & Attitudes.

In terms of behaviours and attitudes expressed, behaviours deemed to be altruistically oriented were preferable and sought after. These behaviours were also highlighted as generating reciprocal responses, exhibiting kindness and empathy encouraged the same behaviours to be actioned by the recipient.

Honesty, openness, empathy, kindness, thoughtfulness and a willingness to reflect on actions and experiences for the benefit of self and others were all valued behaviours. Having respect for the past, tradition, education and knowledge were desired attitudes to hold, as was being passionate about the subject or area you worked within.

How we as individuals and collectives behave and interact with others, and how these actions and behaviours are reciprocated were valued for their positive influence and impact upon mental state and sense of wellbeing.

The Designers Perceptions of Businesses and Stakeholders Values and Motivations

CONNECTIONS: Relationships & Interactions.

Analysis showed that the designers believed businesses and stakeholders would hold similar values and motivations as they themselves held. This belief positioned close personal relationships as being of vital priority, providing motivation and inspiration to areas of professional development and wellbeing for businesses.

The designers also expressed beliefs that businesses and stakeholders would welcome opportunities to share stories, build empathy rich relationships, and actively engage with their local communities and clients. Collaborative working, client engagement and the cultivation of professional and personal networks were also identified as valued and valuable opportunities and experiences that businesses would be eager to engage with.

BEHAVIOURS: Actions & Attitudes.

Being passionate and engaged with work or projects was identified by the designers as strong motivation and influence upon the behaviours, actions, and attitudes of businesses and stakeholders. A number of assumptions towards the creativity of these parties were expressed, including beliefs that: that they would be inherently creative, and as a result, they would actively seek out creative opportunities.

They attributed values and motivations which included satisfaction, power, money and security to the businesses, but they simultaneously expressed belief that businesses and stakeholders would be fundamentally driven by a want and need to positively impact people's lives, and that this want and need would form the foundation of all resulting actions. This in turn then framed profit generation of the businesses and stakeholders as a side-effect to undertaking altruistic and benevolent work.

5.5.1.2 CS2 Themes: *Belonging. Connection. Qualities. Sub-Themes: Relationships, Behaviours, Attitudes. People, Place, Self. People & Place.*

BELONGING: Relationships, Behaviours & Attitudes.

Contributions from case study 2 which fell into the category of Belonging related to the value and meaning of community expressed by participants. Participants shared that the sense of belonging they felt towards the community and its residents was nearly tangible in influence and impact.

Close and personal relationships were recognised as valuable, with knowledge derived from familial relationships attributed to the participants understanding of a community. Actions and behaviours viewed as supportive in creating and cultivating a well-connected community were also seen to be derived from these relationships. Living within a well-connected, engaged and social environment was recognised as positively influencing individual and collective well-being along with effecting quality of life experienced. As such, more socially-oriented relationships with parties including neighbours, community members, social groups and friendships were all valued and appreciated.

Behaviours, actions and attitudes of the residents in the location influenced the sense of belonging and connection expressed by participants. In this community the strength and sense of connection between neighbours and friends was visibly notable. There was an 'unspoken but indicated' code of expected conduct in the community. Where individuals were recognised as positively shaping or influencing the development of the social fabric, they were considered to hold higher levels of social value than those who were viewed as not being so pro-active in their involvements. Participants also valued being a part of something they viewed as bigger than themselves. Living within an environment where sharing, engaging, friendship and trustworthiness were collectively and individually valued was seen as undoubtedly important and valuable.

CONNECTION: People, Place, Self

Participants expressed value for familial and social relationships and associated them with highly reduced feelings and experiences of isolation, anxiety and loneliness. Equally, these connections and interactions also positively influenced perspectives of wellbeing, quality of life experienced, connectivity to others, and connection to the physical environment where they lived. Time spent with friends and family was highly valued and viewed as very well spent. Autonomy, independence, sharing knowledge and skills, connecting and interacting with others, and working towards positive collective experiences and goals grounded expressions of values which were identified in relation to social interactions and relationships.

Participants actively worked towards the improvement and development of the community environment. The physical qualities of the location, its rich heritage and history and easy access to nature and wilderness all served to further enhance and reinforce the participants sense of connection to place and to each other. Extensive access to coastal and woodland areas provided participants with a number of opportunities for activities and experiences not as easily accessible in urban and central areas. Having such instant access was appreciated and valued by participants. Additional facilities within the location which promoted self-care, creativity and engagement were also highly valued for the benefits they were believed to bring at individual and collective levels.

QUALITIES: People & Place:

Contributions in this area reflected values held by participants in relation to the community and its residents. They shared impressions which presented both the location and people living there as welcoming, caring, friendly and close-knit. Aspects of the location and community life were shared in detail expressing how valued and important they were to people. A strong sense of community spirit and a strong, interwoven and active social fabric was conveyed.

Community members were described as being valued for the support and care they provided to others. Valued behaviours included: Caring for others; Being creative, Kindness, Being supportive and Empathy.

These behaviours shaped the sense of community spirit within the location. Rather uniquely, the location itself was personified in contributions. It was not simply a little rural village, rather it was a friendly, quirky and couthy place, one which would welcome visitors and one which looked after its own. The established history, heritage and traditions of the location were all very well embedded and highly valued. The only negative commentary which arose surrounding the location reflected perspectives some residents felt outsiders may have of the place. There was notable concern that others may view it as isolated and a drive-through area, thus missing out on being able to share the experiences and opportunities it offered.

Sense of safety and security were, in addition, valued by participants. The community had a very low crime rate and was increasingly environmentally aware. This was attributed to the strong community spirit and engaged society they had created. Sustainability, environmental protection and cultivating and protecting existing heritage sites were also viewed as valuable actions and motivations for participants.

5.5.1.3 CS3 Themes: Networks. Sub-Themes: Personal, Professional, Community.

NETWORKS: Personal, Professional, Community

Business owners expressed valuing close and personal relationships. The value they directed towards them was however, quantified through examples of practical support which they had provided to the business venture itself. (Values Shift (ch5.5.4) saw expressions in this area resonate more towards those expressed by participants in cs1 and cs2. Familial connections were recognised as having provided invaluable support during the early days of some of the

ventures and were viewed as having impacted the very existence and success of the business.

Positive and detrimental effects resulting from close relationships were identified as directly impacting and influencing the success or failure of ventures. Businesses that identified as having emerged from a collaboration expressed value and appreciation for the actions, efforts and sacrifices that each party involved had made along the way. Alternatively, it was also noted that some businesses had failed and closed in response to the breakdown of relationships across involved parties. The local community was considered highly valued by the businesses for the support that they provided. As was seen in personal relationships of value identified by the business, relationships with the local community also saw the emergence of values shift occurring. (ch5.5.4).

The businesses tended to talk in terms of valued networks rather than personal relationships. They shared valuing and appreciating professional connections and peers who had supported, guided and enabled them in reaching their current position. Applicable knowledge, practical experience, access to markets and useful connections for fledgling businesses were considered to be highly valuable and useful contributions made by others.

Trust was identified as a key value and trait for businesses. There was a significant negative impact upon perceptions of others if bonds of trust were broken. When considered in relation to finance, implications and negative impacts were seen to be lasting and consequential for not just the parties involved, but also future parties with whom the business may one day work with.

5.5.1.4 Group 1 People and Impact Discussion

When asked what they valued most in life, almost all participants referred to some form of relationship or human connection. Contributions ranged from

close, familial and personal, to social and community based and those formed within professional channels and networks. The themes contained within the group of People and Interactions conveyed the inherent importance and value of these relationships and interactions to the participants.

In case study 1 personal and social relationships were valued for their perceived impact upon wellbeing and quality of life. Participants from case study 2 however expressed social connections as grounding and creating a deeper connection which impacted their sense of belonging. Personal relationships were attributed with providing knowledge and understanding of how social structures can be formed and functioned, in effect, they provided the groundwork for future relationships. Social connections found with neighbours and friends were viewed as having significant influence and positive impact upon their lives. In a small scale environment, it can be presumed that close relationships with your neighbours and those around you would be fundamental to social cohesion and tranquillity.

Whilst the businesses did share valuing more personal relationships, their focus of value in a professional context was directed towards other businesses, professionals and network connections they had developed. They also valued their local community for the support they provided. This support took different forms, word of mouth which led to external trade lines and direct community trade, along with being a part of an environment where businesses supported each other were identified as valued actions and behaviours. Community participants expressed valuing their local businesses, and noted increased value was placed towards those more actively engaged with activities, services and facilities available within the location.

In a professionally driven context, the businesses expressed the worth and importance of connections and relationships found across the immediate local residents and customers through to wider spread networks. They acknowledged the need and necessity to belong to a community and identified a range of

relationships which were formed within their community which granted them a sense of connection and belonging. Rather than story sharing and trust building within their local clusters, the values expressed by the businesses conveyed a more professionally oriented strategy where networks and connections further afield were sought for their potential positive impact and knowledge for the businesses future development.

The designers, both professionally and personally expressed valuing personal and close relationships in their lives and expressed belief that businesses and stakeholders would share this opinion. What was somewhat surprising was the high levels of assumptions made towards the business/ stakeholder perspectives. Rather than considering the businesses as institutions or enterprises with specific needs, wants and motivations, they were personified and considered as people. The personal values of the business owners were considered, rather than the professional. There is no argument that the businesses or stakeholders at a personal level may have expressed values which aligned with the designers, however, in a professional context it can be seen that this was not the case. The businesses had significantly different ideologies and principles to what was assumed by case study 1 participants.

Contributions which presented behaviours, actions and attitudes were seen to align over the three studies in general. There was a definite preference for positive kinds of behaviour and positive actions but specific details of these did vary from case to case. The designers sought after and valued altruistically oriented behaviours, and also attributed these to businesses and stakeholders. Community participants expressed a preference for more social behaviours, including those which would support the development of the local sense of community such as being kind, caring, and working for the greater good. Openness, caring and kindness were paramount in desired and valued behavioural traits. The businesses also expressed valuing interactions with others which built trust and enhanced and expanded their knowledge. When trust was

broken, both professionally and at a personal level, this caused significant problems.

Behaviours and emotions identified by the community were more aligned with collective value structures which supported and enhanced the sense of community spirit in the location (Cannon, 2007). There was acknowledgement in the community of a sense of belonging and of behaving accordingly. Appropriate behaviour resulted in positive emotions and positive perceptions and attitudes towards the people or business/group enacting them. These attributed values also associated closely with those found within belonging and connection, and as such, the personal value of relationships and the impact which attitudes, actions and behaviours had upon them. This sense of belonging, through collaborative behaviours, attitudes and actions can be attributed to both an identified need of humans (Maslow, 1943) and the creation and maintenance of a stable community (Cannon, 2007).

Overall from the three studies value was seen to be placed upon the ability to interact with others and develop meaningful relationships. Good relationships were attributed with lowering isolation and loneliness and increased wellbeing.

At personal level it can be seen that people, connection, belonging and interactions are fundamental within the community and businesses values structures. This is no real surprise. If we look back to the works of Maslow, as discussed in chapter 3, relationships with other people are core in each of his 5 identified human needs from physiological through to self-actualisation. It can be seen that in the three studies conducted, at personal levels, this is still very much the case. Humans have a fundamental need for relationships with others, they influence, shape and support us through the day to day. However, if we look at the contributions of the businesses which were more professionally driven, their expressed values which relate to people are more in line with features found within Self-Actualisation and Esteem than those of Physiological, Safety and Love/Belonging needs.

If we consider then the contributions made in relation to the works of Schwartz 10 Universal Values, it can also be seen that relationships and interactions with others have direct relation to all but one of his identified values and goals. As with the relationships and engagements of value expressed by the participants, these values are contextually influenced. For example:

Values expressed by the designers aligned predominantly with Self-direction, Stimulation, Hedonism, Achievement, Benevolence and Universalism, and their perceptions of the values and motivations of businesses and stakeholders would align with the same 7 values. Tradition can also be found within the designers contributions if consideration is given to their motivations and attitudes towards engaging with participants through design-led approaches.

The community participants presented values which aligned more with Schwartz outline of Security, Conformity, Tradition, Benevolence and Universalism. The expression of their values were geared towards features of good social and personal relations the aligning of individual and collective behaviours and attitudes, and the drive for social cohesion and prosperity. The contributions of the businesses were more aligned with Achievement, Hedonism, Stimulation, Self-Direction, Tradition and Security. A collective perspective of the findings which relate to this grouping and viewed in relation to the works of Schwartz (2012) is presented below in Table 31.

Table 31. People and Interactions. Values in Relation to Schwartz

Schwartz 10 Universal Values	CS 1 Designers	CS 2 Community	CS 3 Businesses
Security		X	X
Conformity		X	
Tradition		X	X
Self-Direction	X		X
Stimulation	X		X
Hedonism	X		X
Achievement	X		X
Power			
Benevolence	X	X	
Universalism	X	X	

As can be seen, the expressed values and motivations of the businesses did align to a degree with those shared by the designers, but this was not the case when their responses were considered in relation to those of the community. Where community participants expressed valuing features, which align to Schwartz value of conformity, although the businesses expressed valuing security and tradition, there was not a focus towards conforming with the wider group. They did however appreciate and value the behaviours and support of the community but there was pride in being able to offer something different and a little out of the ordinary to the location and its residents. While community members expressed benevolent and universal values around close and extended relationships, this trend did not carry over to the business perspective. Relationships presented were those considered to be of practical meaning . At a personal level there was notable alignment (a feature which can also be seen in Table 32), but professionally, although at a high level (as was discussed in the earlier parts of ch5), although contributions appeared to be similar, the contextual underpinning for values and motivations which were expressed meant that differences existed at fundamental levels. It can be considered that the variance in relationships of value contributed and identified is reflected in Table 31. The

differing motivations and perspectives of each case study group directly influenced where and how much value they directed to people within their lives, be they personal connections or professional.

Table 32 below offers insight around alignment between expressions shared by participants from the three case studies in relation to themes associated with People and Interactions and Rokeachs Value Survey definitions.

For ease of reading, where alignment in expressions occurred, they are highlighted according to the relevant case study, i.e. D – Designers (CS1), C – Community (CS2) and B- Businesses, (CS3).

Table 32. Participants contributions in relation to Rokeach Values Survey. People and Interactions Grouping.

Instrumental Values	D. CS1. C. CS2. B. CS3.	Terminal Values	D. CS1. C. CS2. B. CS3.
Ambitious (Hard-working, aspiring)	B. C. D	A world at peace (free of war & conflict)	
Broadminded (Open-minded)		Family Security (taking care of loved ones)	B. C. D.
Capable (Competent, effective)	B. C. D	Freedom (Independence, free choice)	B. C.
Cheerful (Light-hearted, joyful)	C.	Equality (brotherhood, equal opportunity for all)	B. C.
Clean (Neat, tidy)		Self-respect (self-esteem)	B.
Courageous (Standing up for beliefs)		Happiness (contentedness)	B. C.
Forgiving (Willing to pardon others)	C	Wisdom (a mature understanding of life)	
Helpful (Working for others welfare)	B. C. D.	National security (protection from attack)	
Honest (Sincere, truthful)	B.	Salvation (saved, eternal life)	
Imaginative (Daring, creative)	B. D.	True friendship (close companion)	C.
Independent (Self-reliant, self-sufficient)	B.	A sense of accomplishment (a lasting contribution)	D.
Intellectual (Intelligent, reflective)		Inner Harmony (freedom from inner conflict)	
Logical (Consistent, rational)		A comfortable life (a prosperous life)	B. C.
Loving (Affectionate, tender)	C.	Mature love (sexual and spiritual intimacy)	
Obedient (Dutiful, respectful)		A world of beauty (beauty of nature and arts)	C.
Polite (Courteous, well-mannered)	C.	Pleasure (an enjoyable leisurely life)	C. B.
Responsible (Dependable, reliable)	C. B.	Social recognition (respect, admiration)	B.
Self-controlled (Restrained, self-discipline)	B.	An exciting life (a stimulating active life)	C. B.

Traditionally Rokeach's Values Survey is undertaken through allocation of importance. Instrumental and terminal values are allocated descending numbers from 1-18 to provide an overview of the value priorities of the individual taking part. In this instance however, the table is used in a different light, it serves to provide an overview of alignment and discord across the expressed values and

motivations shared by participants across the three case studies conducted. Tables 31 and 32 show in visual form that although similar expressions of value and motivation were made, fundamentally, hidden variables within their specific contexts altered meaning.

5.5.2 Knowledge (Group 2).

This group hosts the five major themes of **Learning. Creativity. Attractions. Skills & Experiences.** Within these five themes similarities across expressed values and motivations relating to knowledge, it's acquirement, importance, influence and benefits are discussed. Sub-themes included: *Influencers, Practice & Experiences. Professional & Public. Skills, Capabilities and Previous Influences, Rewards & Self-Creativity.*

As with Group 1, what now follows is a brief summary of the findings from each of the themes identified in relation to their associated study. These are then discussed collectively to explore relationships and differences between the presented values and motivations and expressions made by participants. Each grouping then culminates with a reflection of the identified values and motivations in relation to the work of previous thinkers discussed in ch3.

5.5.2.1 CS1 Themes: Learning. Creativity. Sub-Themes: Influencers, Practice & Experiences. Actions and Mindsets.

LEARNING: Influencers, Practice & Experiences.

A number of individuals with whom the participants had interacted with during their educational experiences were presented as being highly valued by the group. These individuals included lecturers, teachers, tutors, technicians and peers. These individuals were had provided the designers with knowledge, support, inspiration and confidence and were regarded as highly influential and deeply cared for.

Learning was appreciated as a life-long journey not confined solely to classrooms and lecture halls and was regarded as something which evolved and developed daily.

Practice, or rather the development and cultivation of the designers lines of practice along with associated fields of knowledge were considered in much the same light. Value was positioned towards Having the opportunity and ability to hone and develop ones skills, creativity and knowledge were highly valued experiences for both personal and professional growth. Participants exhibited a love and appreciation of learning and education and they expressed this both verbally and through their actions and behaviours.

In a similar light to the shared perspectives of personal relationships, personal experiences were also attributed with capabilities to either positively or negatively impact learning. Challenges in day-to-day life could make learning and engaging with learning difficult to navigate. That said however, these challenges were also recognised as valuable experiences which enhanced the participants empathetic capabilities and built resilience. This area of values and motivations around learning and development spoke strongly to the participants contributions around relationships and interactions.

Participants viewed the expansion and development of their knowledge and skills as being valuable to themselves and to others. The opportunity to learn at advanced level was also appreciated and acknowledged as being a privilege which is not available to everyone. As such, this further enriched the perspective of value held towards learning and knowledge overall. Not all learning undertaken by the participants was directly connected to their professional lives. Hedonistic drives influenced participants in learning skills and subjects situated out with their professions for reasons of personal pleasure and happiness.

CREATIVITY: Actions & Mindsets.

Sharing knowledge and skills so as to support and promote the development of creative abilities and skills were regarded as valuable actions and behaviours to both have personally and to encounter in others

Hobbies, time and experiences (both individual and group) were viewed as valuable in further refining knowledge and experiences and seen as valuable to a wide range of connections. Hobbies were also recognised as being a way in which participants could stay creative even if their lines of work or additional commitments did not allow for this. Participants recognised having a variety of ‘thinking hats’ (de Bono, 2000) which arose from and through being creative. Of the most popular, seeing old things in new ways was viewed as a highly valuable ability to refine.

Participants mindsets supported them in navigating personal and professional challenges and similarly, attitudes and mindsets around physical and mental health also influenced how participants engaged and interacted with others. An important feature in this area which emerged included the essential need for the creation of clear delineation and separation to be defined between professional and personal lives. Working habits which promoted unhealthy behaviours were not considered to be of any meaningful value. Being able and enabled to switch off at the end of the day, to carve an independent life away from work, emails and other professional commitments was seen to be highly valuable to levels of creativity. This was also recognised as positively impacting levels of creativity and the quality of work subsequently produced.

The Designers Perceptions of Businesses and Stakeholders Values and Motivations

LEARNING: Influencers, Practice & Experiences.

Designers identified that learning would be both valued and motivational to businesses and stakeholders. This position was rationalised by perceptions that

they would see it as beneficial for the future development of the business. There was no allowance made by the designers for the businesses to embark into learning for hedonistic rationales. This was one of the rare areas where they did not attribute businesses and stakeholders with matching values and motivations to themselves. Occasionally an allowance for learning was proposed, but each time it was immediately re-contextualised in terms of potential future benefit for the business. They also identified, as within the themes of connection, that businesses would view learning as a way in which to share professional knowledge with others in order to expand their own professional networks and opportunities.

This kind of finding expressed an assumption that the participants considered all actions of businesses and stakeholders to be intrinsically interconnected. Where they had identified their own separation between professional and personal, this was not extended to their views on the values and motivations of businesses and stakeholders.

CREATIVITY: Actions & Mindsets.

Across areas which discussed creativity it was assumed that businesses and stakeholders would actively seek to create something meaningful and that by proxy, this would serve as motivation. Their creation would be valuable (in human terms), and that value would have meaning (i.e. bringing positive impact to people's lives), and the meaning of the value would motivate. There was also a considerable degree of assumed knowledge expressed. It was believed that businesses would almost inherently know and appreciate the value of applying design into their venture, and as such, they would actively seek out opportunities to engage with designers and creative practice for the benefit of their venture.

5.5.2.2 CS2 Themes: Attractions. Sub-Themes: Professional, Public

ATTRACTIVE: Professional, Public.

Case study 2 offered participants the opportunity to express features of their community which they found to be valuable and of meaning within their lives. Findings derived in this area were divided into community-based events, projects, groups and services and professionally directed activities and facilities both of which were also available and hosted within the community.

Each of the community-based features were viewed as being creative and supporting creativity in one form or another. In addition, each was run on a voluntary basis with teams ranging in size from single individuals through to larger more established groups of 25+. These features were associated with very positively influencing quality of life experienced. They enriched the sense of community and the sense of belonging which was imbued within the area. They were also viewed as enriching relationships across demographics and as being key in the sharing of both historical and contemporary knowledge. All groups within the community had something available to participate in which was specifically directed at them, their interests, ideals and capabilities. Members of the community learnt from each other and valued both the process and resulting end outcomes of these experiences. Of all contributions made within this theme, the activities or ventures which were actively creative and craft-oriented and which required participation were the most highly regarded, as were the individuals who worked within them. These individuals were seen as key within the local social fabric and the resulting strong sense of community connection.

Businesses which were seen as positively contributing towards the development of the social fabric were considered to be of high value to the community. Contributions in this area saw some of the establishments gaining not just social value from participants, but also being given individual value at a personal level.

Participants built a picture of their community and lives which exhibited that increased engagement with businesses reflected how well the businesses themselves engaged with the wider community. These were reciprocal relationships which emerged and were developed over time. Ventures which were seen to support and enhance opportunities and prospects for the community members, both small and large, through shared experiences, knowledge and skills were perceived as vital components within the local culture.

5.5.2.3 CS3 Themes: Skills & Experiences. Sub-Themes: Skills, Capabilities and Previous Influences. Rewards and Self-Creativity.

SKILLS & EXPERIENCES: Skills, Capabilities, Previous Influences, Rewards and Self-Creativity.

Experience, knowledge and skills which the participants had acquired during their lives were often imbedded into their current business venture. They influenced a range of areas including; Choice of trade; Business models; Staffing; Working hours; Technology. Where previous experience was lacking knowledge was sought from other parties to fill the gap.

The businesses interviewed expressed feeling equipped to share knowledge and impart skills to others, this was a deeply valued facet of their business ventures. This allowed them to contribute and support the continuation of multi-generational knowledge. The businesses valued the history of these skills, the people who had first taught them, and their own abilities in sharing this knowledge for future use.

Teaching, mentorship and skill sharing were valued aspects of the businesses. Perspectives shared framed learning, education, skills and experience as holding more instrumental value than intrinsic value. Opportunities shaped around these kinds of ventures allowed and afforded them (and others) to learn (or re-learn) skills themselves and then impart this knowledge and skills to others.

Where the businesses expressed valuing education, (to the extent that sharing knowledge was an integrated feature in their business models), it was viewed as an experiential opportunity through which they could gain and share knowledge with others. Elements of the benefits of education for personal and business development emerged from the business contributions and reflected perceptions of eventual value it would allow them to bring to others. Knowledge was also recognised as impacting and influencing financial sustainability and longer-term business survival.

Contributions also highlighted how knowledge emerged through the everyday action. Meeting new people, engaging with customers and clients, speaking to suppliers, each interaction which the businesses had, no matter the scale, were opportunities to share knowledge, to develop relationships and to possibly learn something themselves. Rationales provided by the businesses for choosing their path they had often related back towards health and wellbeing. Social, cultural and close relationships were viewed to be an enriching feature of their choice and ones which effected their happiness and wellbeing.

5.5.2.4 Group 2 Knowledge Discussion

Knowledge, learning, creativity, self-development and the cultivation and sharing of information with others was valued across all three studies. From the historical to the contemporary, multiple forms of knowledge were conveyed as valuable and highly valued. Participants across the three studies shared a collective appreciation of how, why, where, when and what could be learned and sought to nurture this in themselves and others.

Ranging from close and personal relationships through to those developed with teachers, lecturers, and the like, individuals who were recognised as having had a role in life-lessons and in the education of the participants were highly valued. Their contributions were seen as having positively supported and shaped the participants journey and experiences. This resonated with other findings found

from case study one which reflected relationships of value within the participants lives.

Case study 2 saw similar reflection in contributions. Social relationships with neighbours, friends and local community members which were previously identified as highly valued for their impact upon wellbeing and quality of life were once again recognised, in this light, for their contributions to knowledge and education by the participants.

The collective knowledge of the community was an appreciated and valued asset. When rationales were shared around this area, the sense of belonging and community which had also been expressed previously was brought into sharp relief. Participants valued the community as a whole for the lived experience which they had collectively cultivated. They also expressed significant value for individuals and businesses that they felt actively and positively influenced the local social fabric. Value was also placed to alternative lines of education which could be offered to younger generations in the area. These alternatives utilised the local environment and facilities seeking to re-engage the local youth with nature and the benefits which can be drawn from having focused time spent outdoors.

Participants from case study 1 expressed belief that businesses and stakeholders would view all actions related to learning within the context of the future development of their enterprises. Although to a degree values expressed by participants in case study 3 did reflect this, upon closer inspection of the data it was identified that underpinning rationales were being driven by different contextual positions. The businesses expressed a value of learning and education, and appreciated that it could benefit their professional lives, but from the businesses perspectives, learning and development of skills were more driven by personal gratification and happiness derived through acquiring knowledge and sharing it with others. It was a serendipitous by-product that some of these learnings could benefit them at a professional level.

Participants from the interventions (case study 2) conveyed that across the community, members went out of their way to share knowledge, experiences and skills with others voluntarily. This reflected directly the strong sense of social attachment and social cohesiveness which had emerged throughout the data around connections and relationships. The businesses reciprocated these feelings citing value for their local community derived from the support and engagement which they experienced as a result.

The nature of the community relationships, inclusive of those held with the local businesses were revealed to be of a complex and highly interconnected nature. Participants from case study 2 and 3 believed in the value of being supportive of each other for the local social fabric.

Features were identified across the three studies which aligned within the works of Maslow's hierarchy across realms of Self-Actualisation, Esteem and Physiological needs. In terms of the later, needs around food, shelter, warmth, water etc required skills and basic knowledge which participants presented were actively taught and shared with younger generations and each other. They also (both community and businesses) revered the value of knowledge for purposes of self-development and reaching their potential. This then created the opportunity for educating and sharing knowledge with others. Knowledge and contributions associated to this group were also recognised as impacting participants sense of self-worth through confidence, freedom, feeling a part of things and being (and becoming) independent.

Findings were then considered in relation to the works of Schwartz through which hedonism was identified as influencing actions and responses. Participants, (businesses and community) expressed learning and experiences as bring them personal happiness. They also concluded that further happiness and satisfaction were derived when they were enabled to sharing their knowledge and skills with others and see them benefit as a result.

Self-Direction and Tradition in relation to the development of new skills and expansion of personal knowledge were perceived as creating new opportunities, thus further enhancing the quality and quantity of sharable knowledge available for others. These in turn resonated with Schwartz identification of Benevolence as they served to support and enhance the quality of life within the community.

Nurturing facets of local communities such as educationally focused systems is identified by Kramer & Porter (2011) as being key towards supporting positive societal change in communities. It is also interesting to note that the Legatum Institute considers Education as one of the key pillars of human need within their global index (2012). As humans, sharing knowledge is fundamental within our daily activities. It emerges in the smallest of actions, from supporting someone to boil an egg, or to cross the road safely, or aiding a little one to take their first steps or say their first words, through to more formal and easily recognised models of knowledge sharing such as those found in schools, colleges and universities.

Knowledge, learning and education were held by businesses and community participants as reciprocal values. The businesses appreciated that the community engaged with the classes, knowledge or experiences that they offered, and valued that they were in a position to share these things. The community members valued and appreciated businesses which actively engaged and supported the development of the community and its residents.

Underlying rationales may have differed, but both parties still expressed value for the end outcomes which could be derived. Table 33 offers an overview of where identified values and motivations from each of the studies can be seen to align with the works of Schwartz and his 10 universal values.

Table 33. Knowledge, Values and Motivations in Relation to Schwartz.

Schwartz 10 Universal Values	CS 1 Designers	CS 2 Community	CS 3 Businesses
Security		X	X
Conformity			
Tradition	X	X	X
Self-Direction	X	X	X
Stimulation	X	X	X
Hedonism	X	X	X
Achievement	X	X	X
Power	X		
Benevolence	X	X	X
Universalism			

As is apparent, similarities in values and motivations expressed can be seen across all three studies. Contextually, slight differences did emerge across the underpinning rationales from each study. For example; Each of the case studies reflected degrees of benevolence. Knowledge and creativity were valued for their ability to positively aid and assist others. Knowledge was also valued as providing stimulation and as being a hedonistic activity. The community participants were motivated by both the value they placed upon knowledge and also by the value they placed towards self-development, hedonism and achievement. Businesses valued knowledge as both a matter of self-development, often undertaken for personal pleasure, but also as a facilitator in the education and benefit of others. Having knowledge in business context, also reflected their value of independence and facilitated them in avoiding employment in larger chains and consumer markets.

Security in community terms reflected valuing the type of community created, one with low crime rates and supportive activities and relationships found throughout. The businesses valued the security of the community, but also valued having security they derived through their chosen lines of employment.

Being their own boss, not having to answer to others, all played a role in Self-direction.

In addition to reviewing contributions in relation to Maslow and Schwartz, the works of Rokeach were also considered to see where value alignment and mismatch may occur. As presented in 5.5.1, Rokeach's Value Survey is now utilised slightly differently to its traditional manner. It is used to provide an overview of the values and motivations which participants shared across the themes within this group. Table 33 and Table 34 show in visual form variations which exist in the values and motivations of the participants which are contextually dependent. These expressions are not listed in order of importance.

Table 34. Participants contributions viewed in relation to Rokeach Value Survey. Knowledge Grouping.

Instrumental Values	D. CS1. C. CS2. B. CS3.	Terminal Values	D. CS1. C. CS2. B. CS3.
Ambitious (Hard-working, aspiring)	B. D	A world at peace (free of war & conflict)	
Broadminded (Open-minded)	C.	Family Security (taking care of loved ones)	D.
Capable (Competent, effective)	B. C. D	Freedom (Independence, free choice)	B.
Cheerful (Light-hearted, joyful)		Equality (brotherhood, equal opportunity for all)	B. C.
Clean (Neat, tidy)		Self-respect (self-esteem)	B. C.
Courageous (Standing up for beliefs)		Happiness (contentedness)	B. C.
Forgiving (Willing to pardon others)		Wisdom (a mature understanding of life)	B. C. D.
Helpful (Working for others welfare)	B. C. D.	National security (protection from attack)	
Honest (Sincere, truthful)	C.	Salvation (saved, eternal life)	
Imaginative (Daring, creative)	B. C.	True friendship (close companion)	
Independent (Self-reliant, self-sufficient)	B. C.	A sense of accomplishment (a lasting contribution)	B. C. D.
Intellectual (Intelligent, reflective)		Inner Harmony (freedom from inner conflict)	B.
Logical (Consistent, rational)	B. C. D.	A comfortable life (a prosperous life)	B. C.
Loving (Affectionate, tender)		Mature love (sexual and spiritual intimacy)	
Obedient (Dutiful, respectful)		A world of beauty (beauty of nature and arts)	B. C.
Polite (Courteous, well-mannered)		Pleasure (an enjoyable leisurely life)	C. B.
Responsible (Dependable, reliable)	B. C.	Social recognition (respect, admiration)	B.
Self-controlled (Restrained, self-discipline)	B.	An exciting life (a stimulating active life)	C. B.

It was apparent within the areas connected in the group of Knowledge, that both the community and the businesses felt and expressed the importance of the development and wellbeing of their community. This shared appreciation of its worth (which was inclusive of the physical environment and the individuals

living there) and were motivated by beneficial actions and behaviours. All forms of knowledge were appreciated, as were all individuals who were capable of sharing and supporting its communication. Creativity took on a wide variety of meanings within these areas. It was not simply considered within the realms of art and design, rather it was seen as endeavours to bring positive change. It was expressed in the ways in which community members identified areas of possible growth and where businesses gained valuable support. The creative enterprises within this community were possibly the most highly regarded of all activities, services and systems in place. They helped form a key-stone in the evolution and maintenance of the community itself.

5.5.3 Motivations (Group 3).

This group hosts the themes of **Incentives. Enablers. Drives & Motivations**, and **Impact**. Within these five themes similarities across expressed values and motivations relating to motivation, the various kinds of motivations, the values which underpin them and factors which can influence them are discussed. Sub-themes included: *Physical, Psychological. Instrumental factors, Impact. Personal, Ideological, Social Advancement and Personal & Financial Opportunities*.

As with the previous discussions what now follows is a brief summary of the findings from each of the themes identified in relation to their associated study. These are then discussed collectively to explore relationships and differences between the presented values. Each grouping then culminates with a reflection of the identified values and motivations and expressions made by participants in relation to the work of previous thinkers discussed in ch3.

5.5.3.1 CS1 Themes: Incentives. Sub-Themes: Physical & Psychological.

INCENTIVES: Physical & Psychological.

Participants in case study one identified Relationships, Travel and Experiences, Memory and Heritage as valuable in terms of motivation and inspiration within their lives. As per other contributions made within this case study, relationships of a personal and close nature held considerable prominence. Within the context of incentives, relationships contributed within this area also included friendships and peers as being highly motivational and inspirational.

Future experiences which may become available to them as a result of their pending qualifications were also pre-emptively valued and presented as significant motivators. Anticipated experiences included finding meaningful employment, global travel and experiencing multi-cultural events. Interactions with others, conversations and engagement with different people who hold differing perspectives were also shared as being valued for the potential knowledge and inspiration which may be drawn from them.

Memory was identified as a key contribution in this area alongside Emotions and Heritage. They were each viewed as key features which influenced the participants life choices, creative decisions. They were also connected to the value of tradition and heritage as being motivating and incentivising. Being a part of a story bigger than themselves appeared to be a continual theme through this area. The participants in this study expressed a longing to make a difference and help others through their work.

The Designers Perceptions of Businesses and Stakeholders Values and Motivations.

INCENTIVES: Physical & Psychological.

Participants expressed a number of incentives that they believed would be viewed as motivation and valued by businesses and stakeholders. Interestingly,

the vast majority of these submissions could be considered altruistic in origin. Amongst contributions made, were proposals that framed motivations and values of business around: Doing the morally right thing in life; Developing best lines of practice; Working in sustainable and environmentally aware manners and; Contributing to increased equality. When asked to consider why business and stakeholders would value the implementation of design within their enterprises contributions included; Reduction of workload; Streamlining their processes and practices and; Alleviating their workloads. Promotion, Power, Money and Security were also presented within this area as motivations and factors of value; however, they were viewed as being appreciated by the businesses and stakeholders as secondary result which were bonuses from behaving altruistically.

The designers also considered emotions and behaviours which businesses and stakeholders may value and be motivated by. Within this area Satisfaction emerged as one of the main motivations and values. The designers proposed that, in seeking a sense of satisfaction, businesses would be actively motivated to behave accordingly towards their surroundings and environment and that through these actions they would then derive satisfaction from meeting their objectives.

Interestingly the designers did not attribute motivations or values which looked towards financial gain to businesses and stakeholders. Indeed, overall, participants in case study 1 conveyed an attitude towards money and finance as being almost 'dirty' and unwanted. Actions and behaviours supportive of business development, integration into communities and doing the right thing were placed as being prevalent key business goals. These goals, alongside developing models of best practice were identified by designers as being of priority to businesses and stakeholders. Incentives looked to immanent value type structures emerging from considerations such as; How could the business grow in a social sense? How may it the business positively impact those around

it? Similarly, the community data placed no consideration nor importance towards finance, other than one mention which directly related it back to wellbeing.

5.5.3.2 CS2 Themes: Enablers. Sub-Themes: Instrumental factors & Impact.

ENABLERS: Instrumental factors & Impact.

Contributions from the community interventions considered needs and wants of the location and its residents. As such, values were implied and conveyed through expressions of the benefits and experiences participants felt they would gain through addressing these needs and wants. This area identified a number of problems across the community, not least of which was the high degrees of isolation and loneliness experienced. across the community. A significant lack of suitable and accessible transportation had far reaching consequences for the residents. It also negatively impacted their sense of independence and freedom. (Both things which were resultingly identified as key values of residents in the area). High levels of isolation influenced the nature of relationships in the area. Strong social connections were sought for the positive impact they carried upon wellbeing and quality of life experienced and overall life satisfaction. They served as antidote to the isolation and loneliness experienced.

Further factors of instrumental value which were identified included; Adequate housing; Suitable facilities for all generations; Appropriate access to health care, along with safety features like speed restrictions and speed bumps were all anticipated as potentially enhancing the community environment and providing the means to meet identified values of the community.

A number of contributions expressed that participants cared greatly for the younger generations in the area. They wished to create a community that was supportive of hosting families and young adults. Actions and behaviours were driven and enlivened by values held both individually and collectively as

residents sought to improve the quality of life experienced by the whole community. A lack of facilities, employment opportunities and affordable housing were amongst reasons given for the notable rise of migration to more populated and urban areas being made by members of the younger generations. Enterprises which made positive contributions towards the local social fabric and sense of community spirit and wellbeing were noted as being highly appreciated and valued. The majority of enterprises, activities or services nominated for inclusion as based upon their value to the community were creative in nature and were generally modelled around group activities rather than individual experiences.

Participants also discounted the importance and value of finance in terms of it being motivational or incentivising to the wider community. Money was viewed as a necessity, but only in terms of trade and facilitating necessary transactions. Beyond this, it was not something the participants expressed any particular care for. Alternative models of exchange which utilised skills or the trade of products, (such as 2 fish for a half-dozen fresh laid eggs), while not a predominant behaviour, gave form to contributions which expressed how residents wished to step away from more capitalist and consumer driven economic models and were engaged in sharing and transitional models of growth and sustainability for their community.

5.5.3.3 CS3 Themes: Drives & Motivations. Impact. Sub-Themes: Personal, Ideological & Social Advancement. Personal & Financial Opportunities.

DRIVES & MOTIVATIONS: Personal, Ideological & Social Advancement. Personal & Financial Opportunities.

In personal terms, the businesses expressed values which were focused towards personal growth and self-development. They valued independence, autonomy, happiness, freedom and satisfaction. Being an independent trader facilitated the

participants in living their lives by their own rules and enabled them to prioritise their personal values and commitments accordingly.

The participants expressed valuing their particular chosen lines of trade and felt the products/services/experiences they were providing were beneficial for others and as such were further motivated by these beliefs. They also expressed values and motivations which resonated with previously discussed findings around sharing knowledge and cultivating good relationships. The businesses believed in doing the right thing for their community and contributing the collective experiences in a positive manner.

A key value and motivation identified during the business interviews was that of finance. Their reliance upon financial turnover in order to stay in business and carve out a living for themselves meant that, at the root of everything, it all came down to generating a turnover and profit. In the cases of the social enterprises, (which do not require finance in the same way) it was still identified as a key feature of values held. Without the creation of profit, there was no way to keep the enterprises running. Given the community centric focus of the social enterprises and how they sought to benefit as many in the location as they could, it was unsurprising to find that concern around financial feasibility arose in this area. Finance was also connected to the future development of the businesses; Higher profit margins were associated with providing time and resources for the owners to focus on maintenance and development of their businesses. This in turn reflected on their ideals around being a part of their local community.

Inadequate finance carried negative impacts such as: Being unable to learn adaptive skills to compete in ever changing markets; Being unable to take time off for illness or personal reasons; Being unable to purchase wholesale goods for use in their business; Being unable to pay bills and manage finance, thus further reducing their access to fungible resources. As such, inadequate finance was also associated with decreased sense of wellbeing and quality of life, increased stress and worry. A matter of particular concern for the businesses in relation to

insufficient profits was potential business closure, bankruptcy or liquidation. Every participant had bills to pay and families to support, if faced with a situation where their venture was not generating enough financial return, alternative avenues of employment had to be sought.

In addition to concerns around finance and its role and value to the businesses, participants also expressed their perspectives towards necessary governmental tax models and legislations. Some participants shared an appreciation of the official support received and valued the benefits they had brought to the business, but also expressed feeling that the processes in place were convoluted and complex. These official requirements, forms and actions were often viewed as placing additional strain on new businesses who were trying to find their feet and gain market stability.

Participants also expressed that financially restrictive taxation models for SME's and Micro industries had led to the downscaling and reduction of successful business models. Tax brackets meant that barely crossing a threshold had the potential to leave the businesses significantly less profitable after meeting their new required payments. For example, becoming VAT registered could bring considerable increases to outgoing bills. None of the participants argued about the need and obligation to pay taxes, rather they noted that certain brackets were detrimental for SME, Micro and Sole Traders. If their profit margins had truly exceeded the lower limit, then all was fine, but if the shift over the limit was minimal and only barely above the threshold, post-tax payments resulted in significantly reduced profit margins. This in turn then further impacted the business and lives of the owners.

Some of the businesses interviewed expressed how they specifically and intentionally built their business models in such a way that they would not need to employ other individuals. They had navigated further legislations and laws in order to have staff, and then when put in a position where they were reliant upon said staff, had been let down, and left out of pocket. This was not a

situation any of the participants wished to face again, and as such, they had intentionally downsized and reworked their model. These types of events were seen to further reinforce values around independence and autonomy. Alternatively, social enterprises expressed that volunteers and staff were highly valued assets and expressed appreciation for them citing altruistic, kind and caring behaviours. So highly valued were the volunteers that they were framed as being fundamental and intrinsic to the survival of the enterprise

The key differentiator here was identified to be related once again to legislation and law. The former were tied by employment laws and legislations while the later were able to derive needed support, but as it was voluntary, legislations and laws were notably different and carried far less financial impact.

5.5.3.4 Group 3 Motivation Discussion:

The participants from the three studies shared a wide range of motivations, enablers, incentives and values. Material and emotional gains were identified as being valuable and sought after. Learning and Knowledge as a grouping portrayed that the triptych of participants involved all valued and appreciated knowledge, learning, self-development and the conveyance of knowledge very highly. Benevolently directed acts were also identified within the themes held in the grouping of Motivations. These emerged more commonly within case study 1 and 2.

Contributions from case study 1 reiterated that the predominant focus and central value structures of the designers resided around things related to close and personal relationships. In addition, motivations and values related to professional practice reflected additional connections of friends and colleagues who were regarded to hold inspirational position within their lives.,

Travel, along with experiencing different cultures and engaging with other people were identified as being anticipated valued experiences that the designers felt would enhance and expand their scope of knowledge and experience.

Altruistic values which focused towards being caring, helping others and contributing towards positive changes and developments for society related more to their professional value and motivation structures. When presenting perspectives of the values of businesses and stakeholders, a number of assumptions emerged. There was a general perception that businesses and stakeholders would share the designers altruistically shaped professional values. As such, very similar contributions were made to both sides of the discussion, their own values and those they believed businesses and stakeholders would hold.

In terms of enablers, participants from case study 2 expressed factors of more instrumental than immanent value. They identified a number of services, systems and provisions which had been reduced or removed from the community structure. They also provided justification towards their reinstatement detailing benefits for the residents and expressing why they would value their return. Through analysis of the data from this area, values such as independence, self-reliance and reduced isolation were identified. There was also notable awareness of the future and longevity of the community and how this was an important consideration for the residents. Values surrounding socially accepted and anticipated behaviours arose within this area. Particular note was expressed in relation to enterprises and businesses which supported and worked for the collective good. Classes provided to local schools along with experiences offered to older children and teenagers gained prominent note. Businesses which sought to support the social fabric for no financial reparations or perceived expectations of return were clearly viewed favourably by residents. Because these actions were perceived as more altruistic in nature rather than driven by a desire to see greater financial return, the businesses and enterprises who were mentioned did

(according to community residents) endear a greater likelihood of gaining increased footfall and loyal customers.

In professional terms, finance was identified as a fundamental and key necessity and motivation by participants of case study 3. Contextually speaking, in this light, the businesses recognised that finance was a direct requirement for the survival and longevity of their venture. Adequate finance was also expressed as facilitating their abilities to expand and cultivate skills and abilities. This would then enable them in enriching the particular enterprises or experiences they provided.

Alternatively, the community participants did not express any considerable value towards fiscal matters. They valued being able to pay bills and purchase fungible resources but little to no mention of the complex implications of finance upon their local business market was raised. A lack of appreciation for features such as costing and how specialist skills of businesses coupled with high overheads etc could and did influence market pricing was apparent. Designers in case study 1 went so far as to identify finance from a business perspective as being a bonus outcome, rather than a fundamental need and necessity to keep them in the market.

This disparity around the implications of financial value between the community and businesses carried impact towards the potential survival rates of enterprises. What was interesting to note was however, that during moments of value shift (discussed in 5.5.4), participants from case study 3 expressed values and motivations surrounding finance and the needs of the community in a tone more in line with those expressed by community participants. i.e. They presented finance as non-essential and simply a means to an end.

An insight which can be derived presents clear scope to address openly the financial needs of SME's and Micro enterprises and to consider ways in which their value, both economic and social, might be conveyed more effectively to

address negative assumptions and educate consumers as to the benefits they provide to others by shopping locally. Consumers (in this case members of the community) want value for money and do not respond well to incidents where their trust is broken, or where anticipated and preferred behaviours are not exhibited. This is much the same with the businesses. Being enabled to convey a shared set of values in this area carries the potential to positively influence and impact relationships between the two groups.

The businesses expressed deriving value from their experiences as an SME/Micro enterprise as including: The opportunity to meet and engage with interesting and different people on a daily basis; Having the freedom (generally speaking) to select their working hours and terms; Feeling like they had met their values around independence and entrepreneurship by undertaking their chosen venture; Being able to offer positive and good experiences to those around them, both their consumer base and their local community.

Gaining knowledge and skills from the experiences or products available through the businesses and meeting and engaging with new people who visited the location to utilise these resources were valued by community residents for enhancing the local environment.

Features of the values and motivations presented within the themes discussed resonate with each of Maslow's categories of Human needs to varying degrees. Features arising in Physiological need were identified by both community and business participants through their expressions of values which pertained to meeting their own needs and having freedom and independence. An awareness of meeting fundamental physiological needs directly influenced and affected the participants sense of wellbeing, stress, and perceptions around quality of life.

Collectively, values which related to the environment and perceptions of needs and wants, were in turn connected to features of safety. This was also true of values based upon behaviours, actions and attitudes exhibited by residents and

visitors. Both community and business participants expressed a strong sense of connection and belonging with the environment they had cultivated. Equally, this appreciation of their community spoke to needs of Love, Belonging and Esteem. In terms of Self-Actualisation however, values which aligned in this area emerged as being predominantly from the businesses or the designers rather than the community residents. Community participants did care for and value self-actualisation, but the majority of contributions were focused towards the collectivises, rather than being independently framed.

The values and motivations identified were then considered in relation to the works of Schwartz which allowed for insight to be drawn around the context of values and motivations expressed by each participant group. Table 35 offers an overview of areas of alignment and disconnect.

Table 35. Motivations. Values and Motivations in Relation to Schwartz.

Schwartz 10 Universal Values	CS 1 Designers	CS 2 Community	CS 3 Businesses
Security	X	X	X
Conformity		X	X
Tradition	X	X	X
Self-Direction	X		X
Stimulation	X		X
Hedonism	X		X
Achievement	X	X	X
Power	X		
Benevolence		X	
Universalism		X	

Values expressed by the designers in case study 1 around memory were on inspection reflective of Schwartz identification of tradition. Memory influenced and inspired the participants, while forming a foundation for their current values and motivations. Expressions which conveyed a strong connection towards close and personal relationships, friendships and relations with peers can also be seen in Security, where safety, harmony and a stable society are key motivations.

Being challenged and finding work that they were passionate about met their values around supporting change and gaining knowledge through experience and exploration, qualities of which can be seen to align with Schwartz outline of Self-Direction and Stimulation. Additional values expressed reflected features of Hedonism and Achievement, with Universalism reflecting the empathy and human centric focus so often found across design practices and design thinking. In addition, an undercurrent of Power became apparent in expressions which shared how they felt others perceived their lines of work. A belief around the nature of current and future work they were undertaking as being altruistic and benevolently driven was discerned through analysis of the conversations and expressions documented during case study 1.

Participants from case study 2 portrayed considerable levels of values which align to Schwartz outline of Benevolence and Universalism. They valued their community, each other and their local environment and extended networks. Contributions also reflected the extensive lengths that participants and those around them would go to in order to enhance and build a positive and supportive environment for all its residents. This central focus towards the improvement and sustainability of their community also reflected values as identified in Achievement, but in this specific context these were seen to be more in line with a sense of collective achievement rather than individual. They appreciated the local facilities and services available to them and simultaneously sought and appreciated behaviours and attitudes which reflected collective values around Safety, Conformity and Tradition. Businesses which were seen to align with the community values, particularly those which focused more towards features of Safety and Conformity were identified as being notably more appreciated. Elements of Self-Direction which is inclusive of independence were particularly notable when residents discussed the value and worth of systems and services which were no longer available to them within the location.

Participants from case study 3 expressed values which can be seen to align with certain expressed values and motivations shared by the community participants. Businesses expressed values in line with Security in terms of social cohesiveness, the development of good consumer relationships and the general safety of the local environment. They also showed marked respect for the nuances of the location their business was established within. The qualities of the local residents and visitors bolstered their decision to embark into their business ventures.

Notably high levels of Self-Direction and Stimulation alongside those of Hedonism were apparent throughout the interview contributions. The need for independence and freedom to work within their own boundaries and in areas which resonated with them personally gave strong foundation to the value which the businesses placed towards the quality of life they experienced.

As with the previous two groupings, data from the themes held within Motivations was then analysed and aligned across expressions of values found in Rokeach's study. Table 36 provides further scope for consideration of areas where values and motivations aligned and where they did not. As previously, they are not presented in order of identified importance.

Table 36. Participant contributions viewed in relation to Rokeach Values Survey within the grouping of Motivations.

Instrumental Values	D. CS1. C. CS2. B. CS3.	Terminal Values	D. CS1. C. CS2. B. CS3.
Ambitious (Hard-working, aspiring)	B. C. D	A world at peace (free of war & conflict)	
Broadminded (Open-minded)		Family Security (taking care of loved ones)	D.
Capable (Competent, effective)	B. C. D	Freedom (Independence, free choice)	B. C.
Cheerful (Light-hearted, joyful)		Equality (brotherhood, equal opportunity for all)	C. B.
Clean (Neat, tidy)		Self-respect (self-esteem)	B. C.
Courageous (Standing up for beliefs)		Happiness (contentedness)	B. C. D
Forgiving (Willing to pardon others)		Wisdom (a mature understanding of life)	
Helpful (Working for others welfare)	B. C. D.	National security (protection from attack)	
Honest (Sincere, truthful)	B. C.	Salvation (saved, eternal life)	
Imaginative (Daring, creative)	B.	True friendship (close companion)	
Independent (Self-reliant, self-sufficient)	B. C.	A sense of accomplishment (a lasting contribution)	B. C. D
Intellectual (Intelligent, reflective)		Inner Harmony (freedom from inner conflict)	B.
Logical (Consistent, rational)	B. C.	A comfortable life (a prosperous life)	B. C.
Loving (Affectionate, tender)		Mature love (sexual and spiritual intimacy)	
Obedient (Dutiful, respectful)		A world of beauty (beauty of nature and arts)	B. C,
Polite (Courteous, well-mannered)	B. C.	Pleasure (an enjoyable leisurely life)	C. B.
Responsible (Dependable, reliable)	B. C.	Social recognition (respect, admiration)	B.
Self-controlled (Restrained, self-discipline)	B.	An exciting life (a stimulating active life)	C. B.

Values prescribed by Rokeach which present behavioural patterns such as being responsible or self-controlled resonate with findings regarding anticipated and expected behaviours and actions of the local residents. This in itself also reflects the works of Hedahl (see also Ch 3.1), where 'collective concerns' expressed

across a community of people, reflect and give indication to predominant trends, motivations and values which exist therein.

In terms of Equality, participants from both case study 2 and 3, although taking different approaches and being motivated by different ideals and goals were working for equality and improvements across their local society. The businesses Through opportunities which the businesses were able to offer to those around them, were taking steps to improve the experienced quality of life found within the location.

Values and motivations which the business expressed that focused upon independence and autonomy, while appearing similar to those shared by the community participants from the outset, had different contextual underpinnings. Independence was viewed by the businesses as a personal value reflected in their professional lives. Being self-employed facilitated their need for independence and freedom from more traditional employment structures. In the community, independence was perceived to be related directly to their own individual ability to address their own needs and desires.

5.5.4 Identifying Values Shift

As presented in the glossary (p xx -xxvii) the phenomenon of Values Shift is defined as follows:

(Human) Values shift occurs when the values and/or motivations expressed by an individual inadvertently and unintentionally shift across perspectives, reflecting values (and/or motivations) they hold in relation to a different role within their lives.

As established within chapter 3, humans assign values as they search for order and meaning in life. These values are acknowledged as being inherently contextually affected and are responsive to specific factors and influences within our lives. People have multiple roles in their lives (Super, 1957:1980⁵³), and as

such, they hold and carry a wide ranging spectrum of values and motivations which are formed, shaped and influenced by these roles.

Each role we have comes along with, and reflects, contextually relevant values and motivations. According to Schwartz (2012), our values are so contextually influenced by our lives and experiences that they can and do shape the development and evolution of entire communities and not just our individually experienced lives. Our roles shift, change and adapt over time and circumstance as we grow, change and evolve from children into adults. They reflect the responsibilities and actions we take through the day to day, how we view the and interpret the wider world, and they influence our expectations around behaviours and attitudes (our own and those of others).

Values Shift describes the moments where expressions of values move across the individuals spectrum unintentionally. When this happens, personal values are depicted as professional, and vice versa. This usually goes unnoticed by both the expressor and audience but can carry impact for both the personal and professional roles of the individual and their surrounding community. Instances which exhibited the phenomenon of Values Shift came to light most notably within case study 3 during the interviews with businesses. Reflections of Values Shift were also found across case study 2, although there occurrence deviated from individual expression shift towards a shift in external perceptions. Case study 1 however did not exhibit any indications of the phenomenon. What now follows is a brief breakdown of where Values Shift was observed and identified.

5.5.4.1 Case Study 1

As mentioned, in in this case study no instances of Values shift were noted. The participants identified and then attributed their personal values as being in place across the platform of roles within their lives. Everything was interlinked and connected and no differentiation between their roles and the values held within them was apparent.

Interestingly, they also attributed their own personal values to everyone around them, both personal and professional connections. This was also true when they explored the values and motivations of businesses and stakeholders. They presumed everyone would feel the same, even around areas of considerable altruism, benevolence and universalism. When they did identify a value or motivation which sat out-with their own values and motivations framing, they immediately contextualised and rationalised it back to their perspective in their justifications.

A notable anomaly did present within the data from the group of designers. They expressed valuing and placing precedent towards separating their professional and personal lives and having clear lines of delineation marked between the two roles. This was shared in relation to hours worked, responsibilities of profession and the need and importance of moments of personal space. But, even within this very specific and clear appreciation of a split, through which they further expressed the levels of values they associated to familial and social connections, the values and motivations they expressed remained matched in each role. They valued their family and social connections; These inspired their work ethos and their value structures around engaging with others. Their work benefited from their relationships and as such they were better engaged with both work and personal life. They were motivated by gains, both personally and professionally which influenced and inspired their directions and passions. Every aspect of their discussions shared and re-iterated the complexity and interconnected nature of their professional and personal lives. Work benefitted from time away. Familial and social relations benefited from their work. From both personal and professional perspectives their values remained stalwart and consistent.

5.5.4.2 Case Study 2

Within this case study Values Shift emerged, but it occurred in relation to the communities perspectives of businesses and other individuals, (such as community leaders and organisers), rather than as a shift in self-reflective views and perspectives.

Participants expressed their own values as individuals who were members of a larger community. Their motivations in turn, related to their roles in life and were viewed from their individual stance but gave consideration to the wider communities needs and wants. Moments of Values Shift emerged when the participants shared values in relation to the business network and community leaders.

Businesses which were identified as contributing towards the improvement and maintenance of the local social fabric and sense of community in the area were regarded as more highly valued and appreciated. However, this appreciation was expressed in relation to the individuals responsible for the businesses, rather than the business as a professional entity. Participants did express that business owners who were more engaged with the wider community infrastructure were more likely to endear favourable behaviours from residents of the community, but again, this was expressed in terms of the individual receiving these responses and behaviours, not the business itself.

5.5.4.3 Case Study 3

Case study 3 provided the clearest instances of Values Shift as expressed in the glossary across the collective body of studies conducted. Business participants would express values and motivations through the lines of questioning, but often the expressions reflected their own personal values and motivations, rather than those they had cultivated for their business venture. Lines of questioning had to be reshaped and reworded when this occurred to support re-alignment of the lines of inquiry. This re-focus of responses enabled data to be drawn which was

more reflective of the values of the business. However further complications around the multiple roles that the business owners held within the wider community made navigation of this area tricky. The owners were both community member, and business network member. They valued the local community network in both professional and personal terms. When speaking in personal terms, rationalisation for personally held values which related to their relationships and indeed, even to matters of finance, took on a tone which was highly reflecting of those which had been derived through the community based interventions. A shift towards professional values and motivations drew out different responses which did not reflect those found across the community, and as such, these professional perspectives bucked the trends identified.

The business owners would take actions to support and engage with the local community, but in their eyes, they did this through personal motivations which were driven by personal values. They were shifting across professional and personal values. They engaged in a level of self-deprecation. They did not 'see' their actions as related to their business in anything more than its provision of resources or time, they saw their actions as being a part of their role as a member of the community.

They, as a business, would seek to support their local community by taking part or even supporting the organisation of community activities or events. They would donate their time, skills, materials, sponsorship and promotion. These actions were undertaken by the individual through their business owner persona. It transpired however through investigation that they perceived their actions to be a personal response. Of course they would support the community, they lived and worked there, it was their home.

Somewhat oddly, and in need of note was that this particular shift did not apply when the businesses talked about other businesses within their network. When support was sought from them as a business or enterprise, their response was identified as personal not professional, whereas, when other businesses offered

or provided support they were viewed as being professional contributions which deserved and required official recognition.

5.5.4.4 Key Indicators and Resulting Problem Areas

Key indicators of Values Shift occurring were most prominent through the verbal expressions made by participants. In particular, pronoun change indicated a new perspective was being expressed. Movement away from phrasing such as 'The values of the business are built around honesty, trust and reliability' for example, shifted towards phrasing such as: 'I value honesty, trust and reliability in the relationships I develop'. The pronoun use indicated the source, context and direction of the values and motivations being shared. The same thing occurred with expressions made by community members, they shifted from talking about a business by its name, to referring to the individual responsible for the business and their thoughts and feelings regarding that person.

Problems resulting from these Values Shifts include: Businesses not being fully appreciated for the contributions that they are making to the wider community structure; Owners not valuing the contribution and role that they play in professional capacity for themselves and others; Community members presuming financial matters of their local businesses are not as influential or essential as they actually are. In this context, neither community nor business owner reconciles the nature of their relationships at professional levels. Actions and interactions are viewed as a component within their role as a community member and as such are duly framed as personal.

At personal levels, both the community and businesses expressed considerable disregard for financial matters, however, at professional level, the businesses expressed finance as being a fundamental and key component in their working lives. It was essential to the continuation and sustainability of the business. This particular disparity has the potential to be devastating for SME/Micro enterprises. They need custom to survive. This means that trade must be

maintained and supported. If the structure within which they sit lacks an understanding and appreciation of this precarious footing, they face an increasing likelihood of closure or liquidation.

As is discussed in chapter 3.3.3, all too often SME's and Micro enterprises close their doors permanently, leading to the closure and deterioration of our highstreets, an increase in localised poverty, and a reduction to the strength of the local and wider financial economy (Loyd, 2013; Oxfam, 2013; Portas, 2011; The Scottish Government, Department of National Statistics, SIMD, 2012). 'If everyone who'd complimented our beautiful gallery had bought 'just a card' we'd still be open' (Justacard, 2015). Aiding businesses and their communities to see and appreciate their values and motivations without instance of Value Shift would help to identify clear value structures for both parties creating clearer communication and stronger resulting relations.

5.6 Summary

This chapter set out to present the findings of the three case studies conducted. Through a model of thematic analysis this chapter provided insight and indication towards; The values and motivations of designers; The designers perceptions of the values and motivations of businesses and stakeholders; The values, needs and motivations of a rural community and the values, motivations and complexities of SME and Micro enterprises situated within that community. Through the approaches implemented, the researcher was enabled in identifying and communicating different perspectives of values and motivations held by the community and businesses.

The process of thematic mapping provided the opportunity to consider the data individually as collected at each intervention and collectively from across all studies. This allowed for observations and considerations which were documented to be triangulated and seen in relation to one and other. It provided

scope to look in detail at facets and factors of value, through perceptions, needs, impression and experiences, as identified by participants and how these were justified and rationalised.

Amongst findings, factors such as isolation, and values including independence, supportive relationships and feeling safe emerged. These correlate with findings identified in other studies conducted which focus upon quality of life experienced such as The Humankind Index (2013) where, although variation in terms and sub-domains are apparent, qualities determined as affecting wellbeing and life experiences are inclusive of factors such as *'Having good transport to get to where you need to go'*, *'Having the facilities you need locally'*, *Living in a neighbourhood where you can enjoy going outside and enjoy a clean and healthy environment'* and *'Being part of a Community'* (Oxfam Scotland, 2013. p.5).

The identification of Values Shift as a phenomenon in value and motivation expression which was identified as an occurrence in both case study 2 and case study 3 granted deeper insight around how personal and professional values and motivations could inadvertently change and alternate which further blurred lines around roles, responsibilities and perspectives. This was then seen to influence where attributes of worth and meaning were directed and placed.

At a high level businesses could be identified as sharing many of the values of their local communities. Closer inspection however showed that these expressions were being driven through more personal lenses. The business owners role duality, as being both community resident and member of the local business network, offers them unique position and opportunity in this area providing values shift can be navigated successfully. Factors such as the level of isolation present in the communities, coupled with a distinct lack of measures capable of rectifying negatively impacting situations found in the community creates fertile grounds for local businesses to support their own growth and sustainability through further aiding and supporting community development.

In addition to findings which identified Values Shift and values and motivations of businesses and community members from a rural community, the data also supported the identification of high degrees of assumption in relation to the designers. Their general perception was that the motivations and values of businesses and stakeholders would align with their own. This was the case across the board for each perspective of value and motivation which was expressed. It was even found within their own personal values. Professionally and personally, their values and motivations remained mainly the same. They also assigned significant levels of pre-existing knowledge surrounding the benefits and processes of design and design thinking as being inherent to the businesses and stakeholders. Assumptions also arose around businesses and stakeholders actively seeking out opportunities through which they could develop creative skills and behave in creative manners. The designers were deeply motivated by their values around connections, relationships, education and tradition along with embarking upon altruistically oriented activities. The largest issue within this finding is the implication of carried bias from novice to medium level designers directly across into field work. Identification of these areas of bias would aid greater clarity around the nuanced findings which can be derived through studies of this nature.

Greater powers of autonomy for small communities, with increased levels of support are required in order to meet objectives and support growth. Implementation of changes around community directed autonomy have been seen to generate positive results in both quality of life, and in economic turnovers, examples of which include The Transition Towns Movement (Hopkins, R. 2010), Huntly and its creative and musical enterprises, along with considerable works around its history and heritage, and Portsoy, with the re-creation and re-engagement with its heritage and history. The data presented in chapter 5 serves to further re-enforce the needs and values of SMEs and communities in rural communities, while highlighting both areas of values shifts which occur in

response to duality in roles and responsibilities along with degrees of designer bias which may influence final outcomes.

6

Conclusion

Chapter 6. Conclusion

This chapter provides the concluding components and features of this research body. A summary of the research conducted and a brief presentation of key findings and conclusions generated are presented. This is followed with a recap of the aims and objectives of this thesis and a discussion of how and where they were met. The framework created by this research is then presented and discussed and the original contribution to knowledge is then outlined. Limitations to the research which were identified, along with approaches adopted to address and navigate these limitations is then presented.

Finally, the chapter concludes with a brief discussion around potential future applications of research of this nature.

"Imagination is more important than knowledge. For knowledge is limited, whereas imagination embraces the entire world, stimulating progress, giving birth to evolution."

Albert Einstein, (1929).

6.1 Thesis Summary

This thesis, it's about people.

It is about cultivating an understanding of what is considered to be truly valuable in life and the motivations and experiences which shape these values. It's about getting to know each other beyond perspectives which convey worth and value through patterns of fiscal growth. This thesis is about caring for each other and living well. How we respect, interpret, express and communicate with those

around us influences our abilities to cultivate lives with meaning, connection and depth.

Through a design-led approach, this research explored values and motivations of designers and the values and motivations of businesses and community members from a rural Scottish community. It utilised the capacities and capabilities of design to examine and convey deeper levels of human value and motivations which may be found within our communities and across our social fabrics.

This thesis set out to address the question of: *How might we enable businesses and communities to better understand, share and communicate their individual and collective values through design-led approaches?*

It aimed, through a design-led approach to develop a theoretical framework which could support the investigation, identification and communication of personal, social and professional values and motivations of rural SMEs and their local communities.

Supported by an investigation undertaken across a triptych of sectors; Economics, Business and Rural Communities, contextualised and framed through Design Thinking and situated within a Scottish Rural Economic setting, this thesis identified a communication gap between business and communities surrounding individual and collectively held personal, social and professional values.

This research was undertaken through a model of Real World Research inquiry which was inspired by the works of Robson & McCartan, which respected the research area as being small in scale, flexible in nature and conducted within complex environments (Robson & McCartan, 2016). As such, the findings derived are tentative in nature and contextually reflective of the environments and individuals involved.

The inquiry approach of Real World Research was built around a Case Study methodology through which three small and focused studies of values and motivations were conducted. Through design-led approaches these studies investigated:

- The values and motivations of designers and their perceptions of the values and motivations of businesses and stakeholders.
- The values and motivations of a rural Scottish community.
- The values and motivations of SME and Micro enterprises located within the same community.

Design thinking, design-led approaches, Real World Research and Case study are all utilised to express details and features of the human experience. Subject matter and discipline perspectives may vary, but the fundamental foundations of each of these areas resides in the examination and expression of lived experiences.

Design thinking promotes and facilitates human centric, empathetically driven processes and actions. Developing an appreciation and understanding of the individuals who took part, their backgrounds, nuanced needs and their personal experiences and perspectives was supported by these design thinking qualities. This knowledge in turn supported the dissemination of the data by providing insight around fundamental and key influencing features within their lives, such as those relating to environment, service provision, levels of isolation, social and economic challenges, etc.

A strategy for data handling and analysis inspired by the works of Miles & Huberman (1994), Boulton & Hammersley (1996) and Braun & Clarke (2006) was developed which then enabled the researcher to examine and explore the data gathered. Features within this considered:

- Values and motivations and perspectives of the designers.
- Values and motivations of residents and businesses within the location.
- Contexts which impacted and shaped these values and motivations.
- Influencing factors found within the environment explored.

Further findings emerged which went beyond values and motivations, identifying and exposing complexities in both the business and across the wider community. As such it was identified that developing a deeper understanding of these problems (building contextual awareness) along with acquiring knowledge of the values and motivations held by community members could support businesses in identifying ways to align their value structures with those around them. This in turn also applied in reverse; Community members could better support and nurture their local business network through gaining a clearer appreciation of the professional values and motivations of the businesses themselves rather than misinterpreting the businesses values as the personal values of the owner.

It was in this particular area that the phenomenon of Values Shift could be observed as carrying notable impact. The emergence of Values Shift as a phenomenon in developing a discourse around values and motivations provided additional insights around personal and external perceptions of the actions, motivations and values of others. As discussed in ch 5.5.4, Inadvertent and unintentional shifts in expressed values resulted in businesses overlooking their community based contributions as professionally grounded. It also resulted in community members expressing values related to businesses actions towards the owners rather than the business. They saw no separation between the owners role as member of the community and business owner. Their actions were viewed as community directed contributions rather than those of a professional entity. The boundary lines between roles held in the community, and perceptions and relationships with each other in relation to these roles, was entwined and very interconnected. It must be considered however that this could be the result of their specific situations and the very strong levels of value associated with social connection and social relationships identified within the community and social values structures.

Interestingly, case study 1, which was the only study where the participants were asked to consider and express what they believed to be values held by a different group, was the only occasion where Values Shift did not occur. The personal and professional values and motivations held and expressed by the designers carried across each of the roles within their lives. It was duly noted that minimal variation existed between what the designers expressed as valuable personal and what they held to be valuable professionally. These strongly held personal values and underlying motivations were noted as subsequently influencing their interpretation and perceptions of the values and motivations which could be held by other individuals. In addition, case study 1 also shed light upon assumptive knowledge, and mis-contextualised framing by designers with regards to their perceptions of the values and motivations of businesses and stakeholders. A lack of nuanced understanding around expressions, meanings, influencing factors in life, coupled with assumptions surrounding the contextualisation and rationalisation of values and motivations, indicated that designers were missing opportunities through which they could identify key issues and enable and support businesses and communities in these kinds of locations in future. Designers attributed specialist design-based knowledge to businesses and stakeholders. There was an assumption that businesses and stakeholders would be driven and motivated to engage with design, that they would automatically be excited, energised and eager to take part. There was no allowance given for businesses to lack appreciation or capacity to engage with creative or design-led approaches which may hold potential future benefit.

Where designers seek to identify, understand and interpret values and motivations of participants within the scope of their intended research direction, the development of an understanding of context, an appreciation of underlying influences and their impact along with a general broad level knowledge of the background and lived experiences of the community in which these individuals live/work/engage is an essential necessity. If we as design researchers and

practitioners seek to truly reshape and re-design systems, services and experiences which are lacking in their capacity to meet the needs of contemporary society, and indeed, the needs of a world, cultivating a deeper and truer appreciation of what actually matters to people is essential.

In summary it can be identified that in the context of this research body:

- Values manifested as Instrumental and/or Immanent/Intrinsic and were contextually framed and influenced. These frames and influences directly impacted the underlying meaning of the values and motivations expressed.
- Identification of values and motivations will reveal external factors of influence. It was generally found that values and/or motivations were discussed and expressed in relation to specific environmental and societal realities.
- Assumptions of presumed knowledge can negatively impact potential avenues of future engagement. Acknowledgment of designer bias and assumptions prior to field-research gives opportunity to navigate these accordingly.
- Multiple life roles can unintentionally and inadvertently impact the values and motivations expressed through 'Values Shift'. Pre-knowledge of potential contexts, situations and nuances relating to the wider scope of a research venture support the development of understanding and appreciation of contributions at a deeper level and facilitate the identification of moments of Values Shift.

6.2 Addressing the Research Aim and Objectives

In line with the outlined aim of this research which was:

Through a design-led approach, to develop a theoretical framework which could support the investigation, identification and communication of personal, social and professional values and motivations of rural SMEs and their local communities.

Four objectives were defined to support and guide the research development, they looked to:

1. Examine traditional and alternative economic models of value assessment.

2. Establish a context based upon literature at the intersection of business, community, economics, values and design.
3. Apply a variety of design led approaches, new and established, to gather data from a rural community's business and community members enabling the identification and communication of values from both perspectives.
4. Analyse the data, creating a snapshot from business and community perspectives to support the development of a framework for shared value propositions which may enable knowledge exchange and the identification of values to occur in areas where there is societal aspiration for change.

These objectives were met through a variety of approaches. What now follows is a brief overview of each objective and a description of how and where it was addressed and connected findings.

Objective 1. Examine traditional and alternative economic models of value assessment.

Objective 1 was addressed within the literature review presented in Chapter 3 (specific focus towards this area can be found in ch3.3). The structure for this examination was provided through the development of the Venn strategy (Chapter1), which served to guide and shape the literary and contextual components of the research body. As such, traditional and alternative models of value assessment utilised by governments, public and private bodies were explored, considered and evaluated.

Objective 1 identified the emergence of alternative value oriented assessments geared towards the presentation and quantification of quality of life experienced as a growing trend arising across a number of sectors and fields.

Calls for shifts away from more capitalist and consumer based value assessments such as GDP reflect a change in the needs and priorities expressed across the globe. The heavy focus of previous years towards the acquirement of fungible resources and fiscal growth is no longer as prevalent as was seen in previous

decades. Calls are loud and unrelenting for value assessments to consider true matters of meaning and worth in life rather than having wellbeing and worth misrepresented by fiscal growth patterns and import and export rates.

Alternative approaches for the assessment of values were identified as originating in fields such as: The Social Sciences; Economics and Philosophy. Although it transpired that alternative models were becoming more popular, upon investigation it was duly identified that even these newer models were utilising quantitative data sources. In many cases, alternative models were identified as portraying information which had been accessed from a single global data set where the results drawn are predominantly quantitatively oriented rather than qualitative in nature (i.e Rating feelings of happiness on scales of 1-10). As such, it can be seen that findings drawn within these assessments lacked capacity (and necessary information) to portray the specific nuances and idiosyncrasies found in individual community groupings. As a result, these new alternative models and approaches lacked the nuanced and contextually specific information which related directly to the environments and individuals assessed.

Surprisingly, particularly in light of the extensive focus given towards human-centric and people-oriented practices found within the fields of Design and Design Thinking, it transpired that there was also a dearth of information available in this area from the sector. Design as a practice is spreading its capabilities and approaches into previously unrelated areas. Its practitioners are becoming more enabled to work across diverse and wide-ranging areas, and, predominantly, the focus of the work conducted considers and reflects the needs, wants and values of participants and stakeholders involved. There are inherent capacities in design which can facilitate the identification and communication of qualitative data of this nature.

Objective 1 identified a clear gap for the skills and practices inherent to Design Thinking to be applied to alternative values assessment approaches in order to support the

identification and communication of values and motivations found in rural communities through conveyance of qualitative data.

Objective 2. Establish a context based upon literature at the intersection of business, community, economics, values and design.

Design as we know it is becoming increasingly cross-disciplinary in its capabilities (an area discussed in more detail in Chapter 2). Its practitioners are working in fields out-with their areas of expertise, embodying the concept of 'T-shaped designers' (Brown, 2009), as solutions, services, resolutions and products are sought to meet the demands of contemporary societies, communities and individuals. This PhD provides one such example of design branching into research requiring cross-disciplinary knowledge.

Undertaking research across the variety of areas included within this thesis required a strategic approach to be developed. As with objective 1, the approach for navigating the literary and contextual reviews was derived from the development of the strategy inspired by Venn (1866;1880;1894) (Ch1).

Adoption of a Design Thinking approach supported the navigation of relevant areas for exploration and allowed for understanding to be generated from a perspective of 'non' expert and to be combined and considered in line with information from other fields, allowing for consideration of multiple areas to occur concurrently and in relation and reflection of each other.

As mentioned previously, social systems are for the most part, heterogenous in nature, and as such, multiple factors of influence and impact exist within them. It has been established that multiple facets and aspects of society have a clear impact upon both economies and quality of life experienced (Bell et al. 2012; Danson & Trebeck, 2011; Fitoussi et al. 2009), and their lack of inclusion within GDP, or rather, the lack of an approach capable of their inclusion, has resulted in a data gap in the market.

This gap represents an opportunity to consider the development of more social approaches towards understanding and appreciating value at both economic and societal level through more inclusive, and in this case, design-led approaches.

Developing an understanding of collective values found in communities offers opportunity to identify social structures, goals, ideals (Schwartz, 2006). The wellbeing of societies is not lynch pinned upon financial figures. They do constitute a component and complimentary factor within the overall picture, but they are required to be seen in perspective and in proportion, viewed in balance with the experienced quality of life of the citizens (Bell et al. 2012; Danson & Trebeck, 2011; Fitoussi et al. 2009; Kuznets, 1939:1955:1966; Kennedy,1968; Kramer & Porter, 2011). Our individual values are influenced by our collective values, (and vice versa) these in turn impact and shape our perceptions surrounding collective concerns which then shape our actions, behaviours and plans.

The contextual and literary studies supported identification of key, contextually relevant information which directly influenced and impacted the community worked with and provided insight around nuances and subtle gradations which exist across contemporary communities. Gathering relevant knowledge about the Scottish climate, with regards to its fiscal and societal conditions supported the direction of the research and the identification of suitable locations for conducting the research within. This knowledge then subsequently supported the researcher in engaging with both the businesses and community members. Low levels of trust were cultivated through discussions of matters specifically relevant to the location.

Developing an understanding of the domain of values across multiple fields served at a later date to further enrich and support the data handling, analysis and synthesis phases. The knowledge generated within objectives 1 and 2 evolved and influenced the entire body of research conducted.

Objective 3. Apply a variety of design led approaches, new and established, to gather data from a rural community's business and community members enabling the identification and communication of values from both perspectives.

The application of established and new design-led approaches was given grounding in Chapter 2 where the evolution of design towards practices which embody social responsibility and moral accountability (Sanders & Stappers, 2009) was presented.

This grounding served to contextualise and rationalise the actions and approaches implemented within the methodological approach for value identification which was presented in Chapter 4.

Design Thinking embodies an appreciation of the involvement and inclusion of stakeholders. It centres around human-centric and people-focused models of practice. As a process it is acknowledged as supporting the discovery of information which may otherwise be inaccessible, or not immediately available or apparent (Dyson, 2016). Three approaches to data gathering were developed along with a series of methods. The first of these involved a workshop with activities included. This was facilitated by the researcher and observations were documented throughout. Iteration and reflection on the events captured in case study 1 subsequently supported the development and refinement of a model of engagement for case study 2 which utilised interventions, facilitation and observation. Case study 3 provided opportunity for more extensive enquiries to be conducted through semi-structured interviews with members of the communities business network. The lines of inquiry addressed, coupled with the ways in which to draw out and identify expressions of values and motivations developed in the first two case studies proved invaluable for conducting case study 3.

Reflection on the data gathered throughout the three studies, which was undertaken iteratively, and then collectively, supported the identification of the phenomenon of Values Shift. This was particularly prevalent in the third case study.

Objective 4. Analyse the data gathered, creating a snapshot from business and community perspectives to support the development of a framework for shared value propositions which may support and enable knowledge exchange and value identification to occur in areas where there is societal aspiration for change.

Chapter 5 presents the analysis of the data gathered across the three studies and shares snapshots and narratives which convey values and motivations held by participants along with contextualising and rationalising their positions. An 8 step model of Thematic Analysis which was developed from the works of Miles & Huberman (1994), Boulton and Hammersley (1996) and Braun and Clarke (2006) was implemented to analyse the data. Findings presented include: The values and motivations of designers and their perceptions of the values and motivations of businesses and stakeholders (case study 1); Values and motivations of community members (case study 2) and Values and Motivations of Businesses (case study 3).

14 themes were identified across the 3 studies: Five major themes arose in case study 1 and case study 2 while four major themes were identified in case study 3. Data triangulation explored these 14 values in relation to each other and across each of the studies, this further enriching the quality of information derived from the studies. Findings identified values of instrumental and immanent nature along with motivations arising in response to personal and collective values and motivations which also influenced the emergence and development of values.

Triangulation supported and enhanced the identification of Values Shift as a notable phenomenon occurring in both case studies 2 and 3. This is discussed in more detail within ch 5.5.4. The findings generated from the case studies

supported the realisation of specific needs and priorities found in rural communities and their business networks. For example, Isolation, loneliness, freedom, autonomy and meaningful relationships with others all carry significant influence and impact to different areas of participants lives. Actions taken by both community members and businesses could be better aligned if values, motivations and the justification and rationalisation for their specifically held positions could be effectively shared between parties.

In addition, findings and insights derived around the investigation, identification and communication of values and motivations revealed the benefits of including a designer focused value inquiry within studies of this nature. Case study 1 identified considerable levels of assumption and bias regarding designers perceptions of values and motivations of stakeholders and businesses. Early identification of personal and perceived values can only be of benefit to future field research ventures which will require participation of stakeholders.

Following data handling and analysis and a review of the works conducted across this research body a 6-step framework for young and novice to medium level designers to support the identification and communication of values and motivations was developed. The framework and description is presented in Ch 6.4.

6.3 Contribution to Knowledge

It is this thesis' position that design thinking offers the opportunity to explore and consider alternative perspectives of values and motivations by accessing 'unshared or unseen' information and knowledge which may be of benefit to both SMEs and Micro industries and their local communities. From the inquiries conducted in this research body, two contributions to knowledge were identified for design-thinking practice and practitioners:

- The recognition and identification and definition of the phenomenon of Values Shift.

- The 6-step framework for novice to medium level designers who seek to work with businesses and individuals in rural communities.

The first contribution resides in the recognition, identification and definition of the phenomena of Values Shift. Values Shift (ch5.5.4) occurs when roles and responsibilities which inform and shape values and motivations held by an individual inadvertently alter perspectives. Businesses were noted as being most likely to experience and express values through a values shift response.

Values shift can inadvertently affect and influence data being gathered around personal, social and professional values and motivations, and as such, can create misleading and incorrect indication of trends and behaviours held by people. This in turn can then negatively influence information being gathered in relation to contextually relevant nuances found within the community.

Strategies for navigating moments of value shift include providing clarity and facilitation to conversations where values and motivations are being sought. Along with seeking pronoun shift when expressions are being provided.

Providing novice designers with an awareness of this phenomenon serves to support them in working with communities and businesses of this nature in future. Being aware of its existence and it's potential to randomly and unexpectedly emerge during field-research grants prior knowledge to designers which may in turn support and influence lines of inquiry they are developing personally.

The second contribution resides in the 6 step framework as is presented in 6.4. Alongside it's illustration, the framework provides an outline and structure for designers who wish to work in cognate areas through a strategic and tested approach supportive of identifying values and motivations of residents is provided.

Design, as discussed in chapter 2, is becoming increasingly interdisciplinary. It's practitioners are working in fields which far outstretch previous capabilities. This

PhD and the subsequent framework developed carries potential to positively influence perceptions of mythicalities and magic commonly related to design practitioners.

The framework is based around the 3 strategies developed within this research body that considered how best to tackle multi-disciplinary research from a design based background. Through its framework this PhD offers the opportunity to promote and build in rigour and underpinning in accessible ways to support novice to medium design experts in engaging and working with communities and businesses in rural areas.

Benefits of this approach for businesses exist around the frameworks capability to provide insight towards the collective value and motivations of the community structure around them along with identifying values they are unknowingly being attributed with and values they are unintentionally placing upon others.

The framework and identification of Values Shift carries potential future benefit across areas where designers, through design thinking processes which are human-centric and people-oriented, are endeavouring to explore the values and motivations of stakeholders in order to aid the development and refinement of required adaptations and changes to facilities, services, experiences and systems.

6.4 The 6 Step Framework

In relation to the impact of the knowledge derived within this research body, A 6 Step Framework was developed. This framework provides guidelines for novice to medium level design experts in the identification, exploration and communication of values and motivations of businesses and communities in rural areas.

The 6 steps within this framework include: Identify; Gather; Explore; Engage; Analyse; Reflect.

This framework can be used in more than one way. By following exactly the steps laid out, a replica study to the one conducted in this research can be undertaken. In addition, however, the provision of an overview of the key stages which emerged throughout the research process of this study with suggestions made to key and important features to include are provided in the illustration. This offers designers the opportunity to adapt and change the framework to suit their own needs.

Each of the steps are discussed below with an outline of how they can be applied and the framework can be used.

Identify

Step one of 'Identify' is one of two components which consider independent study and research. Through use of the Rule of 3, appropriate connected broad areas of investigation are identified. The intersections of these areas then provide an outline of the additional interconnected areas of investigation. Venn's mathematic principles which underpin his work ensure that information framed within this strategy is specifically relevant to the identified areas and does not accommodate nor facilitate further broadening of scope.

These identified areas are then framed within the selected methodological approach, contextual frames and main focus of the investigation. In this specific case, Real World Research with Case Study, Design Thinking and The Domain of Values.

This step serves to provide workable boundaries for designers embarking into research which is wide ranging and has broad scope in its lines of inquiry.

A Venn map and table along with supporting documentation around the use of the Venn strategy which were generated in direct relation to this particular studies focus are available within Appendix D, d1 & d2.

- *In terms of values and motivations the groupings identified within this study can be carried across into any community. The predominant focus of this research being values meant that the groups identified are fundamental to value and motivation generation. Alternatively, however, if other areas were being proposed for study, such as perhaps values in relation to education, frames of investigation can be added or indeed, areas included in the initial groupings (rules of 3) can be swapped out for alternatives. If this is the case iterations of the layout of the groupings in Venn format is advised.*

Gather

Step 2 of 'Gather' is the second component included in independent study and research. During this phase all relevant and influential information around the areas determined within step 1 are gathered. These are then subsequently used to shape and direct lines of inquiry being developed and methods and approaches which may be used in field research. Step 2 is a process which continually refines and emerges throughout the research body in response to reflections and learnings made by the designer.

It is during this step, in anticipation of future field work that additional considerations should be made to practical realities which will be faced. Working out in the field comes with considerable responsibilities to self and others. Not least of which is robust and thorough ethical boundaries. The development of an ethics outline will support the direction of inquiries and ensure the safety and wellbeing of both designer and participants.

In addition, scoping of suitable locations or groups which will meet the required needs of the research directives is best began at an early stage.

- *The creation of network maps to support identification of potential locations would be a useful contribution to this stage.*
- *Being prepared to adapt and alter approaches early on sets you up well for the unpredictability of field research and people-focused research later on.*
- *Developing a solid understanding of the location, its services and available provisions along with an overview of the business network and it's specific needs should be cultivated.*
- *Being mindful and respectful of the myriad of pressures faced by rural SMEs and Micro enterprises is necessary if engagement with them is to be successful. Being*

prepared to adapt, shift and alter plans for inquiries is essential if you are to successfully facilitate their involvement and contribution.

Explore

Step 3 of 'Explore' is the first of two practice and engagement based phases within the framework. It is during this particular step that exploration of intended lines of inquiry and methods and approaches are put into action. The inclusion of a study with peers which views expressions and values supports the designer in recognising value and motivation expressions and underlying contextualisation. This is invaluable in later stages of the research body.

'Explore' facilitates both the investigation of the exploratory groups' values and motivations, but through inclusion of activities which facilitate their expressions to focus upon the 2 groups which will be involved in the field research phase, (in this case businesses and communities), it is possible to enhanced awareness of personal knowledge, assumptions and bias that they may be taking forward in future projects.

Step 3 also provides room in which the designer can gain practical knowledge and experience in drawing out data, collating it and subsequently handling and analysing it.

- *Expressions of values and motivations tend to emerge with very rich and descriptive language. Individuals become animated and engaged when they are sharing this kind of information. Spotting shifts in both physical behaviours and in the vocalisations being made aids prompting around features to document and consider.*
- *What would be beneficial within this stage would be an activity of self-reflection of the designer conducting the research. One that actively focused upon drawing out their own values and motivations and would allow for a clear identification of areas of bias and assumptions that they themselves may be holding in regard to the groups they intend to work with in future.*
- *The inclusion of activities such as persona's or journey maps may aid the group participating in successfully accomplishing and expressing a 'Values Shift' relation to their perceptions of other parties.*

Engage

Step 4 encompasses the field-research conducted within the study. The focus within this is driven towards the acquirement of qualitative data which can be used to support the development of relevant snapshots of information.

Following reflection and review of the findings derived from the study hosted in step 3, appropriate methods and approaches to facilitate the expression of values and motivations are developed.

Access to suitable locations in which to conduct research of this nature takes considerable time and effort to facilitate, as does accessing the correct community members who may be able to assist with this.

As with each of the previous steps, knowledge gained from steps 1,2 and 3 all carries across into and beyond step 4. It influences and guides directions and decisions being made.

- *As was highlighted in stage 3, behaviours and vocalisations alter in the conveyance of values and motivations. Having taken time previously to investigate the location and make general observations in these areas is supportive in identifying moments where participants are vocally expressing values and motivations to you directly.*
- *Values shift occurred heavily within this step. An awareness of the use of terms, phrases and pronouns further aids identification of moments of shift. Addressing shifts quickly through either rephrasing inquiries or re-directing the participant helps to ensure that the correct lines of values and motivations are identified at the correct moment.*
- *Additional interventions and interviews in this stage would serve to further enhance and ground data gathered. Small focused studies conducted in multiples could provide interesting insights across a number of communities and business networks.*
- *Having clear and well developed lines of inquiry will make this process significantly easier to navigate.*

Analyse

Step 5 involves an 8 step model of Thematic Analysis based upon the works of Miles & Huberman, Boulton & Hammersley and Braun & Clarke which includes

steps of : Familiarise, Generalise, Search, Connect, Count/Make, Review, Wide view and Make succinct facilitated the analysis and interpretation of the data gathered from the three studies. Triangulation of the data sets within themselves, and then collectively across the whole group further aid the grounding and rigour of findings derived. This strategy enables designers in drawing out the necessary data from which they can draw findings and results for presentation

- *Pre-existing strategies and plans for handling large bodies of data, from high-level sweeping through to more in-depth coding are best in place beforehand. Interventions can generate large bodies of data from the community dependent upon uptake with the events themselves. Interviews will by and large always create a large volume of raw data.*
- *When searching for themes an intuitive response must be refined and enacted. Terms and phrases which echo in tone, previous contributions obtained through exploratory phases are good indication of value expressions.*
- *In terms of interviews, audio recording which allows for playback at later times facilitates identification in changes to tone and behaviour which may aid the identification or add clarity to contributions being made.*

Reflect

Maintaining a focus towards values throughout the whole research process supports feeding back findings towards the works of previous academics and thinkers in the field. This adds an additional dimension to triangulation and also serves to highlight areas where although the high-level value expressions may appear similar, further comparison with alternative models can show where rationalisation and grounding of the values and motivations is actually fundamentally different from group to group. Knowledge which incorporates the works of established academics in cognate fields provides an additional layer of rigour and clarity to a process predominantly considered to be mystical or magical.

- *Reflecting findings back towards literature and contextual information gathered during earlier steps further supports appropriate rationalisation and identification of key features of impact which shape responses gathered.*

- *This final step also supports the identification of where values and motivations align and deviate across parties involved. Nuanced understanding and appreciation of specific complexities faced by participants can be gathered and considered in relation to their contributions.*
- *Mapping of key fact based information in relation to the location and specific services, experiences and facilities available would be additionally beneficial at this stage.*

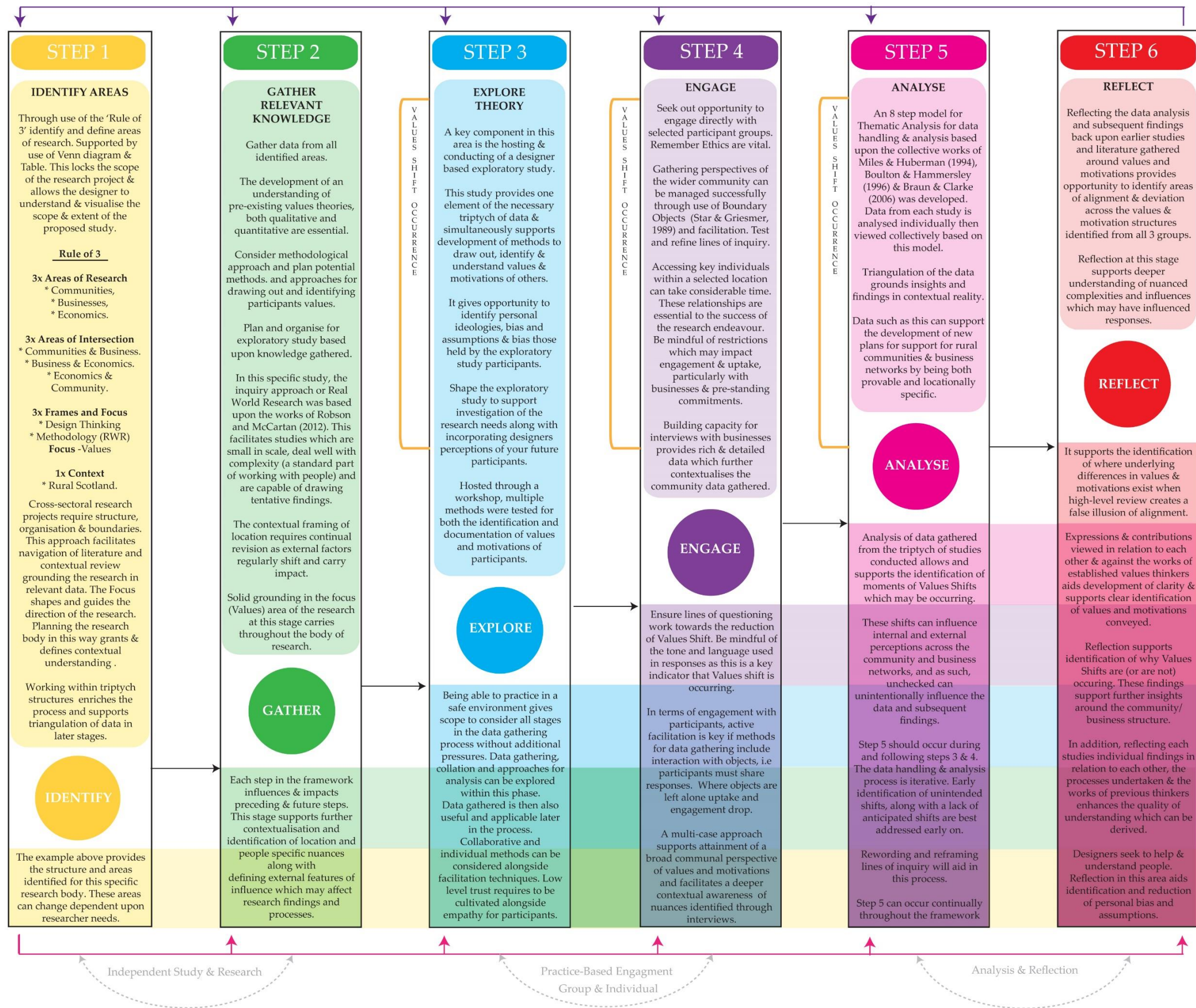


Figure 64. 6 Step Framework for Values Investigation for Novice to Medium Level Design Researchers

6.5 Identified Limitations of the Research

Arguments exist surrounding the applicability and limitations of Real World Research as an approach, and while Robson (1993) accepts that there is a 'danger to [becoming] a hired hand [employed] to develop [temporary], or plaster-like solutions for complex and intractable situations' (p14), he draws upon the works of Weiss and Bucuvalas to argue that:

'There is the advantage that letting society, in the guise of the client or sponsor, have some role in determining the focus of an enquiry makes it more likely that findings are both usable and likely to be used' (Ibid. p.14).

Research conducted within the real world with participants is not like laboratory research, where confines, restrictions and hard rules can be set in place beforehand. Real World Research Inquiry is subject to significant and minor shifts which may occur within and across the environment or phenomena being explored. However, as Robson argues, work for the benefit of society, should, by and large, involve members of the said society, and as such, it will inevitably incorporate degrees of unpredictability and lacks set confines.

Design thinking and its people-centric approach to practice and process also embodies concepts of Real World Research through its focus towards underpinning work through human-centric inputs. This stance is particularly pertinent when considering the needs, wants, values and motivations of individuals and collectivises. In any case, awareness of limitations and restrictions which may influence or impact the research being conducted require recognition and acknowledgement. As a result, steps to counter-act or neutralise any unintentional impact upon the data being gathered can be reduced.

Limitations within this study were identified as sitting within two categories of , External and Internal. External limitations relate to broader levels of the research conducted, i.e. external shifts across social/environmental/political platforms and regulations and requirements of the overarching project. Internal limitations

relate to limitations identified across the body of research being conducted, i.e. its methodology, methods, approaches, etc. The identified limitations along with ways in which they may be addressed in future work are presented as follows¹:

External Limitations

1. This body of research was conducted during a period of significant political upheaval in Scotland and further afield in Europe. As such, it should be noted that ongoing events and realities faced by participants may have influenced their responses and contributions.

Political discourse was in no way included within any of the studies conducted in this research body. The research approaches, methods and focus contained no reference to the ongoing political situations. No discourse with participants was sought through discussion of connected areas. Given the nature and significance of the political climate and its pending shifts, inclusion of inquiries or discussions which touched upon participants perspectives and opinions in these areas were intentionally avoided.

Lines of enquiry which may have generated any level of political discourse to emerge were intentionally discarded. This negated the potential for bias as a result of the political environment to impact or influence the data being gathered. Lines of questioning were specifically developed to enable participants to share their values and motivations but these were sought from personal/collective (Case study 2) or professional (Case study 3) perspectives. In case study 3 where businesses did discuss legislation, law, tax and finance, responses were not connected to any political environment at that time. Their contributions were noted as being general broad spectrum perspectives of established and long-running systems. A disclaimer is included in the front sections of the thesis which outlines specifically, that the process and findings derived from this PhD bear no influence or response towards any political leaning. It also refutes any association of the data gathered as being reflective of any political leaning or influence. Both the wider

¹ For clarity, responses to the limitations are formatted in Italics while the limitations themselves are presented in normal font.

project of Design in Action) and this research body adopted a non-political, neutral position with regards to areas such as this.

2. Due to the nature of this PhD being a part of a larger research funded grant and project, aspects of the research were constrained. Objectives, location and directives were included within pre-defined areas. This in turn impacted aspects and directions of work undertaken.

Areas of investigation had to align and meet the interests of the researcher while simultaneously meeting the needs of the larger project. This meant that through consultation and discussion, potential avenues and direction for research were discounted while alternative avenues were highlighted.

Navigating ground between the project and researcher to find space where both parties could be satisfied with the proposed exploration took time. Large scale projects have requirements which need to be met, some of which may not align entirely with the PhD itself.

Development of appropriate strategies to navigate areas such as this from both parties supports the development of researcher knowledge and skills and enables both the researcher and the project to meet their desired objectives.

The constraints of the larger project were incorporated within the original research plan to ensure that it's specific needs were met along with the needs of the researcher and the PhD investigation. Inclusion of research into specified areas of: The Scottish Rural Economy; Design Thinking and Design-led approaches and SME and Micro enterprises provided foundation from which the research proposal was developed. Further pre-determined features included: Participation must be sought from (at least 1) small, rural Scottish community with a population of 3000 or less. The inclusion of engagement with micro and SME businesses and enterprises in the area further defined boundaries for the research body. Discussions around the direction of the PhD also supported the connected RA work that the PhD researcher was conducting for the project as a component of their PhD role. Negotiation of interests and needs (both the projects and researchers) ensured

a degree of continuity across both roles. It also provided the researcher with additional levels of access and support from the project which would not have been available had the research direction deviated away from the needs and directives of the main project

3. Due to its connection to a larger research funded grant there were pre-set objectives and KPI's of the wider project to be met which at times differed from the PhD itself.

This limitation reflects features identified in limitation 2. The larger project of which this PhD was one of 10 similar positions had its own objectives and KPI's to be met. Roles and responsibilities to the over-arching project had to be navigated throughout the duration of the PhD.

Originally this was accomplished with a contracted and defined split in time. 2.5 days a week were allocated for PhD research and the remaining 2.5 days a week were designated to the project where work within an R.A^m capacity was undertaken. Responsibilities in this area included research and scoping for Chiasma events being hosted by the project. The planning, facilitation, toolkit development and realisation of live events. Documentation of research ongoing within the project, etc (This is touched upon in more detail in ch1.5).

The time-split ratio did vary in response to the immediate needs of the project or the researcher. Role requirements and associated work deadlines were negotiated with the core team members.

Resulting time constraints which emerged as a result of the additional R.A duties within the PhD did carry an impact upon the timeline of research activities then conducted. Awareness of bias emerging and influencing the PhD research directions also required navigation and negotiation.

^m R.A – Research Assistant. The R.A work undertaken was not inclusive of teaching and mentorship by the researcher for the wider university. This was built into the PhD time allotment when required.

A project based PhD is vastly different from an independently funded, or non-project connected PhD. Benefits of being part of a PhD group (In this case there were 10 originally) did provide interesting opportunities for collaborative work and projects along with supporting the researcher in the development of their professional network. Open lines of communication and good team relationships support navigating the duality of needs and responsibilities which emerge in these positions.

Narrow Scope Limitations

1. This was 'Real World Research' which lacked controlled variables. It included people and live events which are known for their complexity and for their potential to be 'messy'. Data being gathered was subject to the perspectives, experiences and beliefs of the participants involved.

Research including participants and live events are subject to complexity (Robson & McCartan, 2016). The subject area under exploration is one which by nature is found to be responsive and reflective of individual perspectives, experiences and beliefs.

Values are intrinsically personal. Both individual and community values are interconnected and influenced by the other (Cannon, 2007; Schwartz, 2012; 2006) Social, cultural, historical, economic and environmental factors are recognised as influencing and shaping communal values, which in turn influence individual values and vice versa.

Values of a collective and values of the individuals who make up the collective are both reflective of, and responsive to one another (Cannon, 2007). Acknowledgement of the contextual framing of the research conducted, through both literature and primary research sources supports the identification of these contextualities. This then in turn supports the identification of researcher assumptions and bias which may influence data sets. The strategy of inquiry implemented was based upon that of Real World Research which embraces the involvement of individuals with variant perspectives, experiences and beliefs within research processes. This acceptance of nuances which can be provided through engagement with participants is also echoed across Design Thinking approaches. These approaches appreciate and view contributions of knowledge from stakeholders as

positive factors. The information they provide uncovers hidden insights and information which can in turn, inform and enable design researchers in generating appropriate responses (Arias et al. 2000; Day & Parnell, 2003), 'more skills and knowledge domains can lead to better informed decisions and possible resolutions (Bruce & Baxter, 2013).

A further influencing factor in research of this nature is that: The workshops, Interventions and Interviews conducted were directly influenced by the people present, (and by proxy), the individuals who did not attend.

Consideration must subsequently be given towards inquiries and reflections which consider things like: Would results of the community interventions varied with a different participatory group? Would the findings derived from the businesses through the interviews have been different if other businesses had been involved? The research could, and did, only report upon the data gathered from the participants involved. That is why findings presented are more indicative rather than absolute in nature.

2. The nature of the interventions and interviews being out with normal experiences could effect and influence responses.

The situations presented to the participants (in particular the community interventions (case study 2) and the interviews (case study3) were out of the ordinary to those they usually experienced. As such, relationship development, building lines of communication and curating an atmosphere where they were comfortable in sharing thoughts and opinions of a personal nature was key.

The abnormality of these interventions and experiences was intentional and capacity to accommodate for this was built into the research body. The endeavour was to gather true and honest responses which were expressed without premeditated consideration. The strategy for this took three forms; The workshop (Case Study 1); The Interventions (Case Study 2) and The Interviews (Case study 3).

Case study 1. The workshop location was key. It was hosted in the student's regular studio environment which was a space where they were both

comfortable and felt at ease. Further factors which served to support the development of a productive environment included: Providing the students with a clear lay-out for the order of the day; Providing a full explanation as to the purpose of the research; Giving an open introduction which welcomed lines of inquiry; Adapting to the needs of the students throughout the activities; and Offering an exemplar at the conclusion of the day of the kind of data being drawn and collected.

Case Study 2. An atmosphere supportive of sharing personal opinions and thoughts was supported by providing options for either public display (The Bunting), or private contribution (The Post-box). All contributions were anonymous. The post-box ensured residents could not identify the source of specific contributions through recognising handwriting and also allowed for private submission if the participants did not want to contribute to the bunting in front of other residents (which would allow their immediate identification). Facilitation which provided participants with instruction, explanation and discussion of the area of research further nurtured low-levels of trust between researcher and participants.

Case Study 3. Each of the interviews was conducted in a location of the participants choice. Predominantly this was their business premises. A full outline of the purpose of the research was provided. Permission to audio record was sought and obtained each time and at any point where discussion deviated to things they wished not to publicly disclose, participants witnessed the direct erasing of the data involved. The interviews flowed around the needs of the participant, stopping and starting in response to their instruction. If customers arrived, or if meetings were scheduled, the interviews themselves were paused and reconvened at a convenient point.

Focus towards the comfort and ease of participants encouraged good rapport and was identified as positively impacting engagement. Indeed, facilitation proved invaluable in

the interventions with the community. The one intervention which was tested as a pop-up and had no facilitation received significantly lower levels of engagement and interaction. This was despite it being in place for a considerably longer period of time that was managed for the initial 2 interventions. A lesson to be learnt within this reflects that when requiring participatory engagement, particularly that which requires participants to share personal information, the designer must be present, engaged and interested to hear and collect the responses in person.

3. Accessing a suitable location impacted the research by constraining timeframes of both the researcher and the participants themselves.

Scoping a potential location for the research to be conducted within took considerable time. The larger project provided lines of communication and experiences across a range of Scottish locations which supported the scoping phase. Relationships had to be developed with multiple potential gatekeepers, some of which were not fruitful. Once a suitable location was both identified and access negotiated, research then had to be conducted within a shorter time frame than previously anticipated. This did not affect the participants in any way but impacted the rate at which the data was gathered. This in turn affected the time available for reflection and iteration. Identifying a selection of locations from which representatives of 'average' rural community's' could be identified required both primary and secondary research to be conducted prior to engagement. Criteria for inclusion or exclusion also had to be refined within this phase.

Issues of access are not new ground in design related research. Gaining buy-in from participants to shape and impact new research avenues requires considerable effort and perseverance. Research-fatigue' (Way, 2013), an unfortunate reality emerging across communities directly impacts the ability and accessibility of certain groups and locations.

Finding a suitable and accessible location was more challenging than first anticipated. Spending considerable time attempting to gain access for it not to emerge was also quite disheartening at times. Maintaining effort and inquiry around accessing locations or

groups is essential. When building a research plan and estimating time for sourcing and accessing a community or a group, from experience adding at least 50% to estimates would be beneficial for the student. Another key feature in this area is the development of a contingency plan (or 2). As said, Real World Research, and Design Thinking involve people, and as such, are by nature, unpredictable and subject to change. Multiple contingency plans on behalf of all parties by the designer responsible would lessen worry and stress and would exhibit preparedness and eagerness to the community(ies) involved. Obtaining a degree of sponsorship from key community members proved invaluable in obtaining and maintaining access to the location and its residents. Their endorsement facilitated active engagement with the interventions from the wider community.

4. Business owners have very limited time to take part in interviews or other research activities.

As is presented in 5.3.6 in the General Observations and Reflections from the Interviews, Sme and Micro enterprise owners have significantly reduced available 'free' time in which to take part in research activities. As such their capacity to become involved is impacted. This in turn affects the researchers capabilities in gathering required data.

Initial steps in organising interviews and engaging with SME and Micro enterprise owners exhibited a flavour of the time constraints which were being experienced. Alternative opening and closing hours meant that some businesses remained inaccessible throughout the duration of the study. When initial contact was made with owners, often a series of interruptions or other work-related responsibilities made conversations fragmented.

As a result, a very flexible approach towards conducting interviews with these individuals was adopted. SME and Micro business owners are under enormous pressures. In engaging with research, they must navigate their personal needs, the needs of their enterprise, along with needs and wants of their customers and clients. And this

says nothing of their needs and responsibilities which exist in their lives outside of their professions.

Interviews were conducted when it was suitable for the participants. If this meant multiple visits to allow them to conclude, this was facilitated. In some cases, interviews were conducted over the course of a day in 2 or more sessions. This occurred when patrons attended the business for purchasing. The interviews were halted, the researcher left the vicinity and returned at a later time. This was all pre-discussed with the participants ahead of the interview starting. Acknowledging personally the value and impact of the participants contributions, both in terms of the research, and the impact that their taking part has directly upon their businesses is important for cultivating good relationships and repour. This in turn can positively impact how well the participants engage with the research and influences how they may view similar opportunities in future.

5. The scope and range of the literature and contextual reviews were extensive and crossed multiple fields of study. As such, this research draws information and influence from a number of directions.

Pre-determined constraints in addition to areas identified by the researcher resulted in this research body covering a wide range of fields. Undertaking the research through a Real World Research which utilised Design Thinking and design-led approaches was categorically supportive in navigating such a diverse and wide-spread landscape. Framing the research through Design Thinking allowed for understanding to be generated from a perspective of 'non' expert, and to be combined and considered in line with information from other fields.

Contemporary designers are increasingly seen to be working across multiple and seemingly disparate fields. Emergent roles include those of Strategist, Researcher and Facilitator (Tan, 2012) (This is discussed further in Chapter 2). T-shaped practitioners who have core capabilities (depth) and a broad understanding of other disciplines and fields (McKinsey in Brown, 2009) are becoming the predominant norm. Designers, like society are evolving. Undertaking research across a broad range of directions is an

incorporated skill and capacity of the design thinking and design-led practice of the researcher.

Having such a wide scope proved challenging at times, but the development of the Venn strategy and table supported the researcher in navigating materials and information of relevance. The core focus of Values within this study subsequently served to ground all investigatory lines. Communities were explored, but through a focus of values and motivations. Economics again, required exploration, but when viewed through a focus of values essential and non-essential information began to emerge. This assignment of major focus which directed all subsequent investigations supported the research from literature and contextual investigations through to the development of methods and approaches along with data handling, analysis and reflection.

6.6 Applications for Studies of this Nature in Future

Applications for research of this kind are quite wide ranging. Alterations to context, areas of study, and focus could be applied to the framework in order to test its effectiveness in other human-centric areas of investigation. This would also offer opportunity to explore different social environments and groups which may further enhance appreciation, understanding and communication of human values and motivations from different settings.

The scope of this research body was restricted to rural Scotland. It is anticipated that were this model of research to be undertaken in urban or cosmopolitan areas, or indeed situated in different nations, findings, particularly those shared in relation to relationships and connections may be seen to vary quite drastically. It is acknowledged that provisions in urban areas, along with features around accessibility and engagement will vary drastically to those found in rural

locations. Therefore, values and motivation found in different social climates can be expected to differ in reflection of the alternative contexts influencing them.

Rural areas are reliant upon connections which aid and support their survival and which reduce feelings of isolation and loneliness which arise from physical restrictions. In addition, at practical level, certain motivations of businesses and communities in rural areas were found to be driven by, and founded upon, specific needs which arose from provisions available in the location. These motivations in turn shaped and influenced values and priorities.

Contemporary design practices are engaging unilaterally in addressing a host of situations found across society. Design Thinking and other practices of similar veins focus upon empathy and user understanding. The framework in this research provides an outline through which design practitioners can draw out, explore and examine underlying values and motivations of people. Simultaneously, the framework highlights the need for designers to identify their own assumptions and perceptions prior to community level engagement which may support the reduction of bias impacting on future outcomes. Second to this is the awareness of Values Shift, which can and does alter contributions unintentionally. Being aware of this shift and its potential impact can strengthen designers understanding and interpretation of value based data they are exploring.

In addition to future applications directly connected to design practitioners and design thinking processes, this research carries the potential to contribute to conversations around alternative value assessment metrics. As was identified, there is a substantiated call for metrics of assessment which exceed those found in GDP. Through building knowledge of this kind, which considers the values, needs, wants and motivations of small communities and their SME/Micro enterprise cultures, we can take steps forward on the road towards more socially inclusive models of value assessment.

There is potential scope eventually, through conducting a number of studies of this scale to identify needs, wants, values and motivations which are specifically relevant to small communities and business networks of this nature. This information would prove invaluable towards the shaping and development of a contemporary, people-centric, location based value assessment approach which could incorporate both mathematical quantifications of trade and commerce and simultaneously represent and convey qualitative data based upon values and motivations of people and their lives.

Radical change is necessary for the future of societies and communities. Change in consumerism, capitalism, and attitudes towards each other. The days of designers as the creators and generators in the consumer and product driven market are drawing to a close. Now, new designers need to contemplate, understand and disseminate complex bodies of information, informing and enabling ideation and development processes as they work towards human-centric, and socially relevant resolutions.

Indeed, design thinking is a process which encourages, and requires the exploration of a problem from multiple perspectives, and one which allows problems to be reframed in the context of the situation occurring (Brown & Wyatt, 2010). Designers as Schön (1983) positions, 'shape' situations around their perceptions and available knowledge. The situation 'talks back' and the designer then responds to the talkback. It becomes a circular, iterative process. It is clear that design has experienced shifts in direction, perception and capabilities and although it still plays a valuable role in aesthetic development, its capabilities are motivated by both intrinsic and extrinsic factors.

Design thinking and design-led approaches have much to offer conversations which support our consideration of one another and the experiences that we have. This thesis is about people. It's about contributing to the conversations which aim to enrich our lives and give us meaning.

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Appendix A

a1. Ethical Approval

A copy of email confirming ethical approval for this study received from Professor Nigel Johnson on 14/07/2014.

From: Nigel Johnson
To: Rebecca Lindsay
CC: Fiona Fyffe Lawson
Date: Mon 14/07/2014 17:16
Subject: Ethical Application

Thanks Rebecca – these seem fine now so please proceed on the basis that you have ethical approval and I will sign of copies on my return to the college. Best Wishes with all this.

Regards,

Nigel.

Professor Nigel Johnson

Director of PhD Studies DJCAD

a2. Example PhD Research Consent Form



Duncan of Jordanstone College of Art & Design, University of Dundee Participant Informed Consent Form

Envisioning Values

I have read the information relating to the above project/ programme of research in which I have been asked to participate and have been given a copy to keep. The nature and purposes of the research have been explained to me, and I have had the opportunity to discuss the details and ask questions about this information. I understand what is being proposed and the procedures in which I will be involved have been explained to me.

I understand that my involvement in this study, and particular information/data from this research, will remain strictly confidential. Only the research student involved in the study will have access to the information/ data. It has been explained to me what will happen to the data once the project has been completed.

Please circle your preferred choices below.

I do / do not give consent for documentation and files such as digital notes, still images, moving images/ personal audio files to be used for this research.

I do / do not wish to be contacted at a later date in relation to the research.

I hereby consent to participation in the study which has been fully explained to me.

Please sign and date this form to indicate that you have read and fully understand the Participant Information Sheet and accept the conditions of this study. Thank you

Participant's name (BLOCK CAPITALS):

Participant's signature:

Research Student investigator's name:

Research Student investigator's signature:

Date:

Having given this consent I understand that I have the right to withdraw from the programme at any time without disadvantage to myself and without being obliged to give any reason.

a3. Example of Participant Information Sheet

ENVISIONING VALUES

Participant Information Sheet

You are being invited to take part in a research study for the Design in Action Knowledge Exchange Hub project. Your participation will help the project identify and determine how Design might affect and support the development of businesses within the Scottish Rural Economy. You personally are not being tested as part of this project.

PURPOSE OF THE RESEARCH STUDY/PROJECT

Design in Action Knowledge Exchange Hub is a 5-year research project due to end in the summer of 2016 led by Duncan of Jordanstone University of Dundee working with five other institutions (The University of Abertay, St Andrews University, The Glasgow School of Art, The Robert Gordon University Grays' School of Art, Edinburgh College of Art at the University of Edinburgh).

The research being undertaken by the University of Dundee will be led by PhD researcher Rebecca Lindsay. The purpose of the research is to investigate underlying values within and across business and community structures, considering how knowledge exchange occurs and how design might affect and support the development of future business endeavours in Scotland.

You are being asked to participate in the design phase of a research project, which aims to develop effective design and knowledge exchange processes for Scottish businesses and communities. Your participation will involve interviews, questionnaires and workshop sessions. The research you are involved in is part of an overall design-led process supported by participatory approaches, focused studies and project evaluation.

The research process will include a series of activities such as group discussion, questionnaires, interviews, workshops, feedback, note taking and documentation. During the study data will be captured through a variety of media, including written notes by researcher and participants, video, audio and photographic documentation. The mix of documentation will help the researcher reflect and analyse the data afterwards. The workshop outputs and documentation will contribute towards the development of the PhD and research which may be published into academic journals, or for example web articles, videos, academic papers, audio files, service development plans or matrices.

TERMINATION OF PARTICIPATION

You have the right to withdraw your consent or discontinue participation at any time without penalty. You have the right to decline any questions or decline to be photographed or recorded. You may be informed at the end about the project findings (If you choose).

RISKS

There are no known risks for you in this study.

CONFIDENTIALITY/ANONYMITY

Participants will be required to sign a form saying that they are willing to participate in the project. The consent form will explain what will be recorded and what will happen to any information collected. The participants will be given a copy of this form to keep. All documentation and resources collated through focus group activities will remain confidential and be stored securely. Records that identify participants will not be publicly available. Articles, presentations and published research that references, uses photographs and report research findings from these focus groups will not use the names of participants.

This study is reviewed and approved by the Research Ethics Sub-Committee of Duncan of Jordanstone College of Art and Design at the University of Dundee.

FOR FURTHER INFORMATION ABOUT THIS RESEARCH STUDY

You are welcome to contact the researcher/supervisor at any point during this project to discuss any concerns you may have about the use of the research material and it's publication.

CONTACTS:**Researcher**

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The Research Ethics Sub-Committee of the Research Committee of Duncan of Jordanstone College of Art & Design at the University of Dundee has reviewed and approved this research study.

Appendix B

b1. Design with Children in Mind and The Unheard Client

Researcher: Rebecca Lindsay.

Undertaken: 2008- 2010

Key Partners: Ninewells Hospital: Barnardos Rollercoaster: Wonderland Nursery: St Ninians RC Primary School

Many children encounter unpleasant and traumatising experiences when in hospital. The environments children attend for therapeutic and medical care are often institutionalised and carry a degree of stigma for the user. Research conducted by Stafford et al (2003) and Cremin & Slatter, (2010) around children's views on participation and consultation processes suggests young people perceive much consultation to be tokenistic models and not yet actions which are fully embraced by adults and other professional with children and their families often forgotten or overlooked within the design and creative process.

The perspective of the child is one of the most common oversights that occurs within paediatric facility design, but it is "Through the direct accounts of children we can accurately portray aspects of childhood, and thus begin to meet the needs of young people" (Hardman, 1973). With better facilities and smoother transitions through NHS services, overall stress levels for children, parents and staff can be diminished. Developing methods to interact with children about how they utilise facilities, services and environments, can have positive effects for the NHS and developed and refined processes and methods can also be later re-employed with other service users to obtain further insights.

Based within these considerations, the research encompassed in The Unheard Client, and Design with Children in Mind was an exploration of co-design and consensus design methods that actively integrated children into the design process of hospital and therapeutic environments. It investigated both methods to engage children in paediatric and therapeutic environment design and methods and approaches for further dissemination of the acquired knowledge into understandable models fit for public consumption.

The research and investigative processes were undertaken through a combination of qualitative and quantitative approaches. Interviews, questionnaires and post-occupancy evaluation methods formed the basis for development of workshop models. The workshops were hosted over a 12-month period and encompassed 6 groups. Children aged 3-5, 8-9, 10-11, 11-12, 14-16 and a mixed group of adults with professional

backgrounds from a variety of specialist fields. The final expo of the research culminated in an interactive exhibit (Fig B1.1) encouraging and supporting perspectives of children to be better perceived and understood by adult figures through a variety of interventions and encouraged group activities and creative thinking to be explored by those who attended.

The interactive quality of the exhibition also promoted and encouraged public feedback to be collected and later analysed in support of research around the design of paediatric care facilities. Works from The Unheard Client and Design with Children in Mind were subsequently also exhibited at The Victoria and Albert Museum London, (2011), The Scottish Parliament, (2011) and The Lighthouse Glasgow (2012).



*Fig b1. Image from Design with Children in Mind Exhibition held at DJCAD, 2011.
Source: Researchers Own.*

Appendix C

c1. Sectoral Allocations

Source: Design in Action - Design in Action University Sectoral Allocations.

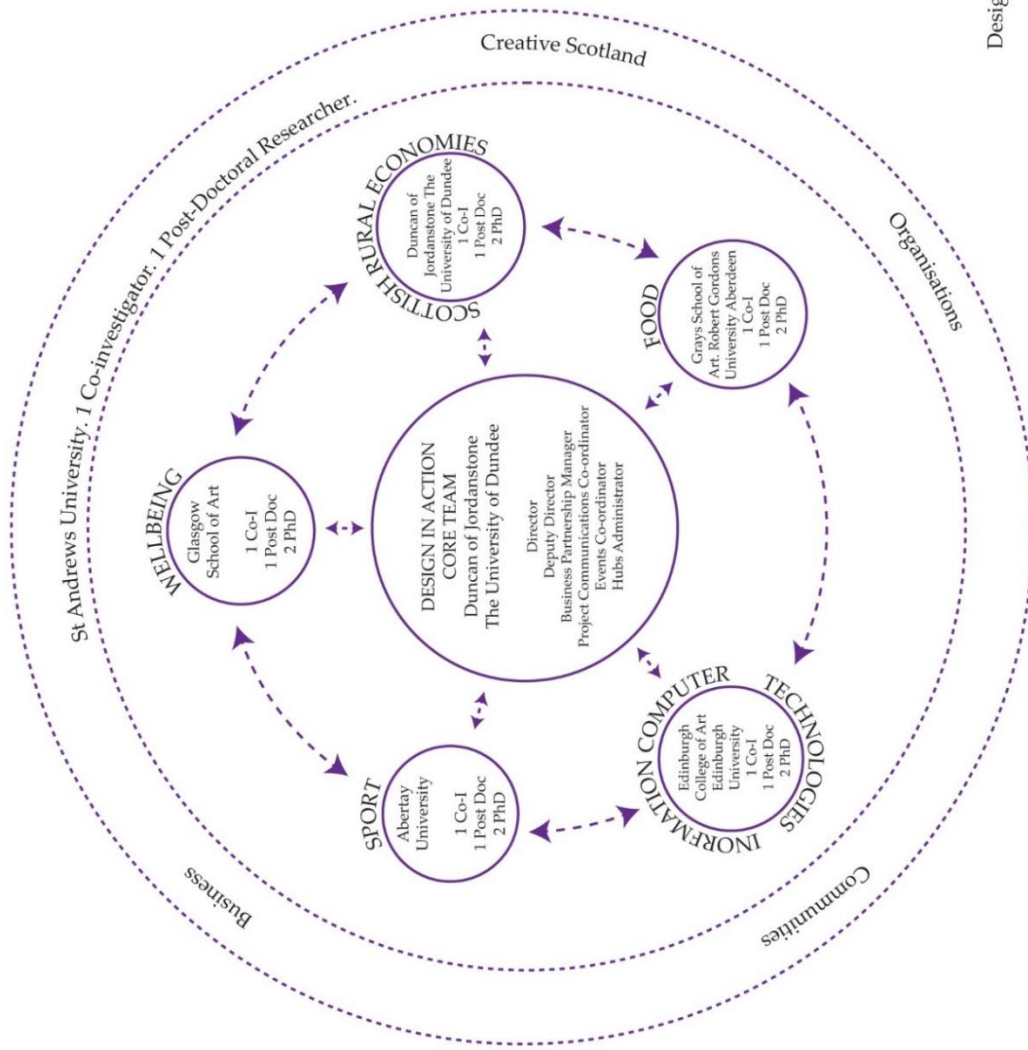
University	Sector	Team
DJCAD The University of Dundee	The Core Team	Director Deputy Director Business Partnership Manager Events Co-ordinator Project and Communications Co-Ordinator Hub Administrator
DJCAD The University of Dundee	Scottish Rural Economy	Co-Investigator Post-Doctoral Researcher 2 PhD Research Student
Abertay University	Sport	Co-Investigator Post-Doctoral Researcher 2 PhD Research Student
Grays School of Art, Aberdeen University	Food	Co-Investigator Post-Doctoral Researcher 2 PhD Research Student
ECA Edinburgh College of Art	ICT	Co-Investigator Post-Doctoral Researcher 2 PhD Research Students
GSA. Glasgow School of Art		Co-Investigator Post-Doctoral Researcher 2 PhD Research Students
St Andrews University	The Construction of Business Models	Co-Investigator + 1 Post-Doctoral Researcher

c2. DiA Chiasma Events hosted by University

Source: Design in Action - Design in Action Chiasma Events hosted 2013-2015

No	Sector/University Lead/University Support	Chiasma	Location
1	Wellbeing GSA/DJCAD	<i>Wellbeing Chiasma 2013</i> - The Management/Prevention of Type 2 Diabetes	Citizen M, Glasgow
2	Food Gray's School of Art RGU. DJCAD/GSA	<i>Food Chiasma 2013</i> Creating new ideas and opportunities for artisan food companies in Scotland.	Oakwood Cookery School, Elgin
3	Rural Scottish Economy DJCAD/Abertay/ECA	<i>Made in Scotland 2013; Capitalising on Cultural Heritage.</i> - Exploring the role of design and innovation with rural businesses and communities	Atholl Palace, Pitlochory
4	Sport Abertay Uni/ DJCAD	<i>Inclusion in the Outdoors</i> - Complex problems gaining access to outdoor activities in Scotland	Forbes of Kingennie
5	Scottish Legal Service Chiasma 2013 All Partners	<i>Innovating to Thrive – Scottish Legal Services</i> Developing Ideas for future businesses and enterprise	Double Tree by Hilton, Dundee
6	ICT 2014 ECA/DJCAD/GSA	<i>Beyond Mobile</i> - New ideas for Information and Communications Technology	Salisbury Green Hotel, Edinburgh
7.	Food - 2014 Gray's School of Art, RGU. DJCAD/ECA	<i>The Canny Consumer</i> The rising cost of food and Ideation around changes to food consumption	Double Tree Hilton, Dundee
8	Wellbeing 2014 GSA/ECA/DJCAD	<i>Living Well</i> - Self-management of health and an aging population	Hotel Novotel, Glasgow
9	Rural Scotland 2014 DJCAD/ECA	<i>Sustaining Rural Scotland</i> Reconciling Climate change impact with Business Innovation	New Lanark Mill Hotel, New Lanark
10	ICT 2015 ECA/Grays/DJCAD	<i>Creative Currencies</i> - Cryptocurrencies and reshaping contemporary banking	T.S.C. RBS, Edinburgh
11	Rural Scotland 2015 with Zero Waste Scotland DJCAD/ECA	<i>Change by Design</i> – Developing New models to support alternative fashion and textile systems	Dalmahoy Marriot Hotel, Kirknewton
12	Food Gray's School of Art, RGU. DJCAD/GSA	<i>#foodfutures</i> Considering transformative approaches within the food and drink sector	Hilton Dunblane
13	Wellbeing 2015 GSA/ECA/DJCAD	<i>Surviving and Thriving</i> – Redesigning Self-Management & Social Support	Northern Design Centre Newcastle
14	Digital Imaging Technology Accelerator Chiasma with Digital Imaging Research DJCAD and all Parties	<i>Our Digital Imaging Futures</i> Making it small, smart, portable, cost efficient and open to global adoption To aid communication and action Connect intelligence and interfaces	DoubleTree Hilton

c3. The DiA Network



Design in Action Network Map

c4. Design in Action Chiasma Outputs

The model of residential workshops known as 'Chiasma' were developed and designed by a collective group formed by members of all the partner universities. These 2.5 day long, knowledge exchange, enterprise innovation workshops were hosted at a variety of locations across Scotland and served to bring together Academics, Businesses and Designers to generate potential business outcomes, solutions and proposals in line with the associated research stream of event.

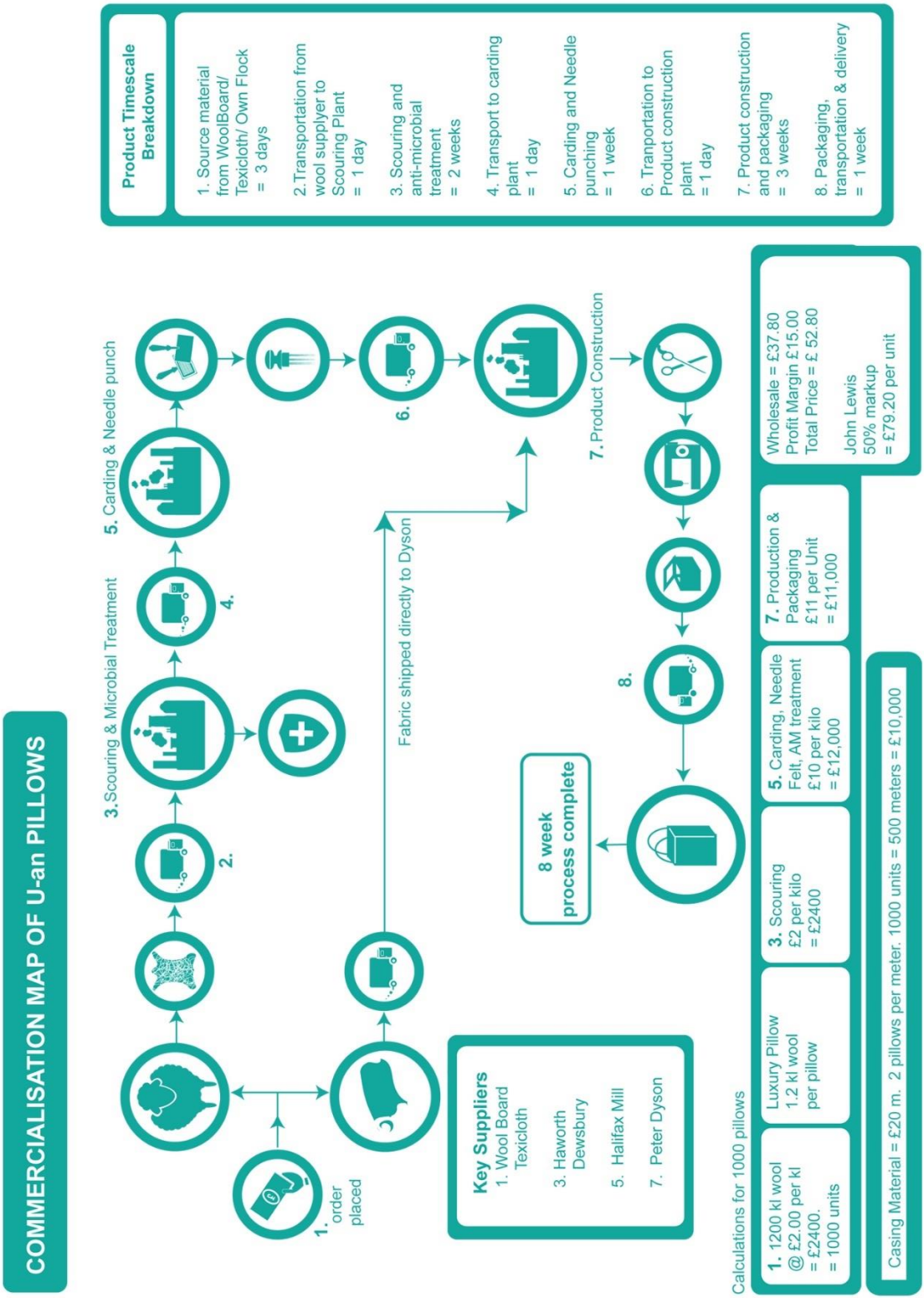
Each chiasma was specifically designed and curated in response to, and in alignment with, its teams allocated sector. They were crafted in direct response to research undertaken by the sectors specifically allocated hub and team. Each hub would spend in excess of 6 months prior to a chiasma identifying and researching key areas across their specific sector through a variety of approaches. These findings were then collated and developed into 'calls' for each unique Chiasma. Post Chiasma, each successful team was then offered the opportunity to apply for up to £20,000. 00 of funding through which to support the generation of their business proposal. They were also provided with specialist business and legal support, along with guidance, advice and assistance throughout the process. They were allocated an appropriate PhD researcher, who, whilst undertaking research of their own direction within the sectoral boundaries, would simultaneously track successful business proposals and generate case studies for Design in Action exemplifying how design was being utilised strategically and what the impact of innovation was.

Design in Action hosted 14 Chiasma events during its tenure and generated 17 successful businesses (Table c4).

Table c4. Design in Action Chiasma Outputs.

Sector	Business	Premise/Impact
Food	Beer52	Craft Beer Brewers supporting a global network of independent Microbreweries.
Rural Scotland	U-an Wool	The creation of high-end, wool products as a 'super' material for positive health benefits. Supporting Scottish Farming Industry & Scottish Wool Industry (Tracked)
ICT	Tappstory	Augmented Reality App with focus on product authenticity and providence
Wellbeing	Shopping Basket Health Check	Assessing the quality of a food shop
Wellbeing	T2U	Consolidation of multiple health monitoring apps to a singular platform access point.
Wellbeing	KnowSugar	Provide guidance to lowering consumed sugar levels
Sport	The Shadow Books	Interactive game to mediate outdoors experiences for children
ICT	ScrAPPbook	Community oriented app for the documentation of meaningful experiences (Tracked by Researcher)
Food	Kitchen Table	Community based restaurant to tackle poverty, interaction and healthy eating
Food	Stonesoop	Community meal sharing and distribution model to encourage interaction and learning
Farm	TableFarm	Gamification of food growing through play, aimed at pre-teens to support learning
Rural Scotland	WoodWorks	Increasing awareness of untapped potential within Scotland's woodland areas. Supporting creation of products through an environmental lens
ICT	Tusi	Smartwatch app for enabling communication through smart devices
ICT	Squidz	Relationship development system to support brand and customer interactions
Rural Scotland & Zero Waste Scotland	SEINCLLN	Fashion brand utilising traditional and contemporary approaches in sustainable and environmentally conscious ways to create high end, high quality garments
Food	MuscleCake	Subscription model for Fitness oriented treats of high quality with direct delivery
ICT	Baum	Physics and Learning oriented app

c5. Route to Market Strategy Map (Created for U-an Wool)



c6. U-an Wool Case Study

Applying Design Strategy; Design in Action Case Study: How can design strategy support and enhance development of new portfolio businesses in Scotland?

Executive Summary

Design in Action is endeavouring to integrate design strategy and research at the heart of business practice through supporting and instigating the development of new businesses. Through 'Chiasma' events (residential business idea incubators), which bring together businesses, designers and academics, it identifies areas of potential growth through participatory approaches and supports development of new businesses to address gaps in the market. This paper discusses a funded Chiasma outcome, a company called U-an Wool which is a diversification of a Scottish farm business. It investigates the impact of integrating design into its business and product development and considers how Design strategy and Research are affecting and supporting processes of ideation, prototyping, pre-trade development and proof of concept. This case study foregrounds the role of a designer, and design strategy as an approach to support an emerging Scottish business.

Context

The current economic situation faced by many SME's across Scotland is that of uncertainty and economic turbulence. Businesses are faced with taking necessary steps to ensure market position by adopting new models and behaviours, such as diversifying approaches to adapt to current consumer values and drivers, embracing 'collective intelligence' and integrating fields of knowledge into practice (Mulgan, 2013). Scotland's economic climate is strongly interlinked to the success and failures of its SME and Micro business eco-system. SME's and Micro businesses are often described as the 'engine rooms' of economies (House of Commons, 2005). According to The Scottish Government (2014), in March 2013 there were no fewer than 343,105 Scottish SME's in active operation, providing employment for approximately one fifth of the entire populous.

CASE STUDY - U-AN SCOTLAND LTD; DIVERSIFICATION THROUGH DESIGN

Background.

U-an Scotland is the brainchild of a Scottish sheep farmer who attended the 'Made in Scotland - Capitalising on Cultural Heritage' Chiasma hosted in June 2013 in Pitlochry Scotland. U-an Scotland Ltd shows example of where and how design methods and approaches implemented strategically can support the diversification, development and growth of a pre-existing business into new marketplaces. The necessity for effective diversification to occur was motivated by the loss of over 50% of the farm's livestock following an extremely harsh winter. In order to safeguard the farm businesses future

market position and economic security, she determined that diversification of her current business model was an essential step to be undertaken.

Approach

The U-an case study was undertaken through a mixed method approach which encompassed;

- 2 semi-structured interviews with the business owner and each of the designers
- ethnographic observation
- group discussion
- prototype development

Implementing Research and Design

The initial designer scheduled to work with the company had a traditional textiles/maker background and although able to bring rich perspective and insights towards the potential vision of the final product, was unable to contribute in the strategic planning and development, it's business model and the commercial and branding plans of the company. Over time it was determined that designers with a different set of capabilities which included; strategic planning, co-design, synthesis and brand development were required to support product development into the marketplace. The three designers who were subsequently brought on board had expertise and qualification in Service, Product, Textile and Strategic Design. This change in the dynamic brought with it both benefits and constraints. Relationships required to be nurtured in order to support the products success and enhance the levels of trust from both sides. Each of the designers had different reasons for accepting the offer to join the business varying from;

- A deep interest about how a product of this nature could be developed
- The co-design elements and activities to implement
- The potential to work intensely on a new fledgling business.

Prior to the integration of a design team, the business owner undertook an extensive level of research in relation to the health benefits of woollen products for those with allergies and health concerns, this action was initiated following direct personal experiences with family members. When the full design team was integrated in to the project to support product, brand and manufacture development, they also brought with them substantial capabilities and practice of research and analysis. This allowed for all pre-collated data and research to be included and considered whilst integrating new findings that they were making through their own research undertakings. This lead to further research being scheduled across a wide variety of fields including; Upcycling,

traceability, product disposal, product maintenance and cleaning, manufacturing processes.

Ideation

Ideation occurred across 3 levels in the business.

- The business owner, her plans for product development and capability.
- The business support team consisting of the owner, business advisor and business mentor.
- The Design team - Textile, Service, Product and Strategic designers supported by a researcher.

Over an 18-month period, 4 key meetings were hosted which involved the owner, a business advisor and business mentor. These meetings provided space to ideate potential avenues for business development and market positioning. This aspect of ideation occurred through structured conversations and interactions. These meetings were documented to provide information towards future business plan and model generation. Ideation was also supported through designer involvement over the course of 7 meetings encompassing sketching, mapping and disseminating information to identify key routes and actions to undertake. The design team would undertake various aspects of work both before, during and after each meeting, supporting the development of a clear vision and path for the business to take. The business owner would also map potential plans, thoughts and ideas which would be brought to meetings. This was a useful mechanism to understand the potential scope of the business and its capabilities. It did bring challenges in identifying a key area from where to begin however. Once the specific stakeholders primary market position had been identified the process became more fluid and concise.

Prototyping

Both lo and high-fidelity prototypes were generated during 8 meetings with the designers. Normally lasting at least 1 full day if not 2 these prototypes allowed the business owner to physically see and interact with a wide range of possible product outputs. The prototypes were generated in both 2-dimensional and 3-dimensional forms allowing for decisions to be made quickly, efficiently and at low cost. The process of prototyping also included brand development, and a visualisation of the route to commercialisation. These encouraged and supported the owner in identifying her key market routes and actions and also the identification and collation of the company identity.

Pre-trade development

The designers showed capability and skills across a wide range of fields, such as;

- Visualisation
- Strategy - both business development and marketing#
- Prototyping
- Research
- Synthesis of data
- Facilitation
- Social Media engagement

Initially, to support synthesis of data and the team's communication strategy, a social media stream was developed. This allowed the core team to share information regarding the story of U-an and its founder, background desk research into medicinal benefits of wool, prototype development, brand development and potential routes to market. The provision on an instantaneous method of communication across the team also supported the team dynamics development and strengthened the relationships being created. In due course this channel will become public to provide insight towards the background story and evolutionary path that U-an has undertaken.

Proof of Concept

Four focus groups were scheduled to provide further feedback in regard to initial prototypes and branding options. The designers developed a model to support recruitment, experience and engagement of participants in line with a co-design philosophy which was shared by the business. Each focus group involved 20 participants with varied connection to the subject matter, from allergy sufferers to experts in health and allergy management, textile experts and small business owners. The focus groups supported development by providing a structured forum through which the designers were able to iteratively develop the product based upon the synthesis and analysis of user feedback. Through carefully designed and curated tools and methods, the designers engaged with the participants and supported conversations around a wide field of perspectives including known and unknown knowledge, tactile reactions, visual preferences, stakeholder positioning and brand development. As a result, a refined and focused product was generated and is subsequently being tested and assessed for market.

Closing Remarks

The interviews with both the designers and the owner served to identify both positive and negative aspects of the experience to date. Overall it is perceived to have been predominantly positive with the owner expressing a developing understanding of design processes and methods undertaken.

"The creative aspect, its' the thinking out of the box process,' whereas what I would call the more focused,' I'm running a commercial business is 'we go straight from A to B'. The creative aspect will say 'well there's D, C, E' and they might give better results." Business Owner on the differences between business planning and design methods.

"It made me completely rethink how I was doing things, it made me value design" Business Owner on integrating design strategically.

"There's so many things I've learned {...}; the value in having a team with different experiences and understandings, but all with an understanding of the core vision. You wouldn't get anywhere without having everyone on the same page but having different things to bring to the table." Designer on working on a live business concept.

U-an Wool will be manufacturing final products for retail in the next couple of months. The business has gained strength and momentum, recently winning additional funding of £1000 through and award for Commercial Potential.

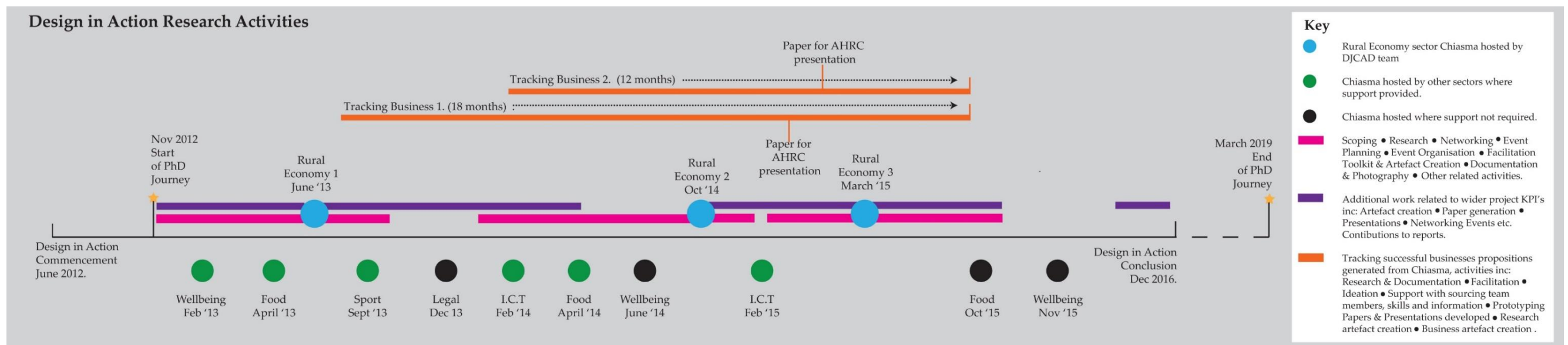
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c7. DiA PhD related RA Responsibilities Timeline



The timeline of research activities undertaken during this PhD within the research role at Design in Action is presented above. It is by no means an exhaustive list but it provides a brief overview of the main activities and events which were incorporated into the PhD experience. Chiasma events offered the opportunity to work with fledgling businesses and aid them in development of route to market strategies, to imbed design thinking into their models and to work upon facilitation, workshop development and delivery along with a variety of methods and approaches to data gathering and data analysis. Other events and activities were involved throughout the tenure of the PhD including toolkit development, video and animation creation, paper generation, presentations, etc.

Appendix D

d1. Venn Diagrams and their role in this research

Visual aids are integral mechanism of intellect, through which humanity has expanded its knowledge, grown and evolved. Using visual aids to understand complexity, and for strategy development and evolution is not new. One such mechanism of visual aid which serves to address this need for clarity and exploration is the Venn Diagram. Venn diagrams originated within the field of mathematics but have considerable applicational potential across all subjects.

VENN diagrams, named for their creator John Venn, are first documented within his work 'On the diagrammatic and mechanical representation of propositions and reasonings' 1880. Venn was an eminent English philosopher, mathematician and logician who, in 2 of his most prominent publications, *The Logic of Chance* (1866) and *Symbolic Logic* (1894), expanded upon the works of George Boole (an English mathematician, philosopher and logician), and the works of Leonhard Euler in the development and explanation of what we now call VENN Diagrams, which are Diagrammatic representations.

Amorphous variations of Venn diagram techniques are imparted across multiple fields of study including the vast territories of design; however, these techniques are not usually applied accurately to reflect the predetermined implementation and utilisation of Venn as they were originally designed but rather as a method of visualisation and information interpretation.

"The majority of modern logical treatises make at any rate occasional appeal to diagrammatic aid, in order to give sensible illustration of the relations of terms and pro-positions to each other." (Venn, 1884, p.112).

Venn discusses, (in the aforementioned chapter via footnote), that in fact, of 60 logical treatises published over the preceding century, over 50% of them had utilised visual aids, all predominantly based upon the Eulerian Scheme. (some 34 publications had made use of the Eulerian Scheme). However, it became apparent to Venn, that although effective, the scheme lacked capabilities for the examination of more complex matters, it

was not that these things couldn't be investigated through its implementation, rather than:

“[...] the failure of the older method is simply due to its attempted application to a somewhat more complicated set of data than those for which it was designed” (Venn, 1884,p.127).

A fundamental argument of Venn's towards the Eulerian Scheme lay within its inapplicability towards exploring areas of the unknown. “They forbid the natural expression of uncertainty.” (Venn, 1880, p.xix). Generally, Euler diagrams are considered to offer capabilities in investigating pre-determined relationships between sets (See Illustration 5 & 6). The Eulerian scheme proposes in absolutes, each circle providing the definitive edge or boundary of the particular subject or component identified within it. It allows, no areas of 'merge' or cross-over to occur with more than 2 subjects or components at any one time. It implies, that each particular component included stands entirely independent to the other, therefore, when this tool is utilised to investigate a triptych-based exploration, (that is an investigation comprised of 3 elements), only 2 elements can be combined at any one time, thus reducing the capabilities of this model to be utilised within deeper explorations.

In comparison, Venn diagrams are developed to support all potential logical relationships which 'might' exist. The development of Venn Diagrams allows us to contemplate complexities, connections and cross-overs between various sets of knowledge through providing visual representation of the points of intersect, and disconnect, which occur. This opens up the capacity for potential levels of understanding and investigation to be undertaken at more complex level, supporting confinement of core subjects while simultaneously supporting cross-sectoral exploration through new lenses. As Venn argues “Diagrams are primarily meant to assist the eye and the mind by the intuitive nature of their evidence, any excessive complication entirely frustrates their main object” (Venn, 1880, p.7). This principle led to the researcher utilising the Venn Diagrammatic as a board from which to develop a method capable of exploration of the subject areas involved in this thesis.

Venn are typically utilised within scientific and mathematical fields when considering relationships and points of intersection which exist within and across sets of information.

Within design and creative fields, they are implemented in a similar manner as they provide visual aid to understanding and perceiving relationships and intersections.

Since the inception of the process, multiple variations, applications and models have been generated which utilise the fundamental shapes and basic principles of Venn, however they contain a substantial difference in approach and application. They fundamentally provide insight towards understanding numerous components and their interconnected and disparate subject boundaries. In Venn diagrams, these considerations are predominantly restricted to the observation and study of a tryptic of fields. One of the existing identified limitations of Venn diagrams is their perceived inability to impart complex level data in a thorough manner as they provide a point of observation from a singular perspective. This limitation is true when, without provision and understanding of the mathematical premise and rules behind Venn creation, mistakes are made in diagrammatic construction, leading to assumptions around negation or omission of data. The systematic approach offered by the rules of pure mathematics surrounding Venn creation is based on fundamental principles of points of absolute inclusion, exclusion and connection.

There are other limitations involved in implementing Venn diagrams as a models of exploration, the first being that, as a visual aid, utilised within a Design context to quickly consider complex data, without extensive working up and multiple iterations, Venn are only capable of providing a simple perspective of the subjects or areas being included and considered. They lack the capability to incorporate complex levels of information in an easily digested visual manner, as, through the inclusion of multiple data layers, things become harder to analyse and consider.

This then creates a second limitation, Venn diagrams can be built to host more than the pre-existing 3 circles commonly associated with them, however, the more circles added, the more confused, complex, and less usable by another team, the diagram becomes to work with, and the reflections of implied relationships existing both separately within each 'set', collectively as a whole, and at the points of intersection ('sub-sets') become less easily identifiable.

Greater levels of complexity included within Venn diagrams elevate the potential for mistakes to be made during investigation and analysis phases of the subjects considered. The simplicity of the visual qualities of Venn indicates that, when used as tool for representing sets which exceed the capabilities of its original design, there are potential gaps and aspects which may go unconsidered. As a result of these limitations, the adapted Venn diagram developed by the researcher constitutes one method used within the process of identifying research areas. This was then supported and used in conjunction with further tables, for example (see Table 2A.3. Map of Exploration), where, following both the table and Venn construction, and supported by extensive area mapping, brainstorming, visualisations and preliminary secondary research, co-relation and exploration was conducted through multiple perspectives in order to minimise the occurrence of limitations in perspective within the overall sets identified. Mathematically speaking, Venn are reflective of 'sets';

"A set is a collection of objects, such as numbers, points, functions, or even other sets. Each object in a set is an element or member of the set, and the elements belong to the set, or are in the set" (The Open University, 2017).

The basic, fundamental principles within Venn Diagrams considers that the limitations of components as presented, are implied and identified as absolutes. For example, if: A = Business, B = Communities, C= Economics, then 'A' is seen as a set, implying that all aspects considered to exist within the set of Business are implied and included within its boundaries. Effectively, A, is not a 'subset' of B or C, and vice versa. However, the points of intersection then allow for interconnected areas to be considered as at this stage, this is where each of these individual sets are implied and identified as 'interconnected subsets', as such they are connected aspects of each other. All of this information is then considered both as set and subset with the resulting data then being available for collective consideration through the overarching frame and boundaries implied and set by the context and lens.

d2. Researchers Process

As was discussed in the prologue, there were two predetermined statutes set for this doctoral study, the first: that the research must be design based, and the second; that it must be located within the Scottish Rural Economy. Taking these two statutes into consideration, the researcher was left with a triad of study areas which consisted of Communities, Business and Economics, all of which were required to relate to, and interact with, the field of Scottish Rural Economics and the field of Design Thinking.

Developing a Venn diagram supported identification of 3 clear and appropriate subject areas, which would be contextualised and framed through an additional 2 subject areas providing the core lenses of investigation: Business, Communities and Economics. When each element was put into position, a Value lens was added into the representational diagrammatic, providing focus towards the identification of intersections across the pre-existing subjects (Fig d1. The Basic Venn Construct).

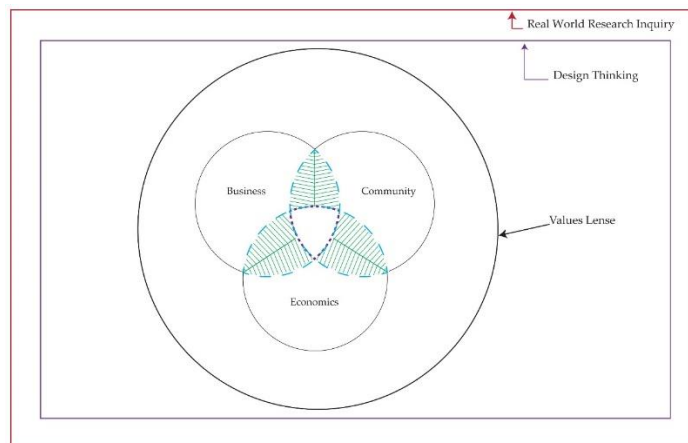


Fig d1. The Basic Venn Construct.

From this point, the researcher began to adapt and manipulate the Venn Diagram to show the most relevant areas of study surrounding and connected to the thesis. This involved identifying the 3 core subjects as 'traditional' practice, that is, perceiving these designated fields within their most commonly accepted and understood models, systems, practices and projects whilst allowing the areas which were focused within the Value Lens to consider more contemporary movements, projects and models which occur within these intersections. The new diagram (Fig d2) was then framed within a Design Thinking context and positioned within a Real World Research Inquiry

approach, after which the sections identified through the addition of the Value Lens were augmented for exploration with the addition of radiating lines; the further these lines expanded from the core of the diagram, the more contemporary and innovative the aspects proposed for discussion were determined as being.

Following identification of this as a suitable model and strategy to use for the extrapolation and investigation of potential areas of connected information, a mapping exercise was conducted to expand upon these identified areas, thus providing direction towards elements which might be included within the literature review (Table d1).

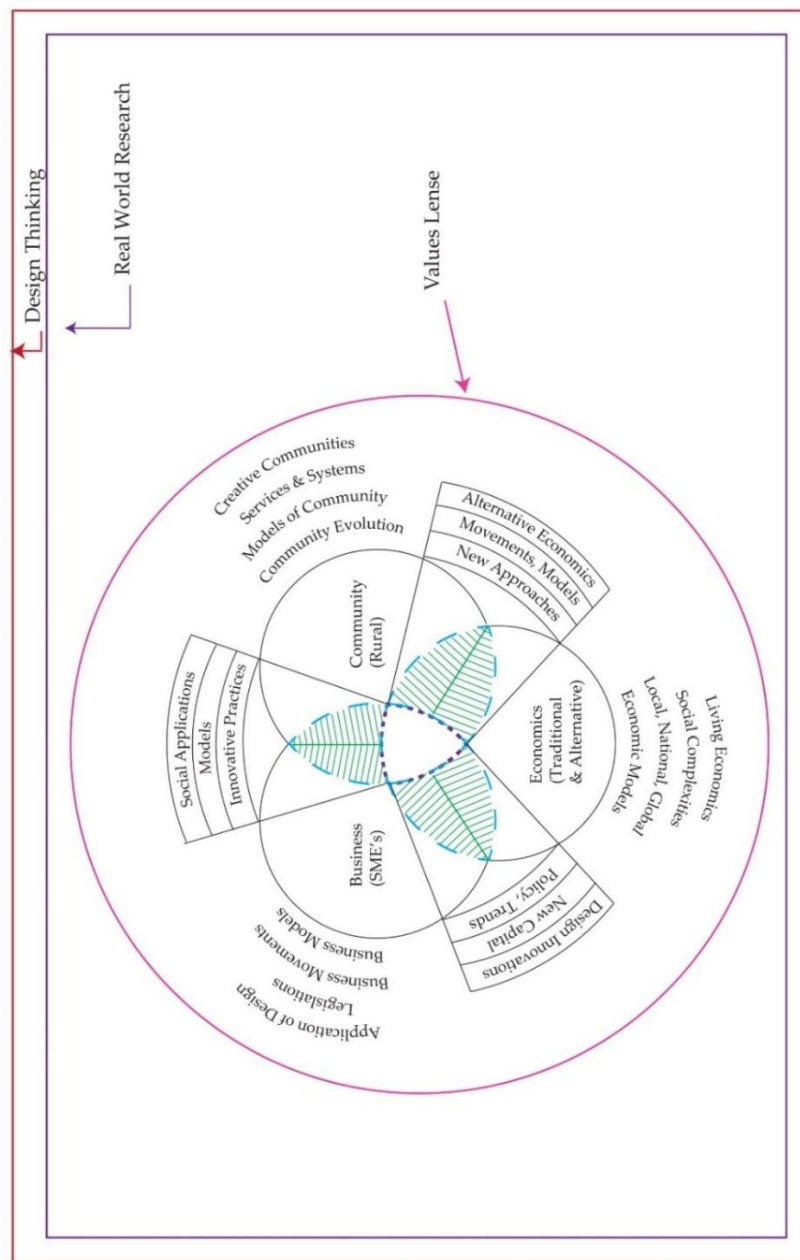


Fig d2 Final Venn Construct

Table d1. Map of Exploration

TRADITIONAL	CONTEMPORARY	TRADITIONAL	CONTEMPORARY	TRADITIONAL	CONTEMPORARY	TRADITIONAL	CONTEMPORARY
<p>B Business</p> <p>Business Models Traditional. Modern. SME. Micro. Multi-National. Traditional approaches & Design led. Projects. Models. Corporate. Smart Growth</p> <p>Business Movements Industrial to Creative revolutions. Consumerism Minimalism. Sustainability Environmental awareness</p> <p>Business Legislation Drivers & Developers Employment & Skills Finance & Trade Policy & Profit</p> <p>Application of Design Business, Design & Creative industries. Communication Branding, Marketing, Values EU projects. Design Council. Hyper Island. DiA.</p>	<p>BE Business & Economics</p> <p>Policy Trends. Emergent approaches Alt business approaches Shared Values. C.S.R. Sharing Economy. Co-ops Circular Economy Creative Economy</p> <p>New Capital New models of capital Theory in practice New Capital. New Trade Social funding Fortune 500/Angel Investors Social Modernism New financial support</p> <p>Design Innovations Design Innovation. EU. Entrepreneurs. UX Design. Design and new business models. Governance. Horizon 2020. Design Council. Nesta. New hubs.</p>	<p>E Economics</p> <p>Economic Models Historical. GDP.GNP. Capitalism. Socialism. New Capital. Theory. Practice. Democracy. Dictatorship</p> <p>Local, National, Global Scale. Local. National. Global. Hyper Local. Flux Markets. Diversification. Sync. Value of SME sectors. G20/G7/Nato/Brexit/Indy Ref</p> <p>Social Complexities Wicked Problems. Quality of Life. Complex Societies. Wealth Inequality. Rural Wealth Inequality. Marx/Picketty/McIntosh</p> <p>Living Economics Economic impact at local level. OECD. Legatum. Current Models. Q o L. Gallup World Poll. Maslow Heirarchy. Class statutes</p>	<p>EC Economics & Community</p> <p>New Approaches to Growth Other economic models. Indicator evaluations. Designing indicators & impact. Evaluation. Maslow Wellbeing. Health & Values. New Trade. Context & Environment.</p> <p>Movements. Models Index of values. R.S.A. Oxfam. GNH. Humankind Index. Changing Economies Alternative Currencies. Sustainability & Drivers. Social Modernism. System Design.</p> <p>Alternative Economics Circular. Sustainable. Creative Sharing. Global to Hyper local. GNH. Prosperity. Nesta</p>	<p>C Community</p> <p>Community Evolution How they develop. Definitions. Stories. Psychology. Communication. Location. Populations. Networks.</p> <p>Models of Community Types of Community Skills. Practice. Location. Cultures. Movement of People. Optimum/minimum levels for success</p> <p>Services & Systems Rural restrictions. Events. Produce Systems. Services. Growth & Reduction. Local Trade. Isolation.</p> <p>Creative Communities Engagement. Ownership. Open Innovation. Theories. Practice. Development. Skill/Time Sharing/Banking Design Activism</p>	<p>Reformative Design CONTEMPORARY</p> <p>CB Community & Business</p> <p>Social Applications Systems & Services Co-Design. Participatory Models. Co-operatives and Projects. Local Environment and growth. Dot 7. Open Design. Environmental Awareness. Transitions.</p> <p>Models Open Design. Design Jams. Open Ideo. ToInness. Transition Towns. HC Design. Co-Participatory Design. Service Design. Strategic Design. Circular Design. Environmental Design. Value Propositions.</p> <p>Innovative Practices Trade & Services. Social Innovations. Transitions. Citizen Science. Social Science. Research - Recycle. Upcycle.</p>		



In summary, this process identified 3 core subject areas: Business, Community, Economics – to be viewed from traditional and contemporary perspectives along with 3 areas of intersection; 1) Business and Economics: Design for Profit. 2) Economics and Communities: Social/Altruistic Design. 3) Communities and Businesses: Reformative Design, which would provide a cross-sectoral perspective of the landscape and offer insights towards some of the capabilities and functions of Design Thinking within and between each field.

These diagrammatic representations (visual aids) (Venn, 1894), helped clarify the Literature Review process for the researcher. They allowed identification of appropriate secondary research materials to occur through an exploratory approach, whilst reducing the potential risk of exponential divergence of subject areas occurring through the creation of 'boundaries of relevance' for the researcher to work within.

Appendix E

e1. Scottish Population Breakdown

Source: Scottish Population as Defined by Council Area. The National Records of Scotland 2016.

Location	(6/2016) estimate populations
Scotland (Whole)	5,404,700
Na h-Eileanan Siar	26,900
Inverclyde	79,160
Angus	116,520
Aberdeen City	229,840
North Ayrshire	135,890
Dumfries and Galloway	149,520
Clackmannanshire	51,350
Shetland Islands	23,200
Dundee City	148,270
South Ayrshire	112,470
Aberdeenshire	262,190
East Ayrshire	122,200
South Lanarkshire	317,100
Argyll and Bute	87,130
Highland	234,770
West Dunbartonshire	89,860
North Lanarkshire	317,100
Scottish Borders	114,530
Perth and Kinross	150,680
East Dunbartonshire	107,540
Falkirk	159,380
Moray	96,070
Fife	370,330
Renfrewshire	175,930
Orkney Islands	21,850
West Lothian	180,130
East Renfrewshire	93,810
Stirling	93,750
East Lothian	104,090
Midlothian	88,610
Glasgow City	615,070
City of Edinburgh	507,170

Appendix F

f1. Wicked Problems (Adaptation)

Source: Rittel & Webber 1973, *Dilemmas in General Theory of Planning* (p155 – 169).

Distinguishable Traits	Descriptors
1. There is no definitive formulation of a wicked-problem.	The information needed to understand the problems depends upon the proposal for solution. You have to know the context to understand the problem, and you can't search for information without an idea of the solution. You cannot first understand, then solve, they have to be simultaneously occurring events – this is why systems-approaches are inapplicable to wicked problems.
2. Wicked problems have no stopping rule.	Problems which exist outside of wicked problem boundaries have defined endpoints. Work in these areas stops at a clear stage. Wicked problem solutions can always be further developed.
3. Solutions to wicked problems are not true or false, but good or bad.	Features of solutions are directly impacted by the fallible judgements of man. They reflect and are affected by values, mood, personal interests and ideological predilections.
4. There is no immediate and no ultimate test of a solution to a wicked problem.	Any proposed or implemented solution has consequence and repercussions. There is no effective way to test success or failure. There is also no way to track all the resulting repercussions through everyone/thing impacted.
5. Every solution to wicked problem is a 'one-shot' operation – Every attempt at a solution counts.	When dealing with wicked problems, every action has a reaction. In other fields, tests and attempts at solving problems can be run without causing negative impacts. Solutions for wicked problems create impact and carry influence. Each attempt to undo or change a 'solution' which didn't create the desired result generates further wicked problems, a cyclical, respective series of events.
6. Wicked problems do not have an enumerable (or exhaustively describable) set of potential solutions.	'Nor is there a well-described set of permissible operations that may be incorporated into the plan. 'Action depends upon creation of trust and on judgements made by client and planner. Realistic decisions have to be weighed and considered in relation to all available information and then, when possible acted upon.
7. Every wicked problem is essentially unique – regardless of similarities, each problem has distinguishing properties.	There are no 'families' of wicked problems, no groups of common characteristics. One solution will not fit nor fix all problems; each individual problem requires its own considered approach.
8. Every wicked problem can be considered to be a symptom of another problem.	Often experiences and situations can be mis-interpreted. What one person perceives as a 'problem' may in fact be a resulting symptom or impact of a greater problem which exists out with their perspective or points of consideration.
9. The existence of a discrepancy representing a wicked problem can be explained in numerous ways. The choice of explanation determines the nature of the problem's resolution.	Pre-determined ways to explain or describe situations do not exist, and hypothesis can be disputed and argued in multiple ways. The lack of boundaries which exist, along with the influence and impact of human judgement, opinion, error and bias. There are no definitive ways in which to describe or explain situations. Hypothesis can be refuted in many more ways than within scientific processes. 'The analyst world view is the strongest determining factor in explaining a discrepancy and, therefore in resolving a wicked problem.
The planner has no right to be wrong.	In scientific communities, hypothesis are refuted or corroborated, but no blame is assigned. Working on wicked problems offers no immunity. 'Here the aim is not to find the truth, but to improve some characteristics of the world where people live. Planners are liable for the consequences of the actions they generate; the effects can matter a great deal to those people that are touched by those actions.'

Appendix G

g1. The Double Diamond. The Design Council (2005)

The Design Council, formed in 1944, (originally the Council of Industrial Design) has over the years re-designed its direction, moving away from generating economic growth through simply product development and creation, and expanding its limits to consider design around services, systems and interactions. The release of their in-house research design; 'The Double Diamond' in 2005 served to portray their 'Design Thinking' process a 'diverge – converge' based model (see Fig. g1).

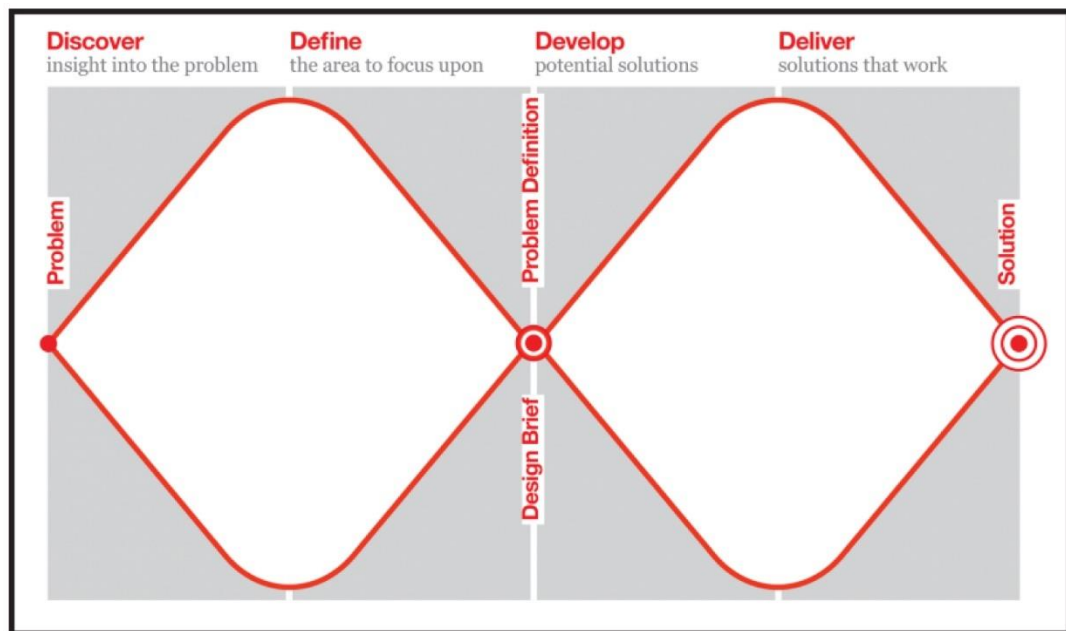


Fig. g1. The Double Diamond.

Source: designcouncil.org.uk (2005)

Through this visualisation they identified and convey the 4 key steps which occur within their process: Discovery; Definition; Development and Delivery, with attention driven towards gaining insight, finding focus, developing potential solutions, and finally culminating with the delivery of an effective solution.

g2. The 5 Stages of the Design Process. IDEO & Riverdale (2012)

IDEO, (an international design and consultancy firm formed by Kelley, Moggridge and Nuttal in 1991) also redirected its focus away from product creation, redirecting itself towards exploring and undertaking human-centred design activities and has emerged as a leading proponent and organisation working within the field of Design Thinking.

Commonly recognised for its well-known 3-step process of 'Inspiration, Ideation and Implementation. This adaptation developed in collaboration with Riverdale expands upon the proposed process communicating a more coherent and detailed 5-phase plan (Fig,g2.) which includes actions of Discovery, Interpretation, Ideation, Experimentation and Evolution.

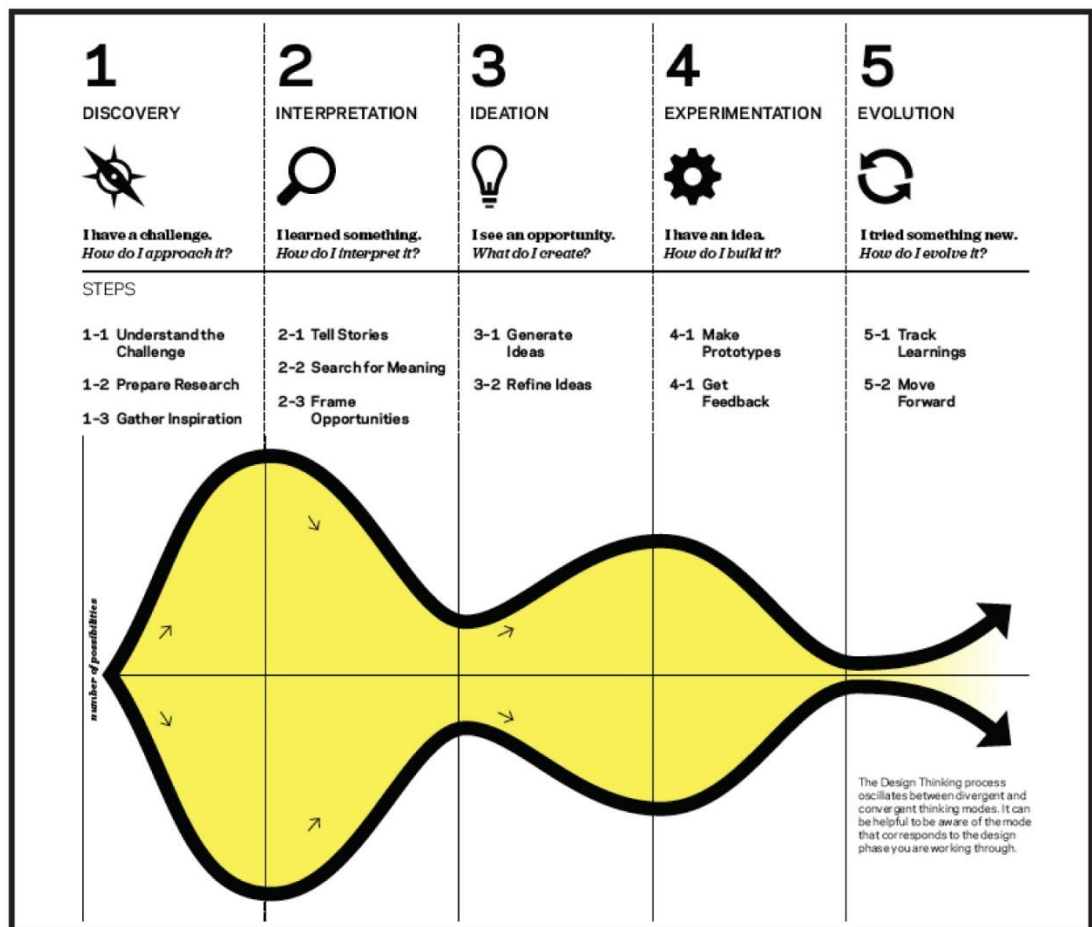


Fig g2. The Five Phases of the Design Process
Source: IDEO & Riverdale (2012).

Within each action the focus has a varied direction ranging from: Understanding the briefs and conducting research: Framing, synthesising and communicating stories: Ideating and creating proposals: Preparing and exploring prototypes and experiments and finally: Testing these prototypes, feeding back reflections and findings into their development. These steps also fit within the 'diverge-converge' process of the Design Council (Fig g1.1) Inspiration, Ideation and Implementation can be associated across the 5 phases, with Inspiration conveying phases of Discovery and Interpretation. Ideation hosting phases of Interpretation, Ideation and Experimentation, and Implementation considering the phases of Experimentation and Evolution.

g3. The Design Thinking Process. Stanford d.school Redesigning Theatre (2012)

Stanford d.school published a visualisation of their process and understanding of Design Thinking in 2012 (Fig, g3.). Similar to the IDEO model, it contains 5 key steps, on this occasion identified as: Empathy, Definition, Ideation, Prototyping and Testing.

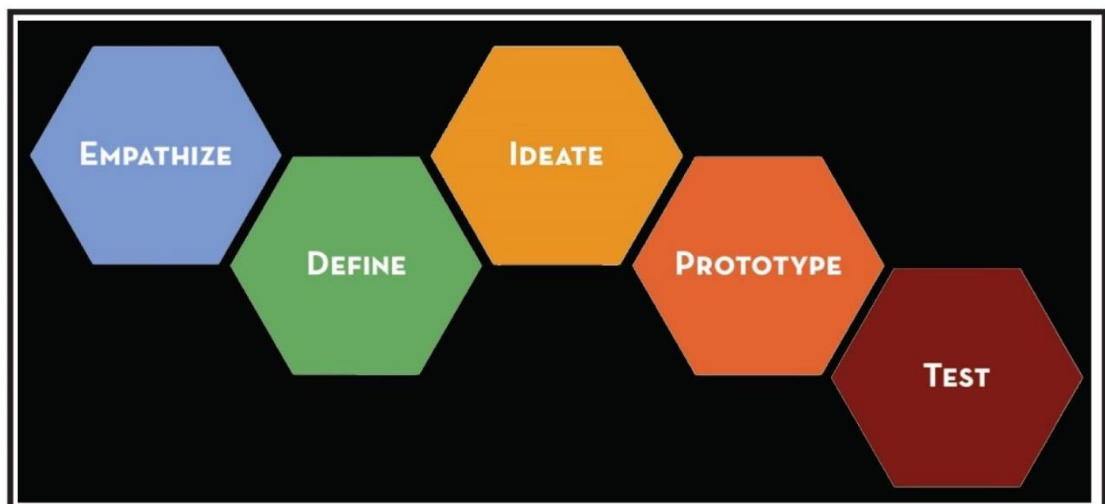


Fig g3. The Design Thinking Process

Source: Stanford d.school. Redesigning Theatre (2012)

This visual conveys the 'waterfall' effect and result of process, where each individual component fuels and supports the following step. It begins by defining the problem, moving through stages towards solution ideation and implementation with a considerable focus driven towards the needs and wants of the stakeholder groups being central in the process. It is an iterative model, developing and as solutions are tested and reflected upon. This model includes 5 key steps, which they position as integral to Design Thinking; Empathy; Definition; Ideation; Prototyping; Testing. The connectivity between d. school and IDEO should be anticipated as they share a 'Founding Father' in D. Kelley. Kelley was CEO at IDEO whilst a professor in d.school.

Appendix H

h1. Business Model Types

Compiled from: Beattie, 2018; Companies House, 2000; Digital Guide, 2017; Kunz, 2018; Meggit, 2018; Lister, 2018; Financial Ombudsman Service, 2015.

Model Type	Description
Manufacturer	Taking raw materials through a process to create an end product.
Distributor	Purchases manufactured products from others and sells them on.
Aggregator/Affiliate	Profit and revenue are obtained through commissions, i.e. the more sales made, the more profit gained.
Retailer	Purchases goods from a distributor/wholesaler (who previously purchased them from a manufacturer) and sells them on the public.
Franchise	Uses a 'parent' business model. Your business functions as part of a conglomerate. Name, branding and training are all part of the package, in return you pay royalties to the original company.
Bricks and Clicks	Utilises both online and offline shops – widens access to consumer markets.
Add-On	Extras offered alongside a core purchase increases cost.
Advertising	Earning revenue through promoting other businesses through your own advertisements.
Auction	Competition across consumers used to drive prices upwards i.e. eBay
Bait and Hook	Creating/selling an item which requires components to function properly, thus ensuring repetitive consumer engagement. i.e. Gillet and razor blade heads. Printers and Printing Ink Cartridges.
Direct Sales	The arrival of the internet allows companies to directly engage with consumers creating environments of consumer directed design, i.e. Dell computers
Freemium	Develops a relationship with a customer through the provision of free services/products and then offers additions/changes/upgrades for taking on a premium membership i.e. Spotify. Dropbox
Low-Cost/ Nickel – and- Dime	Provision of a service of product at a very low cost to customers, they can then 'enhance' their purchase through making further purchases to upgrade i.e. Ryanair.
Pay-as-you-go	The customer pays specifically for what they use i.e. pay-as-you-go mobile phones.
Recurring Revenue	Subscription based; a monthly payment made by the consumer for the provision of a specific product/service/system.
High Touch	High level human engagement and relationship development is required. i.e. hairdressers, consultation firms
Low Touch	Minimal human interaction used for the sale of a product/service/system. i.e. Ikea
Inventor	Creates concepts/ideas/inventions and sells on the IP rights to another business type/manufacturer etc. Can retain some rights thus increasing revenue through future sales.
Entrepreneur	Individual or company that creates and sells other companies for other people to run. i.e. Venture Capital Firms, Incubators.
Financial Trade	Facilitates the sale of financial assets, stocks and securities. Buys them and sells them onwards at an increased price.
Landlords	Gains revenue through rental of products to the wider consumer market.

Appendix I

i1. Sample from Gross National Happiness Survey, 2010

		Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	Don't Know
Meaning in life							
Q16. Please take a few minutes to think about your life. Do you agree with the following statements?							
Mv1	I have found a satisfactory meaning in life	5	4	3	2	1	8
Mv2	I generally feel free to express my ideas and opinions	5	4	3	2	1	8
Mv3	Most of the time I feel a sense of accomplishment from what I do	5	4	3	2	1	8
Mv4	People in my life care about me	5	4	3	2	1	8
Social support							
Q17. How many people are so close to you that you can count on them if you...							
		More than 8	6-8	3-5	1-2	None	Don't Know
SS1	Are sick	5	4	3	2	1	8
SS2	Have financial problems	5	4	3	2	1	8
SS3	Have emotional problems	5	4	3	2	1	8
SS4	Have to attend to important personal events (childbirth, funeral, wedding etc.)	5	4	3	2	1	8
Stress							
Q18. During the last year, would you describe your life as-							
Stress1	Very Stressful	Moderately Stressful	Somewhat Stressful	Not At All Stressful	Don't Know		
	1	2	3	4	8		
If 4 or 8, Go to Q20							
Q19. What are your main sources of stress?							
	Sources of stress						Code
Stress1							
Stress2							
Stress3							
Stress4							
Stress5							
Stress6							
Stress7							
Please consider the last four weeks and answer the following questions by selecting and circling one of the four answer options							
Q20. Been able to concentrate on what you're doing							
GHQ1	More Than Usual	Same As usual	Less Than usual	Much less Than Usual	Don't Know		
	1	2	3	4	8		
Q21. Lost much sleep over worry							
GHQ2	Not At All	No More Than usual	Rather more Than Usual	Much More Than usual	Don't Know		
	1	2	3	4	8		

Appendix J

j1. Differentials between Real World Research & Laboratory studies

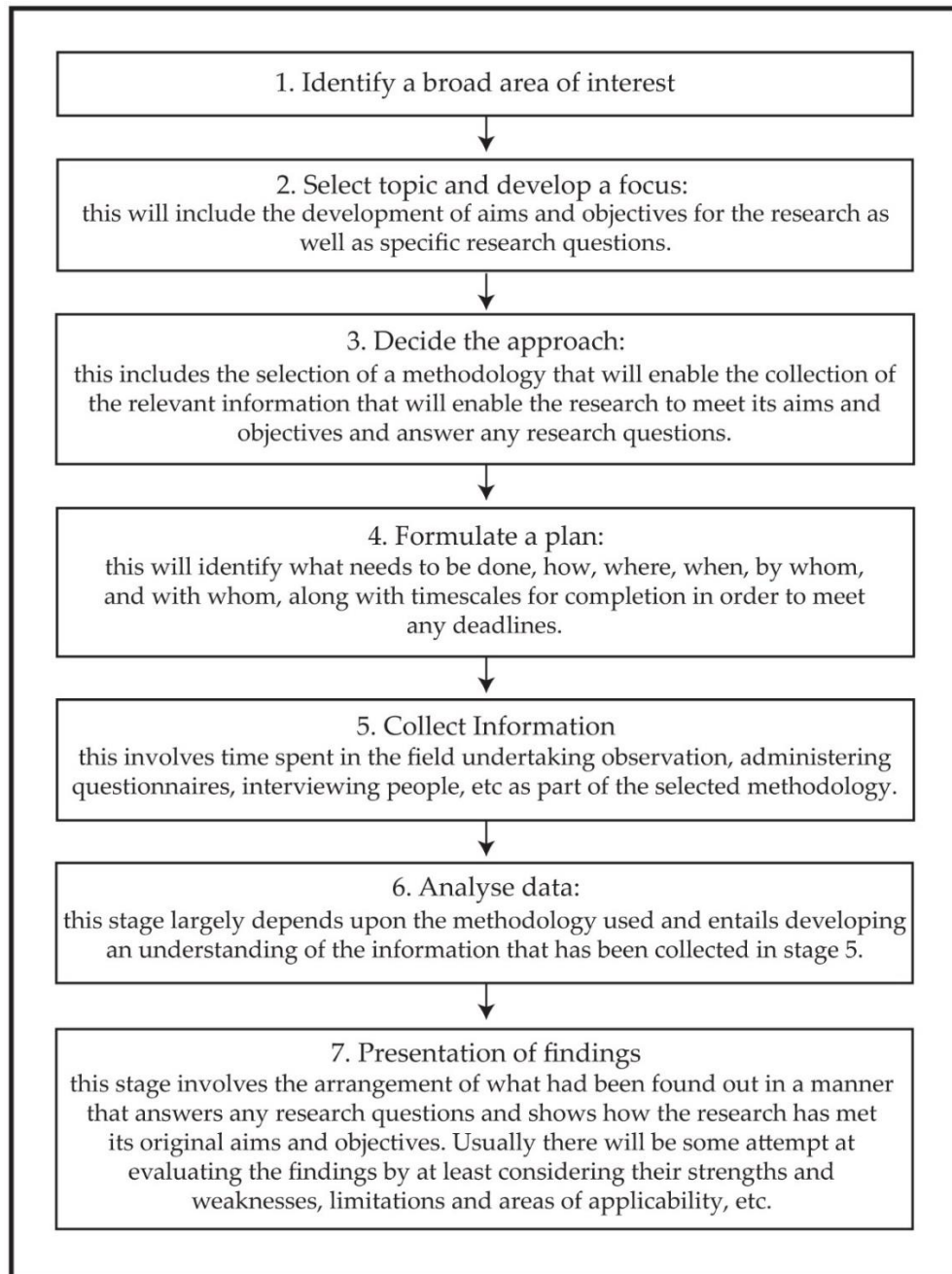
Characterizing Real World Enquiry

Source: (Robson, C. (1993), BOX 1.1. p.11)

In real world enquiry the emphasis tends to be on:	
<i>solving problems</i>	rather than <i>just gaining knowledge</i>
<i>predicting effects</i>	rather than <i>finding causes</i>
<i>getting large effects</i> (looking for robust results) and <i>concern for actionable factors</i> (where changes are feasible)	rather than <i>relationships between variables</i> (and assessing statistical significance)
<i>developing and testing programmes, interventions, services, etc</i>	rather than <i>developing and testing theories</i>
<i>field</i>	rather than <i>laboratory</i>
<i>outside organization</i> (industry, business, school, etc.)	rather than <i>research institution</i>
<i>strict time and/or cost constraints</i> <i>strict cost constraints</i>	rather than <i>as long as the problem needs, or as much finance as the problem needs</i> (or the work isn't attempted)
<i>little consistency of topic from one study to the next</i>	rather than <i>high consistency of topic from one study to the next</i>
<i>topic initiated by sponsor</i>	rather than <i>topic initiated by researcher</i>
<i>often generalist researchers</i> (need for familiarity with a range of methods)	rather than <i>typically highly specialist researchers</i> (need to be: forefront of discipline)
<i>little use of 'true' experiments</i>	rather than <i>much use of 'true' experiments</i>
<i>multiple methods</i>	rather than <i>single methods</i>
<i>oriented to the client</i> (generally, and particularly in reporting)	rather than <i>oriented to academic peers</i>
<i>currently viewed as dubious by many academics</i>	rather than <i>high academic prestige</i>
<i>need for well developed social skills</i>	rather than <i>some need of social skills</i>

j2. The Research Sequence, Gill & Johnson (1997)

Source: Gill & Johnson, 1997, p.9.



j3. Characteristics of a 'good' Flexible Design (Robson & McCartan)

Source: Robson & McCartan, 2016, p.147. Box 7.1

Characteristics of 'good' flexible design

1. Typically multiple qualitative data collection techniques [...] are used. Data are adequately summarized (e.g. in tabular form). Details are given about how data are collected.
2. The study is framed within the assumptions and characteristics of the flexible design approach to research. This includes fundamental characteristics such as an evolving design, the presentation of multiple realities, the researcher as an instrument of data collection, and a focus on participants' views.
3. The study is informed by an understanding of existing traditions of research, i.e. the researcher identifies, studies, and employs one or more traditions of enquiry.
4. This tradition need not be 'pure' and procedures from several can be brought together. The novice researcher is recommended to stay within one tradition initially, becoming comfortable with it, learning it, and keeping a study concise and straightforward. Later, especially in long and complex studies, features from several traditions may be useful.
5. The project starts with a single idea or problem that the researcher seeks to understand, not a causal relationship of variables or a comparison of groups (for which a fixed design might be indicated). Relationships might evolve or comparisons might be made, but those emerge later in the study.
6. The study shows a rigorous approach to data collection, data analysis, and report writing. The researcher has the responsibility of verifying the accuracy of the account given.
7. Data are analysed using multiple levels of abstraction. Often, writers present their studies in stages (e.g. multiple themes that can be combined into larger themes or perspectives or layer their analyses from the particular to the general).
8. The writing is clear, engaging, and helps the reader to experience 'being there'. The story and findings become believable and realistic, accurately reflecting the complexities of real life.

j4. General Skills Needed by Flexible Design Investigators (Robson & McCartan)

Source: Robson & McCartan, 2016, p.149. Box 7.2.

General skills needed by flexible design investigators

1. *Question Asking*
Need for an 'enquiring mind'. Tasks involve enquiring as to why events appear to have happened or to be happening. Asking yourself as well as others. Can be mentally and emotionally exhausting.
2. *Good Listening*
Used in general sense to include all observations and sensing, not just 'the ears'. 'Listening' to what documents say. 'Good' means taking in a lot of new information without bias; noting the exact words said; capturing mood and affective components; appreciating context. You need an open mind and good memory. (Taping helps but is not panacea).
3. *Adaptiveness and flexibility*
These studies rarely end up as planned. You have to be willing to change procedures or plans if the unanticipated occurs. The full implications of any changes have to be taken on board, e.g. you may need to change the design. There is a need to balance adaptiveness and rigour.
4. *Grasp of the Issues*
The investigator needs to interpret information during the study, not simply record it. Without a firm grasp on the issues (theoretical, policy, etc) you may miss clues, not see contradictions, requirement for further evidence, etc.
5. *Lack of Bias*
The preceding skills are negated if they are simply used to substantiate a preconceived position. Investigators should be open to contrary findings. During data collection, preliminary findings should be submitted to critical colleagues who are asked to offer alternative explanations and suggestions for data collection.

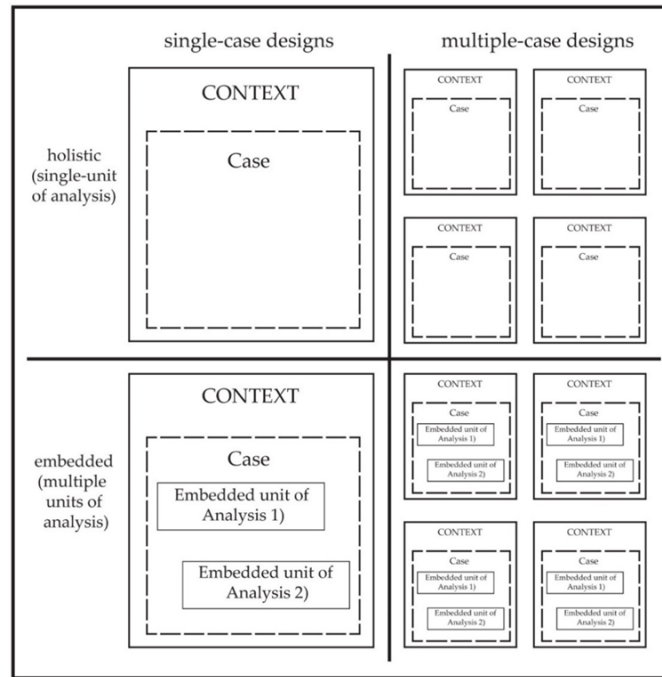
j5. 5 Complementarity of Case Studies & Statistical Methods, (Flyvberg, 2011)

Source: Flyvberg in Denzin & Lincoln (ed) 2011, p.314.

	Case Studies	Statistical Methods
<i>Strengths</i>	<ul style="list-style-type: none"> • Depth 	<ul style="list-style-type: none"> • Breadth
	<ul style="list-style-type: none"> • High conceptual validity 	<ul style="list-style-type: none"> • Understanding how widespread a phenomenon is across a population
	<ul style="list-style-type: none"> • Understanding of context and processes 	<ul style="list-style-type: none"> • Measures of correlation for population of cases
	<ul style="list-style-type: none"> • Understanding of what causes a phenomenon, linking causes and outcomes 	<ul style="list-style-type: none"> • Establishment of probabilistic levels of confidence
	<ul style="list-style-type: none"> • Fostering new hypotheses and new research questions 	
<i>Weaknesses</i>	<ul style="list-style-type: none"> • Selection bias may overstate or understate relationships 	<ul style="list-style-type: none"> • Conceptual stretching, by grouping together dissimilar cases to get larger samples
	<ul style="list-style-type: none"> • Weak understanding of occurrence in population of phenomena under study 	<ul style="list-style-type: none"> • Weak understanding of context, process, and causal mechanisms
	<ul style="list-style-type: none"> • Statistical significance often unknown or unclear 	<ul style="list-style-type: none"> • Weak mechanisms for fostering new hypotheses

j6. Basic Types of Designs for Case Studies, Yin, 1994: 1995

Source: Yin, 1994, p.39; Yin, 2014, p.50.

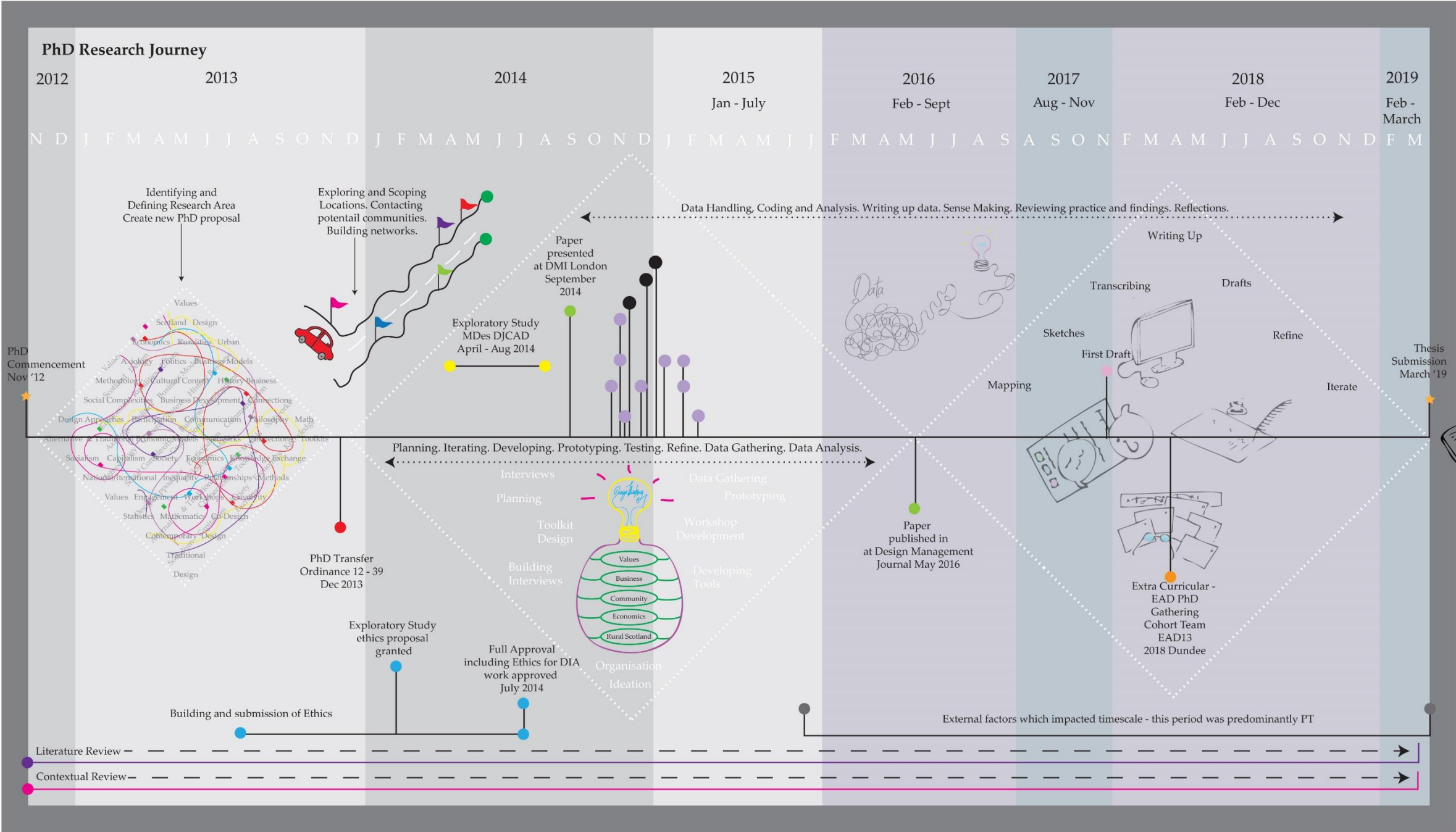


j7. Strategies for the Selection of Samples & Cases (Flyvberg, 2011)

Source: Flyvberg in Denzin & Lincoln (ed), 2011, p.307.

Type of Selection	Purpose
A. Random selection	To avoid systematic biases in the sample. The sample's size is decisive for generalization
1. Random Sample	To achieve a representative sample that allows for generalization for the entire population
2. Stratified Sample	To generalize for specially selected subgroups within the population
B. Information-oriented selection	To maximize the utility of information from small samples and single cases. Cases are selected on the basis of expectations about their information context.
1. Extreme/deviant cases	To obtain information on unusual cases, which can be especially problematic or especially good in a more closely defined sense. To understand the limits of existing theories and to develop new concepts, variables, and theories that are able to account for deviant cases.
2. Maximum variation cases	To obtain information about the significance of various circumstances for case process and outcome; e.g., three to four cases that are very different on one dimension: size, form of organization, location, budget, etc.
3. Critical cases	To achieve information that permits logical deductions of the type "If this is (not) valid for this case, then it applies to all (no) cases."
4. Paradigmatic cases	To develop a metaphor or establish a school for the domain that the case concerns

j8. Research Activities Timeline



★ Start and End of PhD	● Community found for engagement	● Extra Curricular
● Literature Review	● Exploratory Study	● First Draft
● Contextual Review	● DMI Presentation & DMJ Publication	● External factors which impacted the timescale
● Ethics	● Business & Community Interviews	
● PhD Transfer	● Community Interventions	

Key Information on Community Interventions

Intervention 1. 7 hr Facilitated 85 participants	Intervention 2. 1 hr Facilitated 32 participants	Intervention 3. 8 weeks Un-facilitated 12 participants

Appendix K

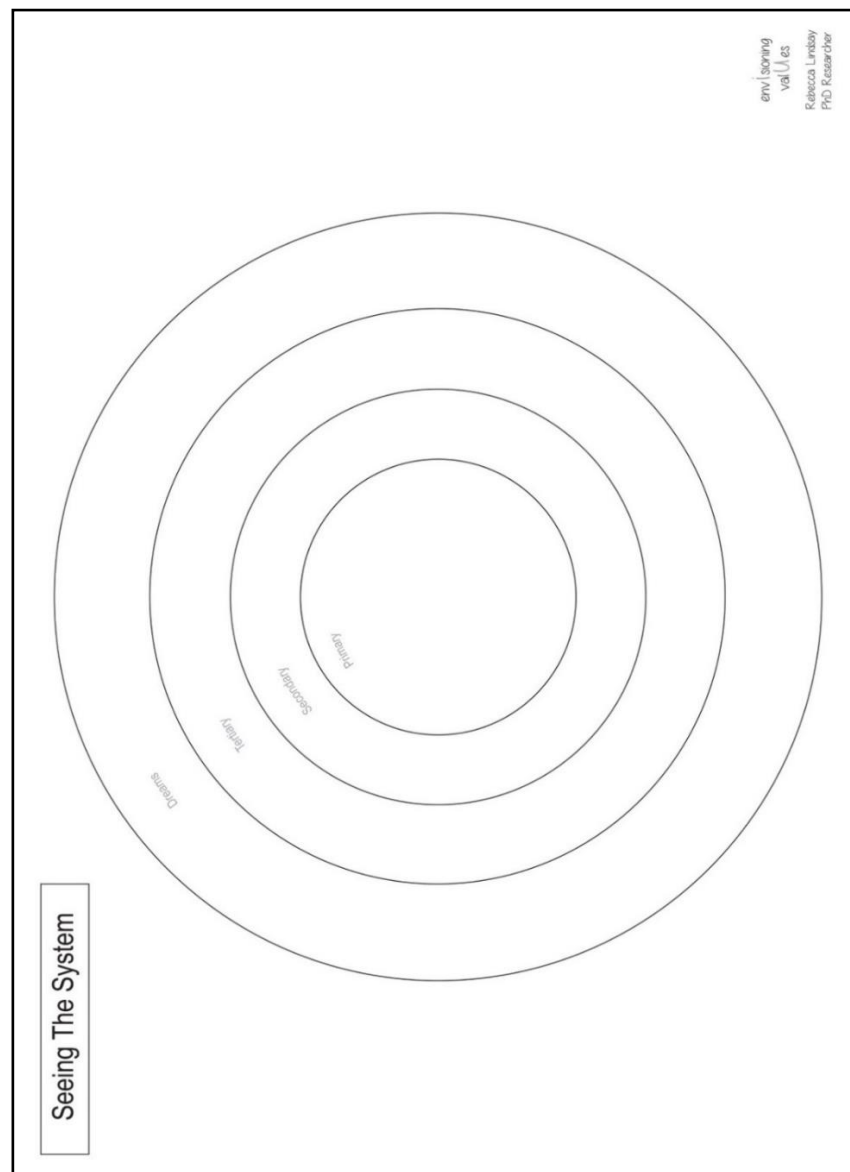
k1. Workshop Timeline Handout

Evaluating Drivers and Values of Design Initiatives Workshop
30 May 2014. 9.30 - 16.00

- 9.30 - 9.50 Presentation
- 9.50 - 10.00 Q & A
- 10.00 - 10.10 Knowing Me, Knowing You
- 10.10 - 10.30 All Together
- 10.50 - 11.00 Coffee Break
- 11.00 - 11.20 See the System
- 11.20 - 11.40 Drivers
- 11.40 - 12.00 What's in it for you?
- 12.00 - 13.15 Lunch
- 13.15 - 14.00 Group Perspectives
- 14.00 - 15.15 The Many Faces of Success
- 15.15 - 15.45 Presentations - 3 minutes per group.
- 15.45 - 16.00 Summary and Close

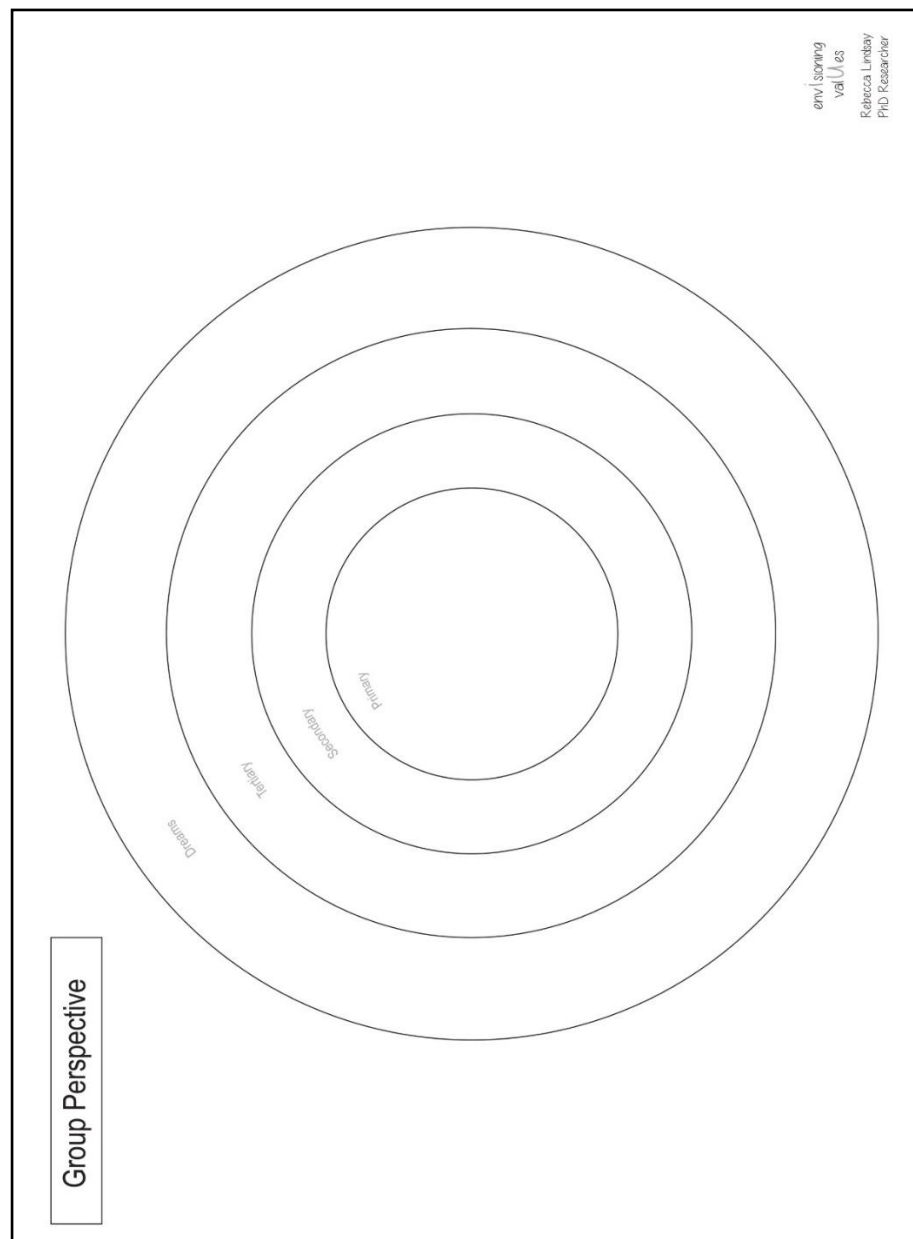
envisioning
values
Rebecca Lindsay
PhD Researcher

k2. Seeing the System



This worksheet was provided at A3 scale. The participants were initially required to consider stakeholders across primary, secondary and tertiary levels with scope to consider a fourth layer of involvement including idealistic and ‘dream’ stakeholders who may have an interest or value their project proposal. This sheet was supplemented with a large sheet of trace paper and post-its as the participants moved through further activities.

k3. Group Perspectives worksheet



As with all worksheets, this was provided at A3. It hosted the same basic structure and premise as the worksheet used for individual working, however this worksheet served to capture the wider group perspectives which were gathered during discursive phases of the workshop. This sheet was also supplemented with a large sheet of trace paper and post-its.

k4a. Personal Project Outline Worksheet (1/2)

5 Top Themes

Positive Impact

Values/Drivers

Key Stakeholders

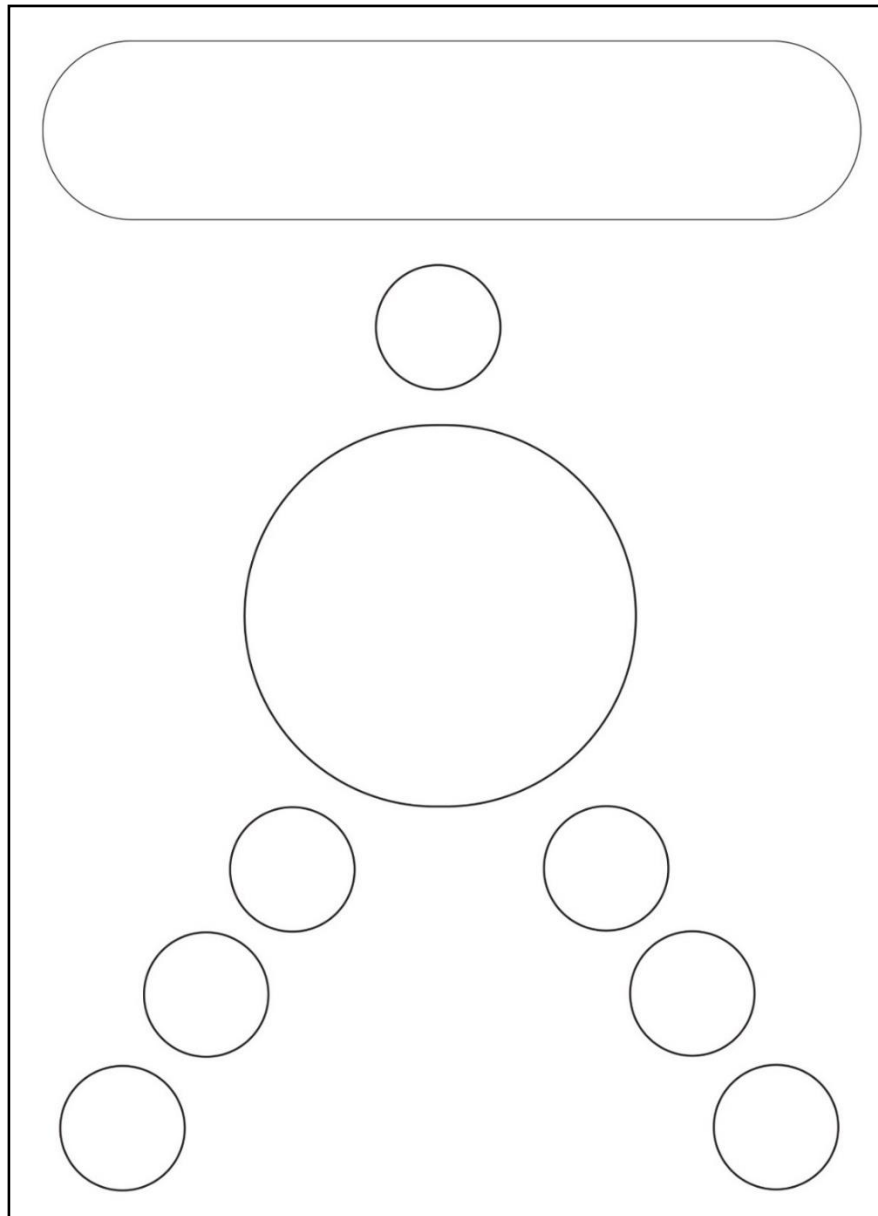
MYSELF

Your Project in 50 words

Provided at A3 this activity provided participants with the opportunity to define an ‘elevator’ pitch of their proposal while considering aspects of the project inclusive of key identified stakeholders, key values determined, both personal and perceived and create a snapshot of their upcoming project.

k4b. Personal Project Outline Worksheet

This worksheet was also provided at A3 scale and was a supplementary worksheet to Appendix i5. It aimed to give participants an 'extension' to the original worksheet and provide further room for condensing and synthesising their thoughts.



k5a. Timeline worksheet (1/2)

actions?											
where?											
who?											
who?											
↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
tasks involved											
↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
what to accomplish											
→	→	→	→	→	→	→	→	→	→	→	→
week	1	2	3	4	5	6	7	8	9	10	11

Provided at A3 this worksheet aimed to provide the participants with opportunity to map their upcoming project and develop a perspective of their overall project management strategy.

k5b. Timeline worksheet (2/2)

	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
identified value											
	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
why ?											
	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
why ?											
	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
why ?											
	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
why ?											
	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
what to accomplish											
week	1	2	3	4	5	6	7	8	9	10	11

Provided at A3 this worksheet provided a way for exploring the identified tasks from the original timeline worksheet (1/2) giving room to form justifications for identified actions and a way in which to identify the value of each particular action proposed from both the participants and/or stakeholder perspectives.

The Shared Values of A Masters Class

Creating **Thoughtful ACTIONS, Outcomes, experiences** and

Connections; Supporting *Self Development* of **Inquisitive** natures.

Enhancing **perspectives** and **KNOWLEDGE**. Bringing **Kindness** and

Inspiration to **CREATE** and **support** the **Realisation** of

Opportunities. Through **Sharing** and supporting **CONNECTIONS** by

engaging in **Unique CONVERSATIONS** built on

Shared Inquiry to create **Equality, IMPACT** and **Shared Values.**

Generating new **Networks, BUILDING SKILLS** and **SELF RECOGNITION**

k7. Suggested Reading List (Handout for Workshop)

*Evaluating Drivers and Values of Design Initiatives
Workshop. 30th May 2014*

Suggested Reading List:

Alder, K., Lucena, B., Russo, B., Vianna, M. & Vianna, Y. (2011)

Design Thinking Business Innovation. MJV Press. [Online] Available at:
<http://designthinkingbook.co.uk>

Dunlop, S., Glinski, J., Swales, K. & Trebeck, K. (2012)

The Oxfam Humankind Index for Scotland, First Results. Scotland. Oxfam, GB (Oxfam Research Paper). [Online] Available at:
<http://www.oxfam.org.uk/scotland/blog/2012/04/media/6A6B095DB10E432A88DEBCA5C9F0F365.ashx>.

Fitoussi, J., Sen, A. & Stiglitz, J. (2009)

Report by The Commission on The Measurement Economic Performance and Social Progress

Kramer, M. & Porter, M. (2011)

The Big Idea: Creating Shared Value. How to Fix Capitalism – and unleash a wave of innovation and growth. Harvard Business Review. Jan-Feb 2011.

Thackara, J. (2005)

In the Bubble Designing In A Complex World. Cambridge. MIT Press.

envisioning
values

Rebecca Lindsay
PhD Researcher

Appendix L

11. Design Approaches to Creating Social Metrics

ARTICLE

Design Approaches to Creating Social Metrics

Rebecca Lindsay



by Rebecca Lindsay

Introduction

This article considers how design can contribute toward the development of new approaches of value identification, through newly co-designed indices encompassing value, growth, and prosperity.

Using this approach, greater insights can be brought to the debate around sustaining and supporting prosperity and growth to occur for both businesses and communities. This article focuses on Scottish rural small and medium enterprises (SMEs) and communities.

The Scottish economy is largely supported by its SME sector, which is composed of businesses and companies with 0–250 employees (European Commission, 2012; The Scottish Government, 2013). Scotland has some 343,105 SMEs operating within the private sector providing employment for 1.1 million individuals across the nation (one-fifth of the populace; The Scottish Government, 2013). However, although providing consistent and valuable input, the SME sector is an undervalued and often hidden asset within the Scottish economy (Elster and Phipps, 2013; The Scottish Government, 2012).

SMEs exist within communities that are inherently complex to navigate; that is, they have underlying “wicked problems” (homelessness, hunger, poverty, crime, unemployment, isolation, etc.), which compound and complicate strategies for development and sustainability. As a result they face a complex set of factors in maintaining and sustaining economical and societal growth within the current financial environment. There are many barriers in development, including financial pressures, legal complexities, resource capabilities, and resource availability (HM Government, 2013). Furthermore, the components and capacities available and required to address the needs and issues in each location are not necessarily replicated across different rural communities.

Recent years have seen values become more integral to decision- and policy-making structures and are now being approached by a plethora of experts and researchers from a wide and varied field base. The past seven years

have seen a flood of information and data surrounding new and innovative approaches for considering values beyond gross domestic product (GDP) emerge. At global level a categorical shift has occurred toward generating a fuller appreciation and understanding of aspects of life beyond and out-with financial position.

GDP: a different measure of value —economic

It is clear that measuring GDP is very effective as a narrow measure of the financial environments occurring both locally and globally; however, this alone cannot provide insight into how we generate more cohesive and thorough responses to assessing prosperity and well-being. We can already see business promoting and extending their values, and there is a unique and fresh opportunity to interlink business growth with creating positive societal impact. This situation offers opportunities to consider the weaknesses and strengths of GDP and how development of comprehensive, socially aware indices, methods, and metrics might complement and support a more holistic perspective of prosperity.

Designed by Simon Kuznets during the 1930s, GDP offers companies, nations, and governments the opportunity to assess and compare growth, failure, and stagnation. As a uniform metric it provides an appreciation of both internal and local

financial situations and supports globalized comparisons (Kuznets, 1934). GDP is a quantitative method for statistical analysis of finance, but it does not have qualitative capabilities. For instance, it does not take into account societal aspects of life such as voluntary work, quality of life experienced, or the quality of goods being exported and created. Nor does it consider the impact and ramifications of wars and disasters beyond the repercussions that affect finance (events such as these cause an unnatural influx in levels of GDP; Picketty, cited in Clark and Domokos, 2014; Picketty, cited in Moore, 2014).

GDP has been continually scrutinized since its inception, accruing a position of value and meaning that is beyond its original domain. Globally it receives consistent criticism regarding its inability to effectively represent societal realities experienced (Danson and Trebeck, 2011; Fitoussi, Sen, and Stiglitz, 2009; Gauntlett, 2011; Schmuecker and Wallace, 2012). It has accrued value and meaning that far outreach its original task.

It is not only politicians, governments, and academics that are aware of the importance of values. Big businesses and multinationals that are purely profit driven are recognizing that the adoption of certain values humanizes business and can create positive financial and societal results. As opposed to the “Price War” and undercutting envi-

ronment that was previously present, in the past few years these giants of commerce have migrated toward patterns more of societal benefit to ensure market longevity; for example, Sainsbury’s “Living Well for Less” campaign endeavors to engage with its customer base through appreciating their values and needs. By becoming more socially aware, environmentally friendly, and sustainable along with engaging in activities supportive of educational programs, culture, sport, and the eradication of inequality, these institutions are engaging with society at newer and deeper levels.

Beyond economic measures: happiness and other studies

Since the creation of GDP, calls have been made for further consideration to be given to alternative measures which may better reflect the multifaceted aspects of societal well-being. Simon Kuznets, GDP’s inventor, gave cautionary warning to the American Cabinet in 1934 emphasizing that national welfare could not be inferred through assessing and measuring national income alone.

Robert Kennedy (1968) and more recently Joseph Stiglitz (2009) supported this perspective, considering the implications of GDP to be lacking and inappropriate for assessing the prosperity and well-being of humanity.

[GDP] is the most widely used measure of economic activity. There

are international standards for its calculation, and much thought has gone into its statistical and conceptual bases. But GDP mainly measures market production, though it has often been treated as if it were a measure of economic well-being. Conflating the two can lead to misleading indications about how well-off people are and entail the wrong policy decisions. (Fitoussi, Sen, and Stiglitz, 2009, p. 21)

The concept of assessing happiness to provide alternative insights into societal well-being has been underway for more than 40 years. The term “Gross National Happiness” was coined in Bhutan in 1972 by the Fourth King Jigme Singye Wangchuck. This term supports the legal code of 1729, which states that “if the government cannot create happiness for its people, there is no purpose for the government to exist.”

Subsequently, The Centre for Bhutan studies worked upon the development of an index capable of acknowledging contributory factors of Happiness into policy-making structure. This culminated in the creation of the first Gross National Happiness Survey initially undertaken in 2010. Bhutan is not isolated in its endeavors to develop complementary and alternative methods to assess well-being and prosperity beyond GDP. Prior to 2003, studies and indices that gave consideration to this and similar factors were generated globally at a slow but consistent

rate. Since 2006 at least one new index, metric, or institution has emerged yearly to provide insights into mechanisms appropriate for determining and understanding well-being and prosperity. Figure 1 shows an overview of the developments that have occurred in this field over the past 33 years.

Each of these institutes, reports, and metrics are part of a progressive global endeavor moving toward comprehension of the needs, wants, drives, and sustainability of modern

society. Collectively, this information provides a richer view of societal needs, identifying areas where concerted effort for change is required.

These endeavors support an inclusive and holistic overview of a wide range of societal aspects. They attempt to consider appropriate responses in order to combat global wicked problems. These works support and facilitate a greater understanding and appreciation of unseen and unheard needs and wants of people, aiming to assist in the

Year	Activity
1980	World Database of Happiness
1981	The World Values Survey
1984	The Centre for Sustainable Economies
1986	The New Economics Forum
1989	The Centre for Sustainable Community Development
1990	Human Development Index
1995	The Genuine Progress Indicator
1998	World Database of Happiness Website
1999	Gross National Happiness—Bhutan (First Survey)
2003	The Global Footprint Network
2006	The Social Impact Forum
2007	Oxfam Humankind Index launched
	Global Peace Index—Institute for Economics and Peace
	Legatum Prosperity Index
2008	Gross National Happiness Report
2009	The Institute for New Economic Thinking
	The Institute for Economics and Peace
2011	Better Life Index—Organisation for Economic Co-operation and Development
	First World Happiness Day
2012	Sustainable Development Solutions Network
	Social Progress Imperative
2013	Social Progress Index
	World Happiness Report (Sustainable Development Solutions Network)

Figure 1. Societal engagement with alternative assessments.

creation of a prosperous economic structure beneficial for both community and business development.

These activities allow for important key factors such as those which contribute to the ability to live well, to be taken into consideration and understood by potential external and internal factors of influence, such as local council constabularies and larger governmental bodies. Rather than reliance on GDP as the key and sole indicative measure of progression within societal structure, these indices take a more holistic approach, enabling foresight when determining potential effects of new policy shifts. It can be argued they consider unseen values and drivers that support community development and long-term sustainability.

Design approaches to wicked problems

Communities across the globe have evolved into heterogeneous systems, which are also home to a plethora of social, environmental, and economic instabilities and inequalities. Often referred to as wicked problems (Rittel and Webber, 1973), these issues are structurally undefinable, containing multiple co-related factors. A scaffolding of interlinked, yet individual problems of equal complexity supports them. Attempts to define and understand issues within these areas often bring further revelations pertaining to complex underlying problems that require attention.

These wicked problems have challenged and destabilized the environment of trust previously experienced across the public toward businesses and governments (Fox, 2013; Kramer and Porter, 2011). If this effect is to be reversed, there are necessary actions to be taken toward strengthening and building relationships. One such action includes implementing an ecosystem supportive of shared values. Through nurturing a deeper understanding of value systems which both drive and constrain business and community structures, the potential exists to develop and establish approaches for creating necessary, supportive, and assistive mechanisms.

Understanding value(s)

Value(s) is an ambiguous term with multiple inferences and meanings. The OECD provides definitions inclusive of our capability to appreciate varying life factors in relation to their impact and effect upon our well-being.

To elaborate, the opinion of this article is the following:

Value(s):

- Are intrinsic to life, giving context and support to our actions and reactions;
- Grant meaning and guidance across situations we face, in rationalizing our actions and decisions, or providing grounding and scope for reevaluation;

- Are negotiable and considerate toward accomplishable compromise;
- Influence behaviors, attitudes, and response mechanisms; and
- Form the ideals from which we shape our lives.

Values are built and refined through time and experience, influenced by multiple factors and in return effecting multiple factors (Schwartz, 2005, 2009). Some are shared throughout communities and cultures, while others are individually determined from our own perspectives (Schwartz, 2009). Emotively descriptive, they can be determined and vocalized through both singular terms and structured statements. They enable us to position ourselves and actions across a wide variety of events, situations, and day-to-day life.

Within the context of business structures, values play a similar role, guiding and defining standards for forming approaches and plans. They are the principles that sustain and give foundation to strategies for present and future action. Collective values such as those found across communities provide an umbrella perspective of social structure, goals, and ideals. Schwartz describes them as "Universal Organisation of Human Motivations" (Schwartz, 2009). Appreciating values has provided insight into both individual and collective actions and responses providing insight around facets of evolution within societal construct (Schwartz, 2009).

The applicability of co-design in business

Businesses can contribute to both economic and societal growth through shared values, creating positive social impact in local areas, thus allowing new opportunities to arise (Kramer and Porter, 2011). The strategic implementation of design methods provides opportunity to instigate these steps, supporting the generation of co-developed, self-sustainable support mechanisms for future resilience and prosperity.

Design interventions can enhance the experiences and potential outputs created through collaboration between businesses and communities through knowledge exchange (Follett and Marra, 2012). Societal problems are context related to their communities and local environments. The most constructive approach to tackling these issues is to directly engage with the people who live there (Day and Parnell, 2003). Community members are privy to knowledge that can offer invaluable insight into potential resolutions (Arias, Eden, Fischer, Gorman, and Scharff, 2000).

The long-term benefits of utilizing design to construct new and innovative processes to address these complexities allow consideration and positive actions to be driven around issues of economic and social contention and the promotion of business generation, societal security, and long-term recovery. It is perceived

that, without embracing a new approach to these aspects of society, the world economic structure will not achieve a full or lasting recovery.

Through developing a deepened understanding and appreciation of the multifaceted value structures that are inherent to community and business ecosystems, businesses and companies can proactively involve themselves in not only regenerating the larger economic structure, but create a stabilization within local economies. If businesses can engage mindfully and integrate themselves into their supporting local ecosystem, there is the potential for profitability to occur both socially and financially.

Design approaches are being implemented globally to instigate and support business growth, societal improvement, and social innovation (Thackara, 2005), creating environments of shared values across community and business ecosystems. We now see systematic shifts from traditional and conventional business practices toward newer models that incorporate more socially responsive ideals, beneficial for both company growth and societal benefit.

The revolution that occurred across Design as a practice has allowed it to develop from purely production line output to a 360-degree encapsulation of process, which when implemented correctly enhances the potential for success with endeavors. Furthermore, design has emerged as “a key tool for

analysing, evaluating and visioning future company developments for change” (Follett and Marra, 2012, p. 144).

Over recent years the field of design has seen an upsurge in the utilization of participatory and co-design methods. It is no longer sufficient to accept a brief and produce an output without first engaging and interacting with stakeholders to determine their needs and wants. The public are impacted both positively and negatively by ongoing developments; design methods offer the capabilities of garnishing deeper understanding, engagement, cooperation, and support when implementing change.

Design thinking

Co-Design is an approach applied by designers that encourages and supports the development and delivery of resolutions through engagement with the stakeholders involved.

It is a mechanism that supports the creation of shared understanding and shared languages to develop around proposed service/project/areas. The concept is pinned by a belief in generating successful outcomes through direct user involvement. Engagement with users enables designers to provide appropriate support throughout the design process from the fuzzy front end to a clear outcome which they themselves have had an active and key role in generating. It supports users to

design effective, desired outcomes driven by their needs and wants, with the designer taking a more supportive, facilitative role. It is a human-centered process that places ownership of process and output into the hands of the stakeholders.

Engaging members of communities with models that support active participation allows exploration surrounding preconceived assumptions and unknown areas. Members of communities are host to “unconscious knowledge pools” (Day and Parnell, 2003); they have an awareness of the day-to-day facets that create challenges within the social, economic, and environmental layers of their societies (Day and Parnell, 2003). The complexity and variability of social problems are too great for any one individual to tackle independently, but through utilizing resources, knowledge, skills, and experiences, a richer perspective of situations can be obtained.

Envisioning value(s)

Determining the complexities of community and business relationships is a long-standing need. The revolution of design from product to experience focuses, supports, and enhances the value and impact of Knowledge Exchange and refocuses attention on the stakeholder pool. Design has emerged as a leader within the fields of Social Impact, supporting its workers in development of processes considerate and

responsive to the needs and wants of stakeholders. If it were to integrate the responsibilities of values into the process, it may enable a stronger and more responsible attitude toward engagement and positive impact to occur. The past years have seen a rise in transitions within Westernized societies, and the tipping points of engagement, understanding, and empathy have been glimpsed. Design approaches are leading the interactions possible and supporting potential avenues of success.

To explore and evolve methods for value extraction, a workshop was developed to consider effective methods for ‘Value Identification’ from a design-led perspective. The intended benefit for participants at this initial stage of exploration was to develop an understanding of their practice or research network and then determine a wider context of the potential value their work may have.

The eight-hour workshop was undertaken with 15 master of design for services students. It aimed to support investigation and development of methods and tools to identify values and drivers. The Workshop was broken into six stages, rotating between group and individual activities. As shown in Figure 2, the stages of the workshop were as follows:

When considering values beyond financial output, it was important to have the process embrace the occurrence of both reflective thinking and knowledge exchange.

Early findings provide a start point for guiding development and dissemination for potential avenues of exploration within community and business structures. The workshop revealed that effective methods for identifying values were predominantly collaborative activities as opposed to individual activities. The methods which promoted discussion and questioning supported and enhanced individual exploration and self-reflection.

Each stage focused development and exploration around varying types and perspectives of values.

Stage 1 was an active listening, object-based conversation activity which generated findings of individual value(s) being situated around the following areas : (Figure 3).

Through multilayered mapping activities, Stages 2–4 explored the values and drivers of stakeholders and designers from both individual and group perspectives. Primary findings showed similarity between both parties (Designers and Stakeholders; Figure 4). This is to be revisited a further three times over a nine-week period to determine and assess where assumptions were both correct and misplaced.

Stage 5 was a group activity that focused on future outcomes and measures of success. The students developed short presentations documenting their current perspectives of what might create a successful outcome. These will also be developed in future workshops over a nine-week

Stage	Type of Work	Purpose	Core
1	Paired	Exploration of the benefits of Boundary Objects (Griesemer and Star, 1989) discerning individual values.	Active Listening.
1.5	Group	Generating an overview of the collective whole.	Clustering and Conversing.
2	Individual	Creating an overview of the stakeholders involved/influential and linked to work. Working through a primary, secondary, and tertiary system of impact.	Reflect & Disseminate.
2.5	Group	Sharing and considering stakeholders from a collective perspective.	Discussion.
3	Individual	Considering the drivers and values of the stakeholders who may be involved.	Reflect & Disseminate.
3.5	Group	Sharing and considering stakeholders, values and drivers from a collective perspective.	Discussion.
4	Individual	Synergy Alignment. Identifying areas where individual values may coexist with stakeholders and areas where conflicted values structures might occur.	Reflective practice to enable identification of potential actions.
4.5	Group	Considering the wider group perspectives, determining areas of strength and weakness within a project and discussion around positive actions to make.	Discussion & Mapping.
5	Group	Ideation surrounding positive impact assessment and measure. Lasting legacy.	Ideation, Future Casting, Brainstorming, Mapping, Timelines.
6	Group	The integration of terminology and language used to initiate generation of a collective manifesto.	Discussion, Shared perspectives, Group formation.

Figure 2. Workshop development.

Learning	Connections	Creating	Drivers	Emotion
Guidance Support Challenges Skills Development Life Experience Reflection Practice	Stories Culture People	Balance Beliefs Hobbies	Family Friendship Memory New Environments Experiences The Past	Bravery Courage Connection Thoughtfulness Openness Need Love Time Tradition Curiosity

Figure 3. Individual value exploration.

period. There were, however, discernible benefits gained through group discussion around successful outcomes and lines of action to take forward.

The final aspect of the day, Stage 6, culminated in the generation of a collective manifesto which considered emotional terminology the group had used throughout the discussion phases. These terms were: (Figure 5).

Conclusion

A prosperous financial situation does not guarantee well-being or happiness of individuals or communities. The complexities of life are subject to the opinion and perspective of those involved, encompassing both physical and psychological aspects to provide a more three-dimensional outlook. Finance constitutes a complementary factor within the overall picture, and the numbers are required to be seen in perspective and viewed in balance with the experienced quality of life of citizens.

The task of understanding and defining values into comprehensible and comparable indices brings with it complexities. Values are determined by both physiological and psychological factors that are responsive to and affected by life situations and perspectives. Like any design opportunity, this task requires both macro and micro exploration to identify methods that can provide quantifiable measures of assessment sympathetic and responsive to the communities involved.

Drivers of Stakeholders	Designers
Mutual Inquiry	Reciprocated give and take in relationships
Idea Exchange	Generating positive change in self and others
Participatory Engagement	Building empathy
Opportunity	Supporting communication
Creating something meaningful	Hearing voices
Love	Employment
New ways of working	Curiosity
Increased equality	Desire to create change
Learning	Willingness to help
Collaboration/Networking	Travel
Replicable Model Generation	Opportunities
Self Promotion and Growth	Future collaborations
Satisfaction	Network generation
Trust development	Kindness
Similar values and directions	Being able to help
Knowledge Exchange/Sharing	Impacting the workforce
Evidencing and sharing stories	Making a difference for people
Best Practice	Improving engagement
Money/Promotion/Power/Security	Improved quality of service
Experience	Changing interactions
Sustainability	Generating awareness of issues
Alleviate workload	

Figure 4. Identifying drivers and values of stakeholders and designers.

Emotion Based	Activators
Thoughtful. Kindness. Inquisitive	Knowledge. Experience. Sharing.
Shared Values. Realisation	Skill building. Opportunity. Impact
Unique. Inspiring. Equality. Positive Effect	Conversations. Networks/ Connections
	Self development. Recognition
	Inspiration

Figure 5. Emotional terminology and drivers.

To enable the generation of a matrix to support a synergistic response to occur thus promoting and enabling the development of a human-centered focus, primary actions require effectively addressing dissemination and consideration of current methods of value assessment from a diverse range of fields inclusive

of societal endeavors, social science studies, anthropological endeavors, and design thinking approaches. There is considerable opportunity to expand, enhance, and develop our appreciation of the concept of value, through exploring how, why, and where they develop; what impact they carry across into daily lives and

behaviors; causes and ramifications of fluctuations in the collective perspective; and their formation and development and resulting influential control.

This ongoing research aims through a design thinking, co-design approach to continue to discern processes and methods for uncovering the needs and values of businesses and their communities as they develop and evolve within the current economic and political climate.

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Author biography

Rebecca Lindsay is a final year PhD student working within Design in Action, a Knowledge Exchange Hub based at Dundee University. Her studies are currently focused within the Rural Economies sector of the hub where she is undertaking a PhD titled

'Building New Social Metrics for Business; Exploring methods of Co-creation with Rural Businesses and Communities.' Her aims within this study encompass an exploration of values embedded within local communities and businesses throughout which different design approaches have been applied to support communication and knowledge exchange towards the enhancement of prosperity and wellbeing. This research seeks to develop an understanding of 'value' from different perspectives to identify new social metrics beyond GDP to support new models of growth for the future in rural Scotland.

Rebecca has a background in social innovation and developing co-design methods. Her degrees include a Diploma in Interior Design, a Bachelor of Design Honours in Interior and Environmental Design and a Master Degree in Design which focussed upon Service and Strategic

Design. Her work is interdisciplinary and driven by people centric thinking and utilising design strategically towards creating positive changes and growth within communities.

Previous works have included the development of co-design methods to engage stakeholders in designing architectural and interior structures for hospitals and therapeutic spaces; Service Design strategies for creating public service facilities; Toolkits and methods for exploring underlying causes and effects of fuel poverty; Development of products to aid and assist Dementia sufferers and families across Scotland and design-led innovation methods to enable new businesses to develop/expand. Rebecca's works have been presented at conferences internationally and exhibited at a variety of venues within Britain including The V&A museum London and The Scottish Parliament.

Appendix M

m1. List of Interview Questions

Table m1. Interview Questions

General Line of Questions	
Introduction : Personal context/history/ Experiences/Skills	
	Who are you?
	What is your business called?
	How big is the team involved?
	Are they paid/unpaid/volunteer?
	What is your role within the business?
	How long have you lead/worked in this business?
	Where were/are you based?
Values: Business/Personal/Financial/Community	
	Why did you originally decide to develop your own SME?
	What was your motivation?
	Is this a lifestyle business or a traditional business?
	What are the core values of the business?
	Who/What encouraged you to set up the business?
	How has this impacted your life as a result?
	What have you found to be the best aspect of having this business?
	What are some of the problems you have encountered?
	Is there anything that might help future progression?
	How does this business reflect your own personal values?
	What makes this business special to you?
	What do you think makes this business special within the community?
	What value do you believe you bring to your community?
	What do you think makes for a good quality of life?
	Do you see this product/service/business bringing potential value to yourself and the wider community?
	What value/values? And why?
Skills: Experience/Skills/Introductory/Contextual	
	What would you describe as being your core skills?

	What hats do you use most within the business?
	Which hat do you value the most?
	What is the underlying service system of the business?
	How are the connections formed across stakeholders, community, suppliers etc?
	What do you believe may support growth and prosperity in your local community and across sme businesses?
Community: Business Practice/ Problems/Values	
	What do you believe makes this business successful within the community?
	What do you perceive to be the most important factors which support a 'good' life?
	Do you feel that this businesses values are shared or reflected across the wider community?
	How supportive is the local community towards your business?
	What do you think the social/health benefits are of your business?
	How does your business support the community?
	How do the businesses in the community engage with their markets?
	Do the community positively engage with their local SME'? in what ways?
	Have you needed to diversify your market avenues?
	Why did this occur?
	What impact did this have both personally and across the wider community?
	What is your opinion on the potential environmental impact of your product/business/service?
	How do these factors connect with local societal issues?
Examples of General Additional Questions	
	Are you VAT registered?
	Was this a conscious decision? Can you elaborate?
	Do you feel you received sufficient support when setting up and developing your business/service/product?
	What further support could be provided and why would it be useful?
	What additional resources/ support would be beneficial to SMEs such as yourself?
	What was your background and how has this influenced or impacted where you are today?
Examples of questions/ lines of inquiry used during the non-business interviews	
	How long have you lived here?
	Did you work here as well?
	Local businesses, how they have changed and developed over the years
	Personal experiences of living in the community over time
	Employment markets over the years

	Changes to the local community dynamics
	Local trade, both official business and local trade and barter systems
	Self-sufficiency and survival
	Things of value and that matter in life
	Local issues and problems
	Ways to resolve and support people which are new/old
	Community resilience
	Communication
	Local services and provisions, what you have, what is needed, what was before and what would be good to have once again.

The general line of questioning and inquiry followed is outlined in Table m1. As mentioned within Chapter 4, the 2 interviews conducted with community members did take a considerably different tone and lines of questioning flowed in response to the participants and the stories they wished to convey.

Appendix N

n1. Theme Development (Designers Individual)

Frame	Major Theme	Micro Themes of Value Expressions		
Personal Values	Learning	Interest driven – learning subjects which you have an interest in.	Personal Development	
		Copy to Learn – observation, learning from others	Skill Development	
		Sharing Knowledge and Experience	Teachers/Tutors & their influence – positive & negative	
		Values which appear across additional sub-themes		
		<i>Showing others 'Ideal' situations - education</i>	<i>Practice – skills which develop over time</i>	
		<i>Tradition – models of learning and education.</i>		
	Connections	Relationships – Family, friendships - Professional & personal. Biological family & chosen 'family'	Companionship - meaning & influence towards & upon actions	
		Support from connections & networks	Love – for others, for work – personal & professional	
		Values which appear across additional sub-themes		
		<i>Time – its impact on building relationships and network</i>	<i>Communication – building communication across groups of people</i>	
	Creativity	Sharing Knowledge/Skills	Hobbies – maintaining creative outputs.	
		Creative Thinker – thinking about things in new ways	Meeting new challenges	
		Family – influencing & shaping creative outputs	Friends – influencing & shaping creative outputs – boundary where personal & professional lives meet	
		Values which appear across additional sub-themes		
		<i>Time – developing skills, ideas, putting work into live practice</i>		
	Incentives	Personal Experience - creating drives & inspiration	Travel – as a professional or personal opportunity.	
		Multi-cultural Experiences	Work/Life Balance	
		Gaining new experiences	Communicating with others more effectively	
		Values which appear across additional sub-themes		
		<i>Relationships – developing communication and supporting professional/personal relationships</i>		

	Emotion	Reflection	Curiosity & being inquisitive
		Feeling close to the subject – passion for work or subject area	Being Thoughtful
		Support – emotional & physical	Memory
		Traditions & their connection to memory, their influence	The Value of the Past
		Values which appear across additional sub-themes	
		<i>Time – forming memories and experiences</i>	<i>Tradition – old traditions from personal & historical past, a form of connectivity</i>

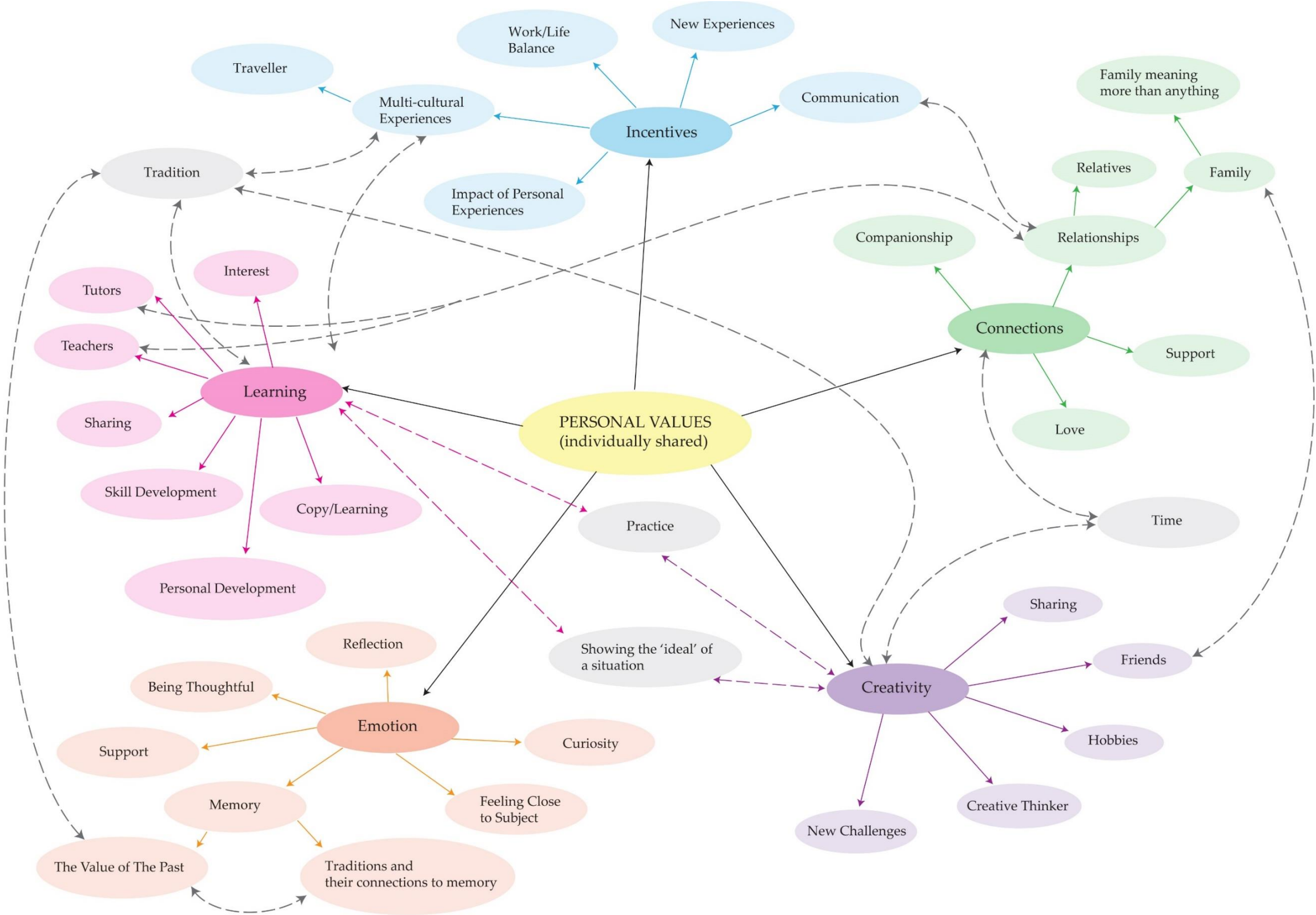
n2. Theme Development Designers (Collective)

Frame	Major Theme	Micro Themes of Value Expressions	
Collective Values	Learning	Guidance from peers, family – In relation to teachers, tutors.	Support and understanding from peers, family, when following interests
		Challenges in life and work and how they require and cultivate empathy	Development of skills , both personal and professional
		Life experiences – how they shape and impact perspectives and learning	Professional Reflection on self and others' behaviours
		How practice is impacted and develops over time.	
	Connections	Stories of self and others. The value of communication.	Family, Friends - meaning and influence towards and upon actions
		Culture – expectations, and influence	People , the wide range of people who can be engaged with across life.
		Communication – as key in networks both professional and personal	Behaviours – cultural and social behaviours
		Values which appear across additional sub-themes	
		<i>Conversations – Creativity supporting creative developments</i>	
	Creativity	Balance (Finding one between work/personal life)	How personal beliefs influence creativity and actions
		Hobbies as a means of self-expression and as a way of channelling creativity.	Practice and development of creative abilities
		Time – the development of skills, practice and seeing changes happen	

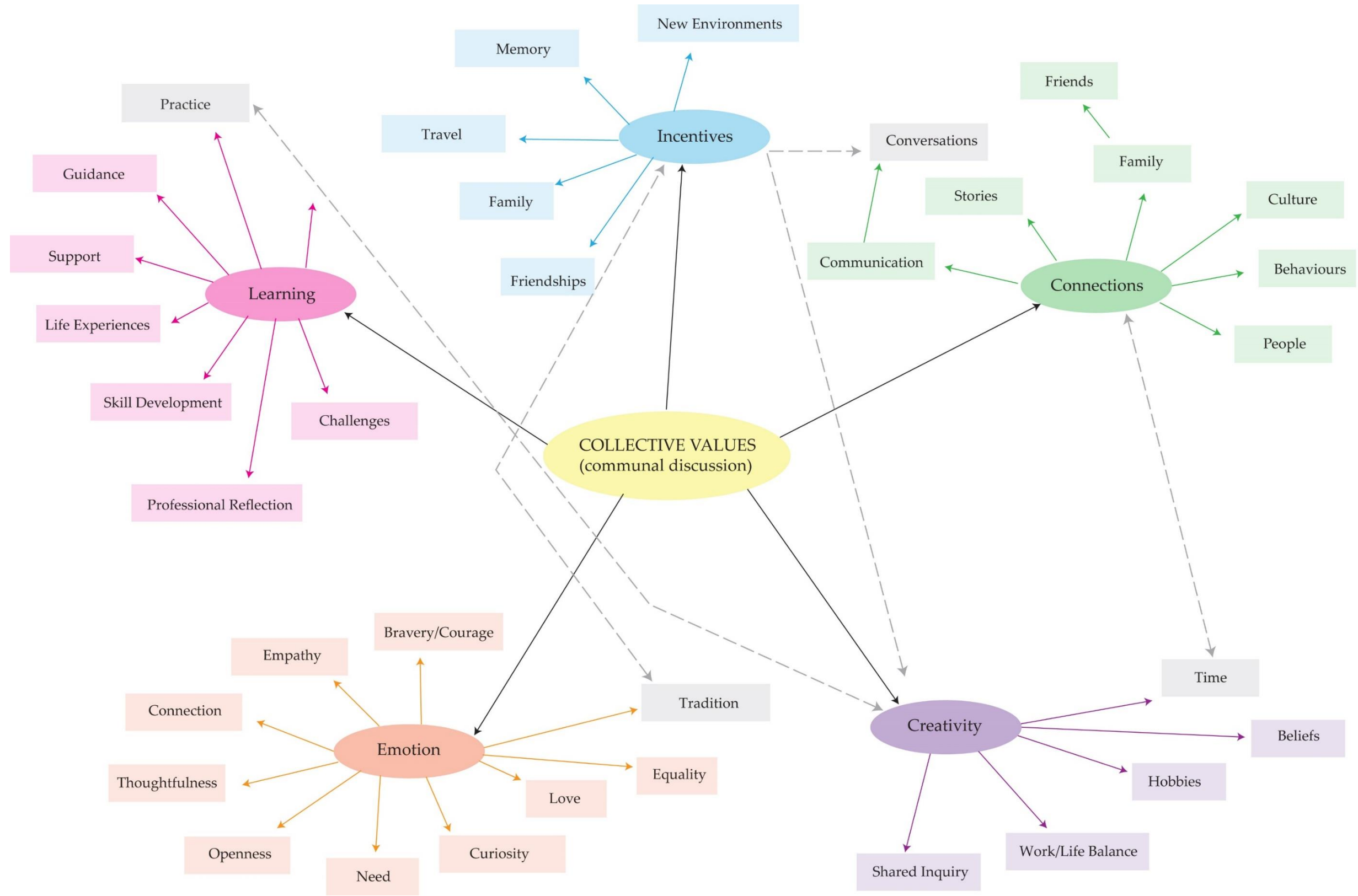
		Values which appear across additional sub-themes		
		<i>Time – Connections effecting the development of relationships</i>	<i>Practice – Learning – as a process</i>	
	Incentives	Family as fundamental within rationalising actions, as an influential factor in decision making processes. A source of inspiration.	Friendships as influencing factors and as a source of inspiration. The support provided by peers throughout both work and life.	
		Memory as influential to both actions and perspectives	New Environments driving and influencing direction and actions – how new environments impact the ways in which people act.	
		Travel as opportunity to learn and gain experience		
		Values which appear across additional sub-themes		
		<i>Tradition – Incentives influencing actions, responses</i>		
	Emotion	Bravery, Courage , of others and self of others and of self	Empathy to others and as personally experienced	
		Connection to others, events and people as an emotional influence	Thoughtfulness , as experienced and enacted as a positive factor	
		Openness from others and from self to others, reflective of honesty	Need , meeting one’s own, and other people’s needs	
		Love as intrinsic to emotional influence across life and work.	Time , being meaningful, both in terms of personal experiences and as something shared with others	
		Tradition , creating emotional and personal responses to work and life.	Curiosity , as key to inquisitive natures in work and life.	

Appendix O

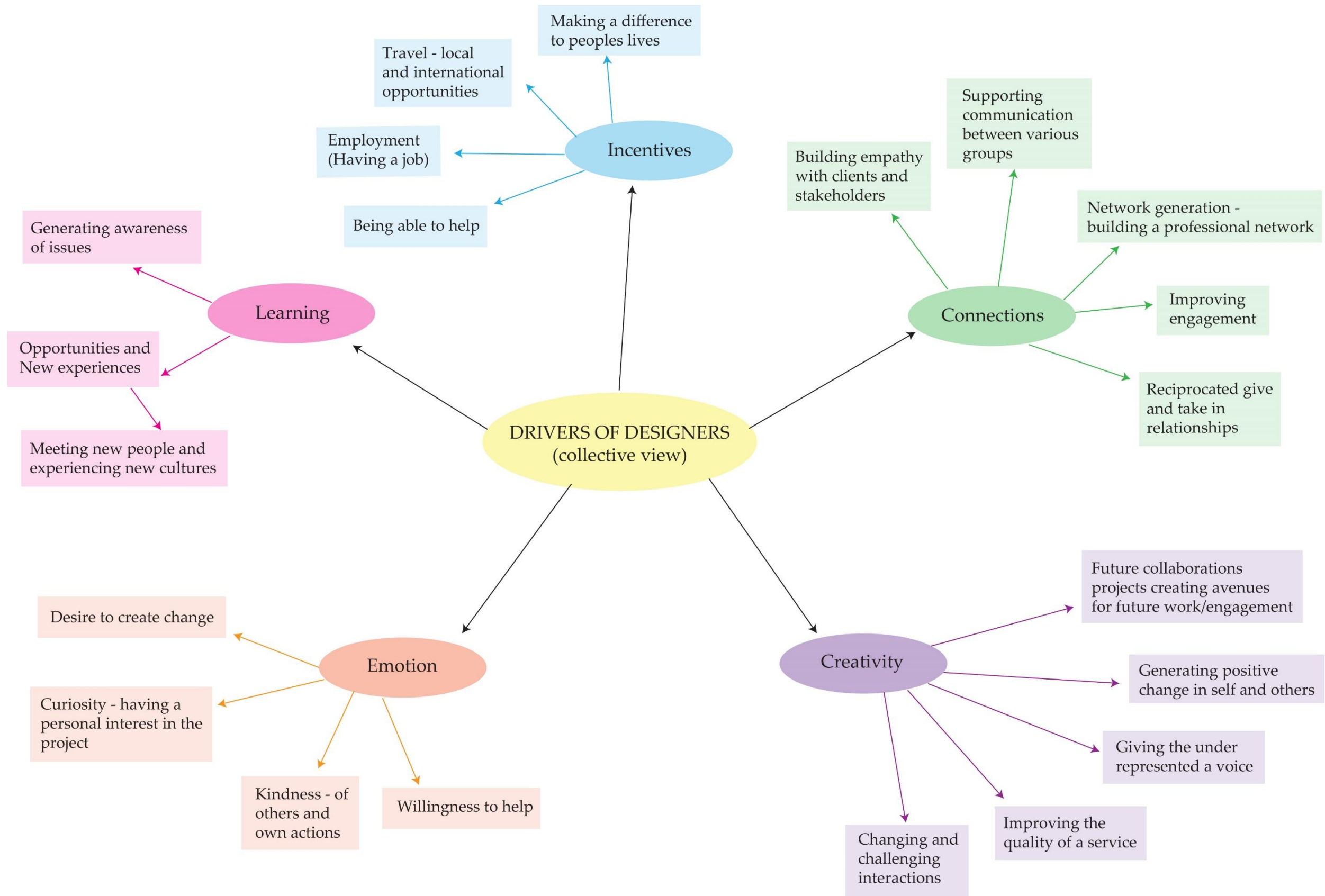
o1. Thematic Map of the Personal Values of the Designers (Individual)



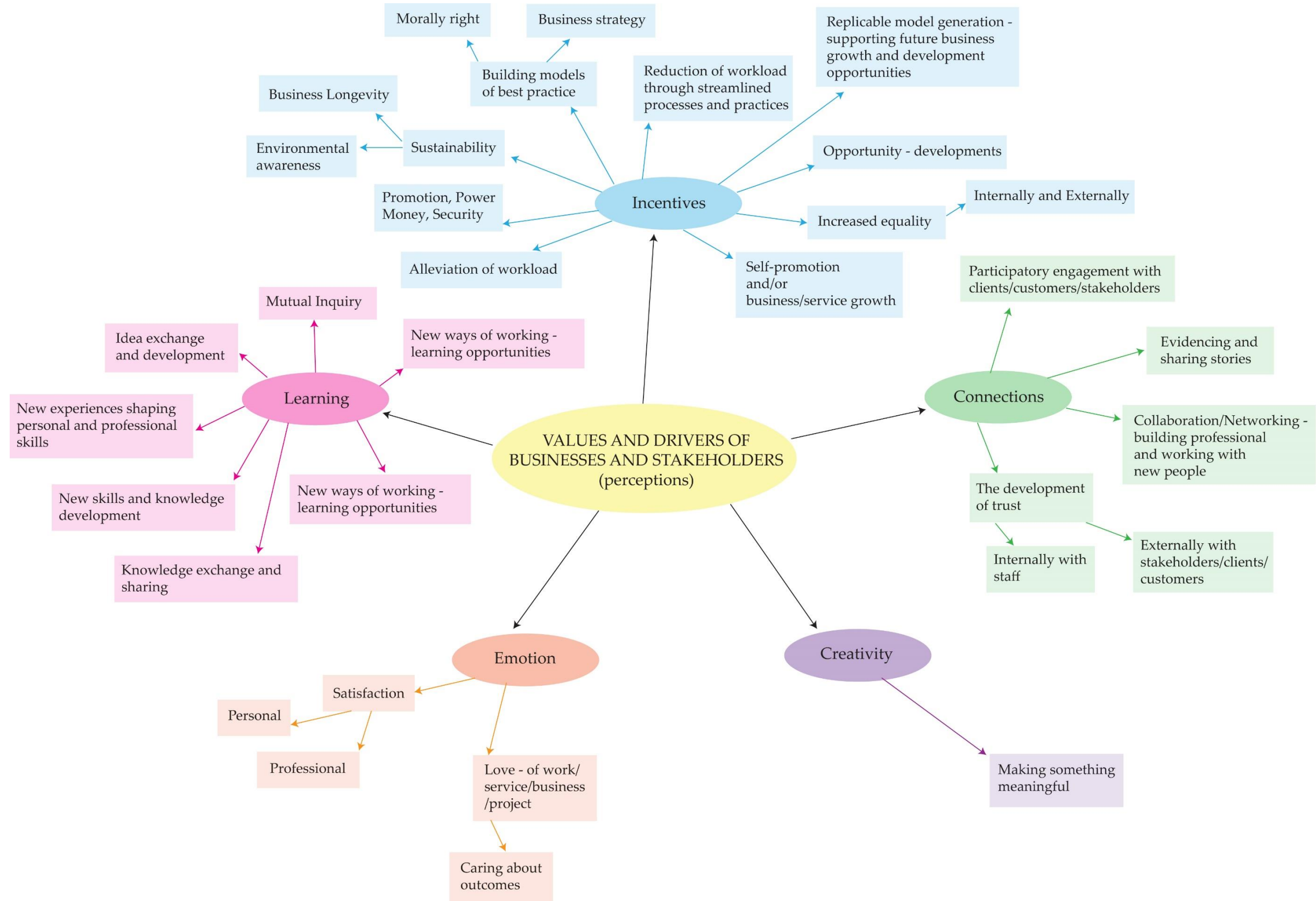
o2. Thematic Map of the Collective Values (Designers)



o3. Thematic Map of Designers Drivers and Values

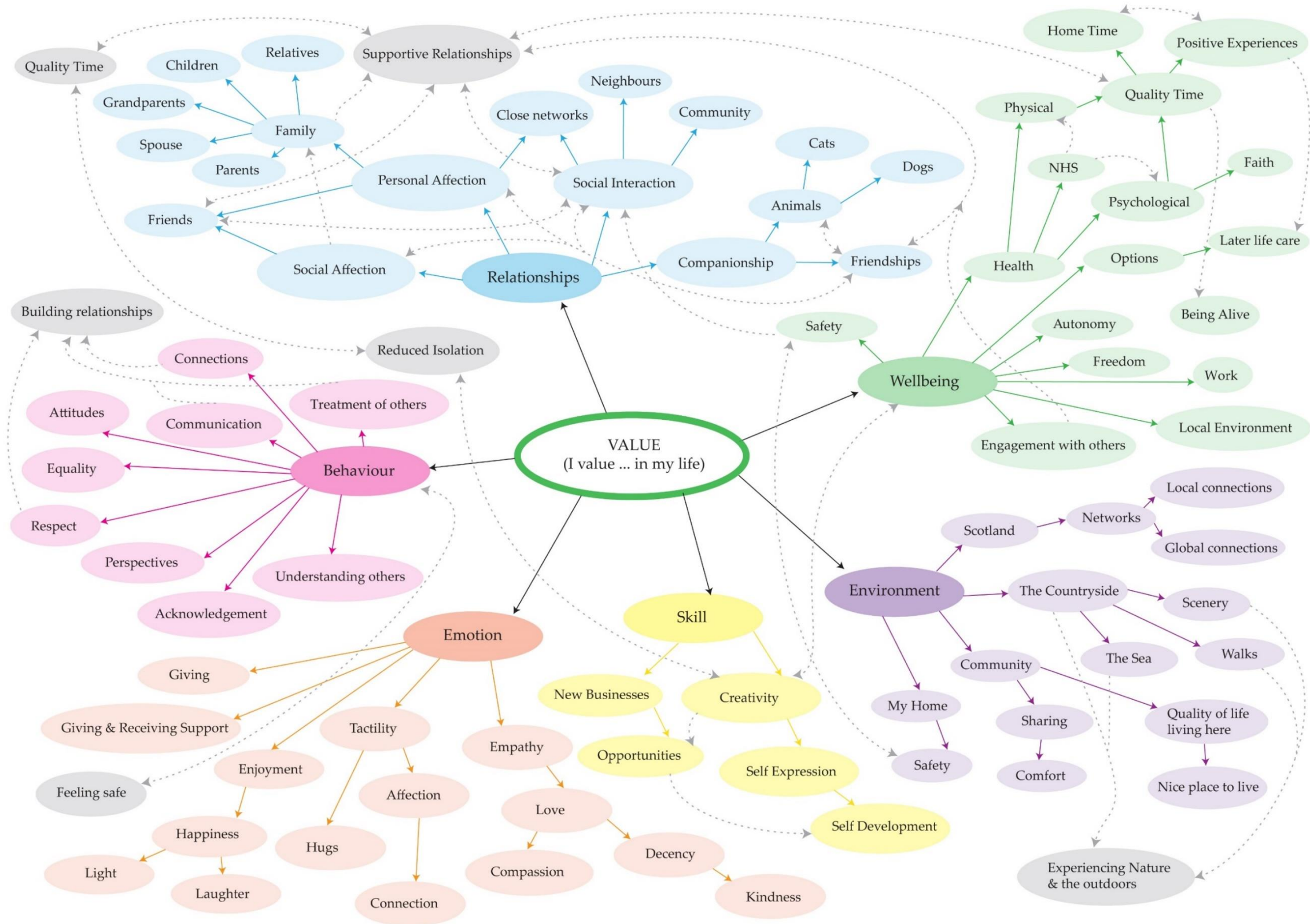


o4. Thematic Map of Perceived Drivers and Values of Stakeholders and Businesses as Identified by Designers

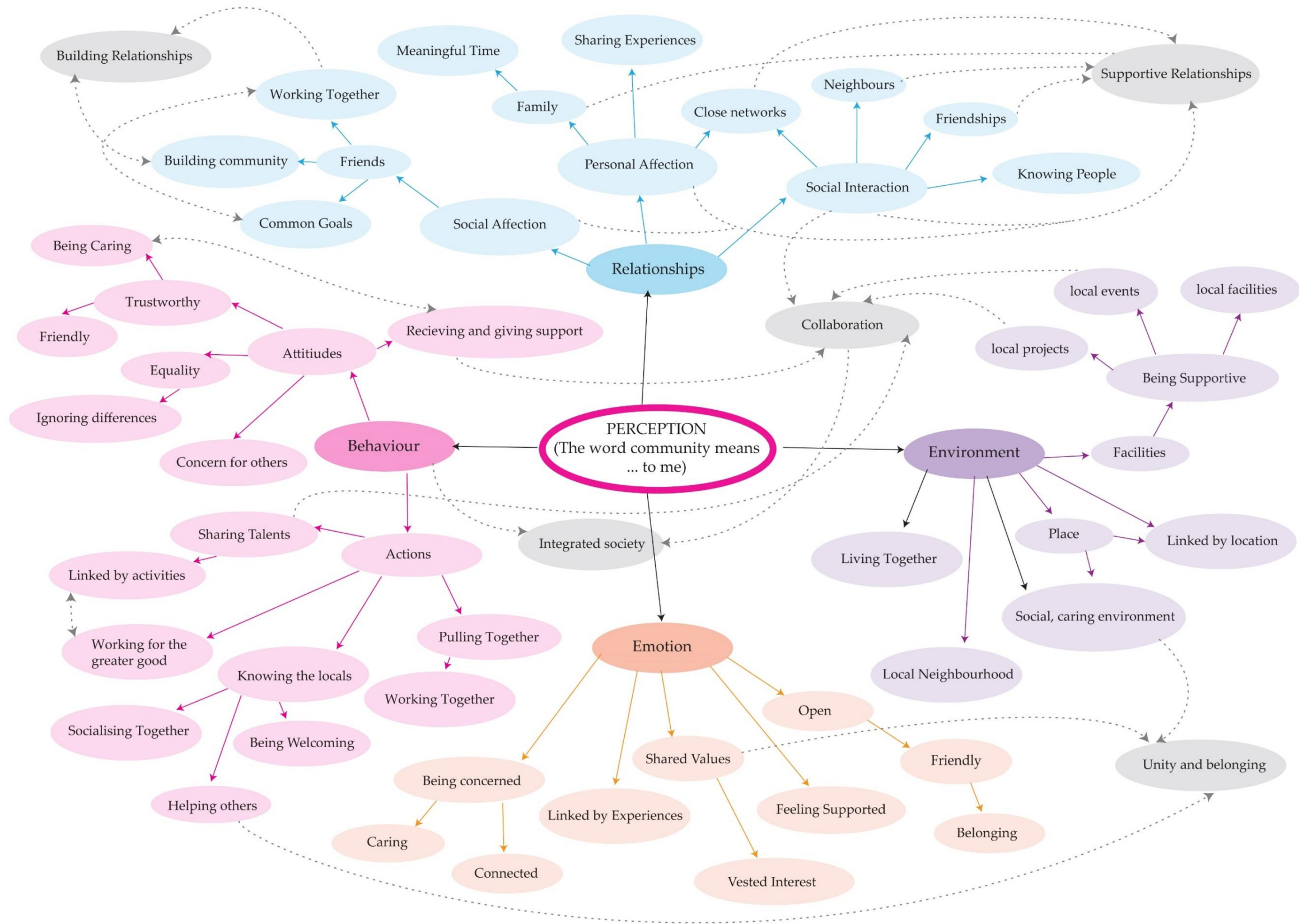


Appendix P

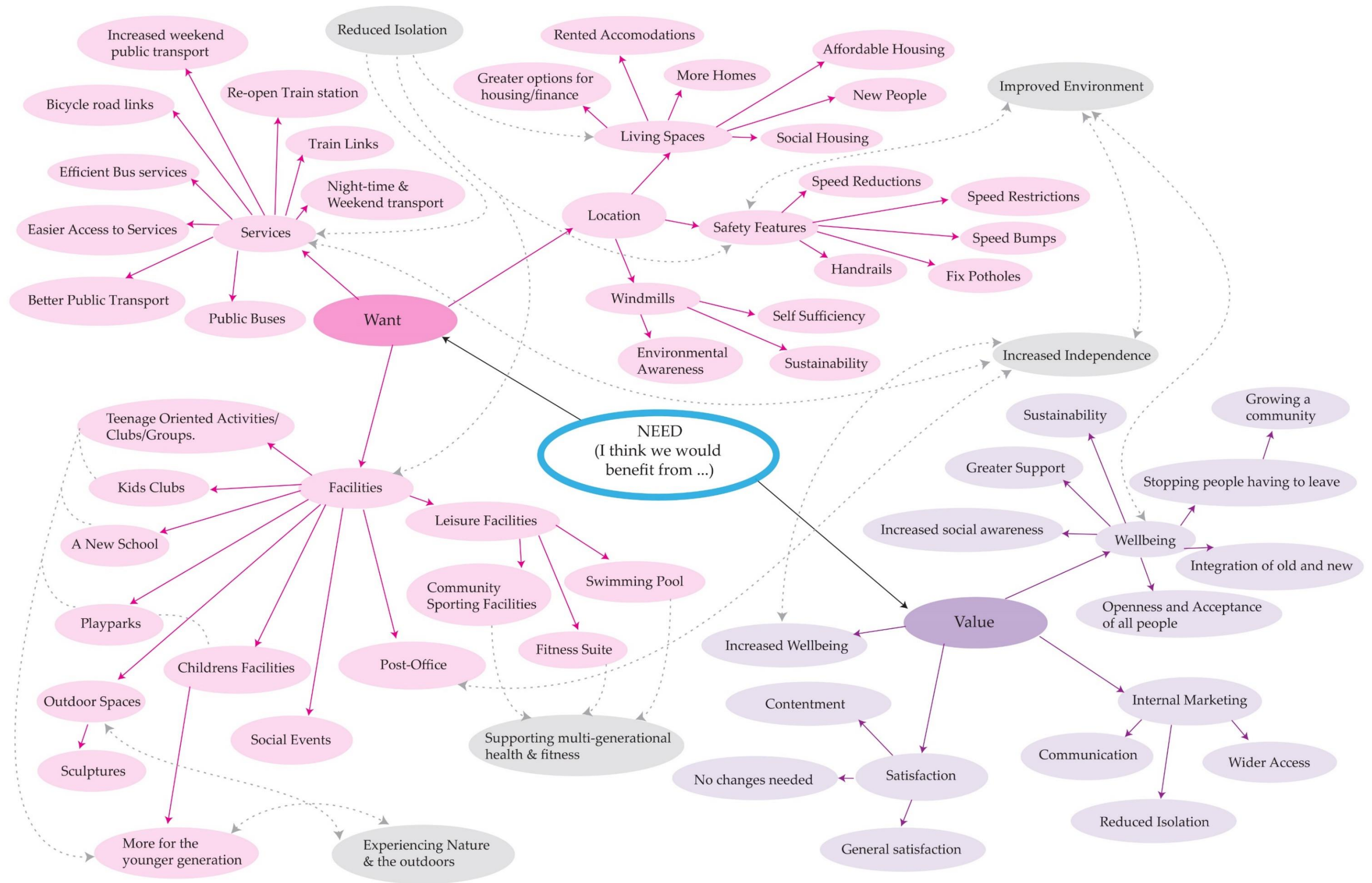
p1. Thematic Map of Matters of Value



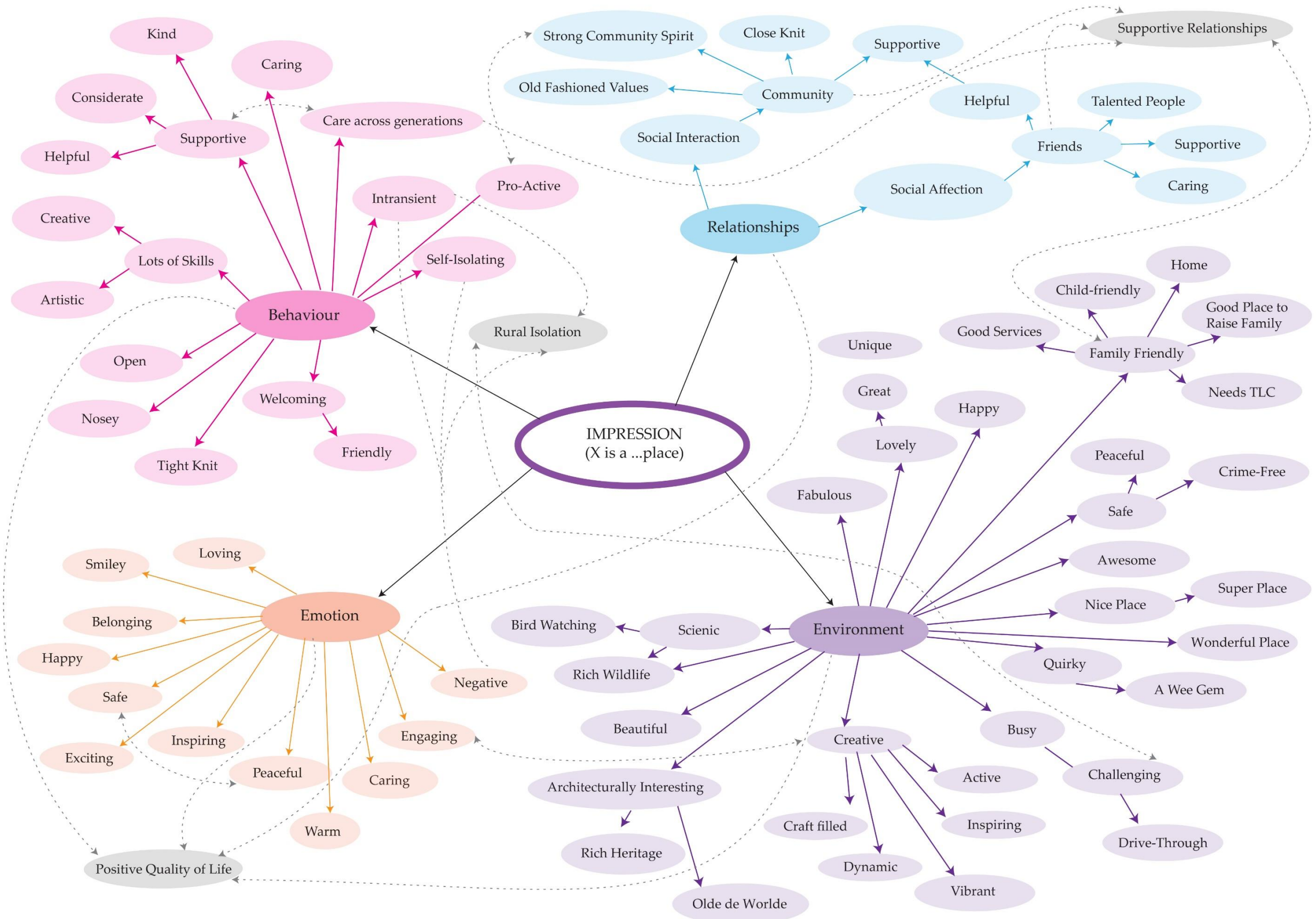
p2. Thematic Map of Perceptions of the term Community and its Values



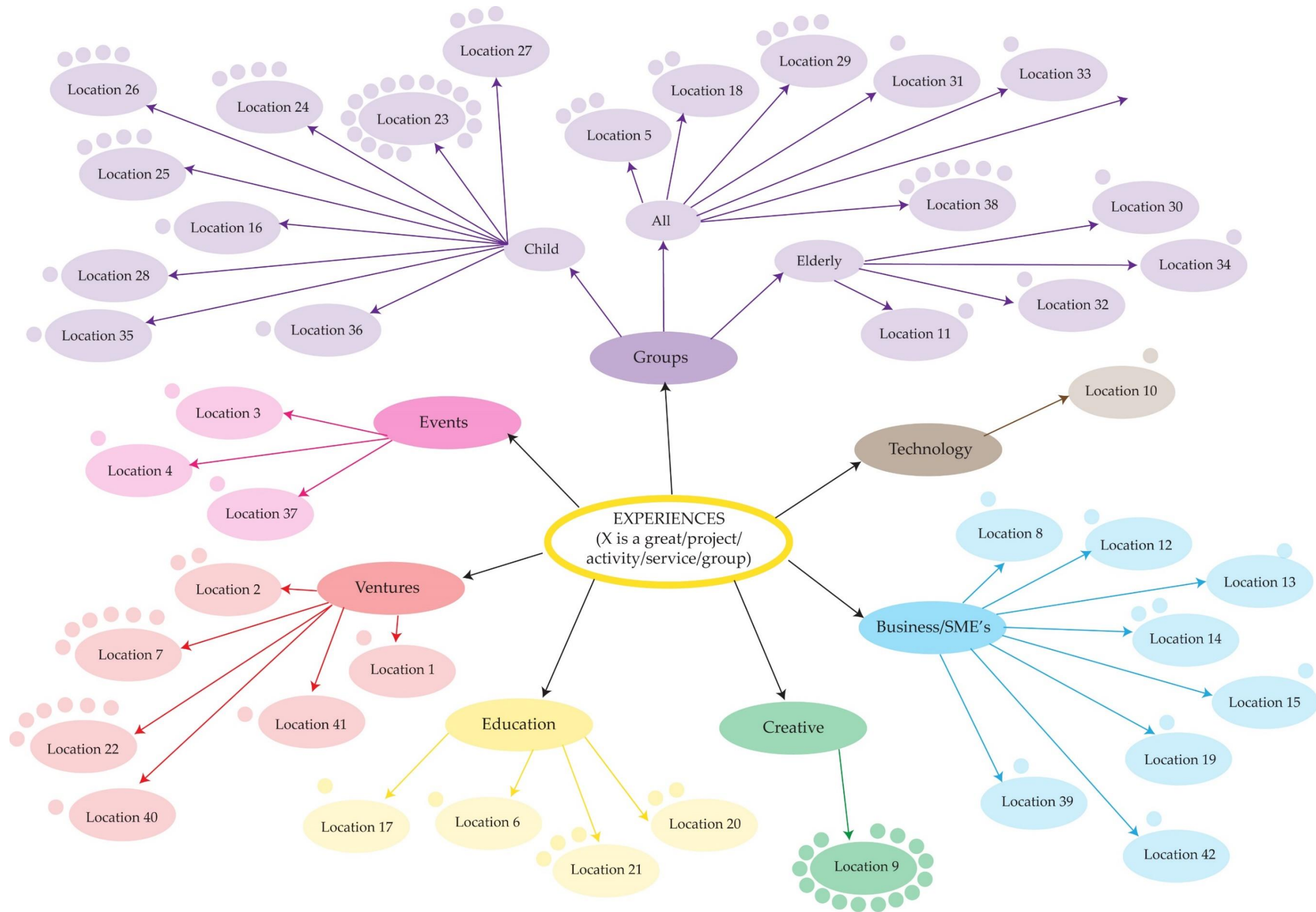
p3. Thematic Map of Needs and Wants of the Local Community



p4. Thematic Map of Impression of Location



p5. Thematic Map of Valued Projects/Groups/Activities/Services available in Location (Experiences)



* As a part of the protocol for anonymity, the locations specifically named in this activity were changed to Location 1,2, etc. This thematic map identifies the location and the number of times it was mentioned.

p6. Thematic Map Identification of Key Factors found Across CS2 Data Pool



Appendix Q

q1. Identified Themes from Community Interventions. Extended Table.

Major Theme	Frame	Major Theme	Sub-Theme	Micro-Theme	Phrase & Terms Associated	Examples of Quotes Submitted	Number of Mentions	Round % of all Responses
Community Perspective	Personal (I value ... in my life)	Connection – People, Self, & Place	Relationships	Personal Affection	Family	“Without these people in my life, it would make my life much harder”.	44	29
				Social Affection	Family/Friends	“Time with friends and family and the little things they do for each other”.	30	20
				Social Interaction	Local Community and close personal networks	“Supportive Relationships”.	11	7
				Companionship	Animals, Pets.	“Cat’s”. “Dogs”.	6	4
			Wellbeing	Physical/Psychological	Health, NHS, Autonomy, Freedom	“Feeling safe in the community where I live”.	16	10
				Quality Time	Positive Experiences	“Being able to spend time with people, having the opportunity to talk with people about what they like to do”.	5	3
			Environment	Location	Scenery. Walks. Scotland. The Sea. The Countryside.	“Quality of life in a nice environment”.	16	10
			Emotion/Qualities	N/A	Compassion. Kindness. Love. Giving. Happiness. Enjoyment.		10	7
			Behaviour	N/A	Connections. Attitudes. How people treat each other. Perspectives.	‘Decency’ an old fashioned word”.	13	9
	Skills	Creativity	Creativity and Self Expression. New Businesses. Opportunity	“Developing new creative skills”	2	1		
	Perception (The word Community means ... to me)	Belonging – Behaviours, Actions	Relationships	Personal Affection	Family	“Meeting friends and family for various activities”.	2	2
				Social Affection	Friends	“A group of people all working together in friendship to gain valuable time, friendship and spirit, to make the community a nice place to be”.	4	4
				Social Interaction	Community	“Knowing the people, you live in the same place with”. “Helping each other”. “The coming together of people for a greater good and to help people in any way possible”.	24	26
		Environment	Place	Facilities	“Supporting local projects and organisations, getting to know the locals”.	21	23	
		Emotion	N/A	Caring. Being concerned. Friendly. Open. Trustworthy.	“Togetherness”. “Linked by values”. “A social, caring environment”.	8	9	
Attitudes.		Behaviour	Attitudes & Actions	Coming together. Working together. Pulling together	“Where people pull together to get things done for their hometown’. ‘Doing things together as a group for the good of the people who live here”.	33	36	
				“Everyone working together for the common good of the people and the fabric of the local area”.				

Need (I think we would benefit from ...)	Enablers and Impact	Want	Location	Affordable Housing. Rented/ Social Accommodation.	"More affordable housing for younger peoples so they don't have to move away."	14	29		
			Services Facilities	Playparks. Sculptures. Handrails for the elderly. Speed Reductions.	"Better public transport (especially at nights and weekends."	35	71		
				Swimming Pool. Fitness Suite. Public transport – Buses and Trains. Speed bumps. A New School. Playparks. Sculptures. Handrails for the elderly.	"Speed restrictions to help keep people safe"				
		Value (would have and do have)			Wellbeing	Reduced Isolation. Greater support. Easier access to services.	"Buses that aren't school buses and that don't require multiple links."	29	59
					Communication	Acceptance. Internal Marketing. Social Awareness.	"More openness and acceptance". "More opportunities for cross-pollination between the established population and new incomers."	18	37
					Satisfaction	Contentment with status quo.	"Leave things as they are". "We have everything that we need."	2	4
		Impression (X is a ... place)	Properties People Place	Relationship	Social Affection	Friends.	"Friendly, supportive and tight knit community of people."	2	2
					Social Interaction	Community.	"Close knit community, people support each other in so many ways." "Wonderful village but in need of TLC." "An inspiring place to live with talented people who care about being part of a community – everyone helps everyone out."	20	22
Environment	Location			Friendly community. Safe. Peaceful. Good quality of life. Scenic. Interesting. Lots of character.	"Somewhere with an incredible community spirit. Folk from out-with are always surprised by the level of support given by the community to local projects." "Nice place to live."	51	56		
Emotional and Behavioural	N/A			Caring. Supportive. Friendly. Exciting. Helpful. Lovely. Couthy. Inspiring. Creative. Loving. Kind. Cool. Safe.	"A place that keeps an eye out for its old folks (and it's drunks), and a place where kids still play outside... a place where people smile because you belong."	19	20		
Experiences (X is a great project/ activity/service/ group)	Attractions Public Professional	Community Groups	Community Groups - Child	Activities. Groups. Gatherings		34	32		
			Community Groups - Elderly	Activities. Groups. Gatherings		4	4		
			Community Groups - All	Activities. Groups. Gatherings		17	16		
	Community Events		Community organised and funded events		3	3			
	Community Ventures		Local café. Community Centre. Environments for the collective		17	16			
	Education	Local education services	Schools. local environmental projects. Sustainability.		7	6			
	Creative	Creative Enterprises	Local creative endeavours		15	14			
	Technology	Social Networks	Facebook		1	1			
	Business/SME's	Local businesses	Local businesses with large levels of community interaction/support		9	8			

Endnotes

¹ PhD pathways are changing and evolving to modern needs, this includes the emergence of new varieties of PhD models such as PhD by publication, Professional Doctorates, New Route PhD's, some of which see PhD researchers actively integrated into businesses and projects. For further reading see Park's 2005 New Variant PhD: The Changing Nature of the Doctorate in the UK. *Journal of Higher Education Policy and Management*. Vol. 27, No. 2., July 2005, pp 189-207.

² For an interesting overview on how the creative economy has changed over the past two decades, see Newbigin, J. (2018) <https://creativeeconomy.britishcouncil.org/guide/what-creative-economy/>

³ Through analysis of influential papers and government direction DiA focused its attention towards 5 sectors of anticipated future growth across the Scottish economy. These sectors are shown in Appendix c1. Further information can also be obtained via the Design in Action website: <http://www.designinaction.com/>

⁴ Scotland has experienced increasing levels of migration over the years, with individuals and families moving here from all across the globe. There are multiple reasons for this occurring, but these are not subject to examination within this thesis. For further information and discussion around the subject of migration in Scotland please see the discussion hosted by the Scottish Government National Publications (2016) regarding Migration and Integration: <https://www.gov.scot/Publications/2016/10/5974/7>

⁵ For example, the refugee relocation in Bute – Following the Syrian crisis, refugees were granted asylum across numerous countries. In Scotland this has led to the development of new, and strengthening of pre-established communities, as areas across Scotland have become home to new arrivals. Amongst positive effects brought about is the emergence of craft-based skills and creativity. For further information see McKenna, K. (2017) *The Refugees who brought hope to a Scottish Island* and Argyll and Bute Council, (2017) *Year 2 Evaluation of the Argyll and Bute Refugee Resettlement Programme*.

⁶ Overall their aim included the reduction of £95 billion pounds of spending between 2010-2015 (The Scottish Government, *State of the Economy Annex: Outlook for Public Finances*, 2011). Of this, 76% was to be taken from spending cuts. 12.1% from the Scottish Departmental Expenditure Limit (DEL) which controls public service funding. It was initially anticipated that this cut, over its defined incremental timescale would impact Scotland by a reduction of approximately £1.1 billion overall during the determined timeframe of 2010-2015, with full recovery to previous levels estimated as requiring 16 years to accomplish. The lasting impact of these incremental reductions would later be discovered to have generated a loss of £39 billion overall (The Scottish Government, *State of the Economy Annex*, 2011).

⁷ The living wage was implemented in Scotland (and across the UK) during 2016 but is not a nationwide occurrence, nor is it compulsory for employees to pay. Current legal positioning means they must pay the minimum wage. For current legislation regarding the living wage in Scotland see: Park (2012) *Living Wage (Scotland) Bill*. https://www.parliament.scot/S4_MembersBills/Living_Wage_Consultation_Final.pdf

⁸ Dorst 2017 gives consideration towards assumptions such as these by exploring Darwin's development of the Theory of Evolution and Natural Selection. 'Darwin claimed to have created his theory [...] in such a creative flash. He writes that the idea suddenly hit him when he was reading a treatise on human population by Malthus. [...] We can trace this moment of glory in his original diary of that time, where he dutifully reports having read Malthus. But no Eureka. Just a brief entry'. Dorst goes further in examining the following days of work undertaken and documented by Darwin, identifying: 'If we read the diary carefully, we can see that the idea of natural selection slowly dawned upon him. Darwin's creation of the theories of evolution and natural selection was a gigantic creative step. But there never was that one Eureka moment' (Dorst, 2017. p. 149).

⁹ It should be noted that the works of Alexander (1964), although stepping away from notions of ‘magic’ within design process and activity, does show concern that degrees of innocence are being destroyed through the implementation of mechanics, industrialisation and modern revolutions. As designers explore their purpose and actions, the difficulty of the questions they pose focuses their work towards repetition of previous styles ‘In this atmosphere the designer’s greatest gift, his intuitive ability to organize physical form, is being reduced to nothing by the size of the tasks in front of him and mocked by the efforts of the “artists. What is worse, in an era that badly needs designers with a synthetic grasp of the organization of the physical world, the real work has to be done by less gifted engineers, because the designers hide their gift in irresponsible pretension to genius.’ (Alexander, 1964. p. 11).

¹⁰ For the context of this thesis, it is important to state, that while the researcher fully acknowledges existing, established arguments, discussions, research and considerations which focus upon the role of Design within Nature, that is, the ‘Design of Nature’, (Miller, 2008; Pearce, 1978; Sanchez, 2016; Wolf, 2011). These aspects, inclusive of models such as Bio-Mimicry; Organic Design, (an architectural philosophy; see Frank Lloyd Wright, 1868-1959; Charles Rennie Mackintosh; Alvar Aalto) and Symbiotic Design, (where human design outputs are influenced predominantly by reflection of ‘natural design’), are not under discussion within this thesis.

¹¹ The appreciation of individually hand-crafted products has fluctuated over the years with different social trends, however in recent years and there has been a clear resurgence.

¹¹ The (first) Industrial Revolution is recognised as having originated in Great Britain and to have begun during the 1760’s. Instigated by the mechanization of the textile industry, developments rapidly spread across various production lines. This signalled a categoric shift away from predominant models of production which had been used previously. Until this point, all forms of manufacturing and production had been undertaken manually. From a historical perspective, these years brought extensive growth and technological advancement. Rates of production exploded. As a result, it is proposed by many historians that the overall quality of life which people experienced began to significantly improve. These kinds of growth had never previously occurred, incomes began to increase at an unprecedented level. More affluent societies began to emerge, production rates grew, industries shifted from small-scale, cottage-based endeavours into models of mass production. Areas of development in agriculture, through to textiles, steam, iron and transport grew, employment rates increased, and greater levels of finance became available to people. There is general agreement that the boom in city population rates was brought about by a lack of jobs in country areas. As people searched for employment, they turned to the cities, forming a population primed to be a workforce. It is vital to note, that although standards of living improved in parts of the population, it was also responsible for appalling working and living conditions of the poor and working classes. Child labour became a predominant feature of industry, lacking the ability to unionise, their small statures (suitable for navigating through spaces in factories which adults could not), the ability to pay them less, and numerous other reasons all promoted children as the preferred employee type – during this same time period public rebellion against these processes developed, laws were passed to control working hours and the beginning of mandated education for children emerged. For further reading, see Ashton, T. S. (1998); Hobsbawm, E. J. (1999); White, M. (2009).

¹³ Opinion is split as to the number of revolutions which have occurred during the time frame of the 1700’s to current day, but there is opinion that the Industrial Age is home to no fewer than 2, and possibly 4 ‘revolutions’ – The First – Mechanisation of Textile and other industries roughly (1760-1840), The second – Electricity/Assembly line/mass production – Henry Ford etc. (1870-1914), The Third – The Digital Age/Nuclear Energy (began approx. 1969), The Fourth – The Internet of things, AI, (Approx. current millennium) For further reference see: Richmond Vale (2016).

¹⁴ There are extensive studies available as to the progression of industry, populations, and each of the ‘revolutions’ across human evolution which have occurred. These however are not under examination in this thesis, nor are they specifically relevant to the questions this research posed. It should be noted however that each has had impact and influence upon the current socio-economic environment and upon the role and development of design in its own way.

¹⁵ It was during the 1950's that studies and exploration of ergonomics 'The Human Factor' took off. Ergonomics' is concerned with how a product, environment, process/system interacts with the human form in both physical and cognitive ways.

¹⁶ Papanek is recognised as being one of the founding thinkers responsible for the conceptual development of co-design and participatory practices. Highly influential within and beyond the design field, he made calls for greater social engagement and moral responsibilities to be upheld and enacted by designers (the Phenomenon of co-design and participatory approaches gained true momentum and traction towards the turn of the 21st Century). He never ceased to believe in the capabilities of design through collaborative engagement as an effective method for bringing about positive societal changes. Since Papanek's first explorations and writings upon these directions for design, engagement with this more socially responsible model has occurred across the sector.

¹⁷ Environment in this context serves to consider 'Environment' as natural and physically created space, and Psychological Environment – the social environment, the entire community/social experience.

¹⁸ The first Design methodologies conference was held in London in September 1962 'Conference on Design Methods'. This movement was a result of the works of John Chris Jones, Thornley, Gregory, Broadbent, Ward, Moore, Spillers, Evans, Powell and Jaques. Early design methodology and methods practitioners such as Hall, Asimow, Alexander, Archer, Jones, Broadben were responsible for some of the earliest available books on Design Thinking and Design Methods.

¹⁹ There is extensive literature available on the progression and development of Design over the decades. Not least, works upon Modernism (Pre WW2), Postmodernism, Postmodernity and Structuralism (Post WW2). This thesis acknowledges that significant shifts in practice and philosophy occurred in both pre and post-Industrial revolution, each of which had lasting influence and impact upon the development of design practice. However, to explore these time frames in detail would take a thesis or 4, and as such, they are acknowledged but not extensively discussed.

²⁰ See the Oregon Experiment, Oxford University Press, 1975.

²¹ The 80's saw the rise of Design consultancies, companies like Apple, Alessi, Calvin Klein, Gucci and Ralph Lauren become synonymous with Design, but it was still viewed as object based. Engineers designed and made things; the designers made them look appealing. As brands and businesses²¹ emerged and developed, designers gained more credibility and responsibility. Systems Thinking and Design Thinking began to emerge more readily, and it began to be utilised and implemented beyond just aesthetic boundaries. Design became integrated into models across multiple sectors, its wider capabilities became more apparent, and over time perceptions, perspectives, understandings and opinions began to change. It became reflective and responsive to societal values, needs, cultural nuance, environment, and resource availability.

²² 'Law III: To every action there is always opposed and equal reaction: or the mutual actions of two bodies upon each other are always equal and directed to contrary parts' Source: Mathematical Principles of Natural Philosophy (Newton, 1687).

²³ Humanity faces a global endemic of complex problems, not least the increasing levels of environmental instability due to the unsustainable manners in which we have interacted with the planet. The effects of these, in turn, compound and add to pre-existing complexities faced. Termed by Crutzen and Stoermer in 2000, Scientists refer to humanity as having entered the 'Anthropocene Period', an epoch with our planetary history, where the impact of humans is now apparent within the surface of the earth. The effects of our actions are identifiable and visible through analysis of glacial ice cores which document the geological make-up and evolutionary phases of our planet. Sections of ice showing atmospheric changes can be dated back to the late 1800's which coincide with the momentum gained by the Industrial Revolution. This is an epoch where we will experience the impact of previous and current negative actions and behaviours which have disregarded the interconnectivity of all things on earth. This acknowledgment of this timeframe, as being directly related to humanity and its actions, recognises the significant and negative effect which humanity has had globally upon the earth.

²⁴ Rumsfeld, as US secretary of Defence, during a news briefing 2/2/2002 on lack of evidence regarding countries supply of WMD to terrorist groups, stating: 'Reports that say that something hasn't happened are always interesting to me, because as we know, there are known knowns; there are things we know we know. We also know there are known unknowns; that is to say we know that there are somethings we do not know. But there are also unknown unknowns – the ones we don't know we don't know. And if one looks throughout the history of our country and other free countries, it is the latter category that tend to be the difficult ones.'

²⁵ Social and natural – inclusive of all aspects of life, naturally occurring and manmade.

²⁶ 'Alchemy' as a metaphor. The use of the term in this specific context pertains to the 'nature and transformation of substances' (The Oxford English Dictionary, 2018; see also; The Urban Dictionary, 2018) indicative of the change potential of design processes. Not to be misinterpreted as implying magic qualities of design, rather, that design/design thinking and creative practices support human capabilities and actions for change.

²⁷ As inspired by Asimow (1962); McCrory, (1963) and Mesarovic (1964) Visual format tracked to Watts (1964) in Gregory (1966). Regularly attributed directly to Mesarovic, inspired by Asimow, McCrory and others. See: Asimow (1962) *Introduction to Design*, Englewood Cliffs, New Jersey; Prentice Hall.; McCrory R.J. (1963) *The Design Method – A Scientific Approach to Valid Design*. In: Rapp F. (eds) *Contributions to a Philosophy of Technology. Theory and Decision Library (An International Series in the Philosophy and Methodology of the Social and Behavioural Sciences)*, vol 5. Springer, Dordrecht.; Mesarovic (1964) *Views on General Systems Theory*. New York: John Wiley and Sons.; Gregory (1966) *The Design Method*. Springer Science & Business Media LLC.

²⁸ Curedale (2013) p.106, takes this proposed model and makes adaptation to allow for the visualisation of the iterative nature and behaviours integrated within the practice. Curedale proposes a model for the Design Thinking Process based on an amalgamation of knowledge acquired through personal experiences and exploration of models used and implemented by other organisations. Curedale's model illustrates the non-linear activities of Design Thinking through use of dotted lines to indicate areas of repetition and iteration which can occur (2013, p. 106).

²⁹ Sensemaking as discussed by Kolko

³⁰ These are inclusive, but not exclusive lists

³¹ Drawing upon Gershuny (1983), Smeds et al. (1994) argued that technological innovation (in this instance the vacuum cleaner) led to a more equal sharing of tasks within the household. The societal impact of technological innovation – the restructuring of power relations – was, therefore labelled as a social innovation (Ayob. et al. 2016, p. 643).

³² For example: Valentine et al. (2017) positions Design Thinking as an approach for Social Innovation in Health care. They create the case for Design Thinking as 'a powerful methodology for innovation [...] {which} blends an end-user focus with a multidisciplinary collaboration and iterative improvement to produce innovative products, systems, and services' (p. xiv)

³³ An interesting position raised around this particular area of employee/worker voice arises in the work of Handy, 2002 who argues that the actual ownership and decision-making processes found within business perhaps should not belong to stakeholders, or financiers, but instead, that they should be the responsibility of the business; seen as a community, One made up of individuals who give up time, talent and skill, and who invariably create the IP associated to the business. Through re-interpreting both the role of business to society, and businesses' responsibilities and obligations to their workforce, a more democratic model of business, with values both financial and community oriented might emerge

³⁴ The debate of hobby or business can generate considerable issues when it comes to tax liabilities. The status of a venture directly affects what can and cannot be deducted as losses or expenses incurred.

³⁵ An example of this transition can be seen clearly within the fashion industry, where previously inspiration for High-Street fashion and brands were taken directly from styles found upon major fashion catwalks or companies such as Pantone, but this has since transitioned over to an appreciation of 'micro-trends' identified across social media sites such as Instagram (Russon, 2018).

³⁶ Businesses can no longer afford to not pay heed to trends being determined and shared on new platforms of communication. Trust, understanding and empathy are integral to engagement of multiple stakeholder groups when attempting to combat and address complex problems and issues located around and across modern societal structures. When preparing to undertake effective collaboration, a mindful and respectful approach must be adopted. Problems which can arise when undertaking work of this nature were identified as being associated to perspectives of responsibility. Sole responsibility is often the adopted perspective that an issue or problem belongs to either: a) The place/person(s) that caused the problem or b) The team which is addressing the issue. In order to negate this, the development of relationships of trust and understanding is integral to the process.

³⁷ Amongst these, advice and guidance can be sought from Gov.UK (replacing Business Link as of 2013); Coach in a Box (Founded 2005); Cultural Enterprise (Founded 2002) and Nesta which was founded in 1998.

³⁸ With 5 operating units, they have capabilities spread across: Development, distribution and publication of interactive entertainment (Games) for consoles, mobiles, tablets and PC's. Development, distribution and publication of experiential games such as World of Warcraft and Heroes of the storm. Mobile phone specific game inclusive of development, distribution and publication. i.e. Candy Crush, Bubble Witch. Major Lead Gaming – the development, distribution and publication of e-sport games. Film and television content creation based upon their I.P (Activision Blizzard, 2018). This array of units allows for customers to engage with gaming experiences in highly personal ways. Options available include: Customers can purchase games as a stand-alone pieces for a variety of consoles; Subscribe to membership, (they boast 500 million monthly subscribers across 196 countries) for e.g. World of Warcraft is sold via 'subscription only beyond level 20' providing a continual revenue stream. Retail purchases can be made online for special files to download; Continuity fee can be charged to keep online games and any personalised characters from being deleted; Some games which they own are free for download but then require payments to access further levels/special skills/bonuses, etc. They also have physical stores, where items and artefacts can be purchased for personal use; Special events can be hosted where individuals can show off skills, models, trade etc. They generate further profits through licencing revenue lines across international boundaries, where countries who 'host' games pay to do so. They also a wide variety of intellectual property to other companies and individuals. (Activision Blizzard, 2018)

³⁹ Inequality of Wealth distribution is a recognised phenomenon occurring globally. Currently, it is estimated that: 'The globe's richest 1% own half the worlds wealth' (Neate, 2017).

⁴⁰ 'The Big Idea' published in the Jan/Feb 2011 release from HBR offers a detailed elaboration on the model of shared value. In particular within this is considered the works of Nestle in Latin America. The terms coinage is in itself actually accredited to Niels Christiansen and first appeared in 2006 where it was used in The Nestle Concept of Corporate Social Responsibility as Implemented in Latin America (March 2006). The term was subsequently adopted and the idea of shared value developed through Kramer and Porter's work understanding impact on socio-economic developments and the ideation and development of concepts which can support business development in the longer term.

⁴¹ Responsibility for the creation of GDP and GNP as metrics is regularly attributed solely to Kuznets, however, it should be noted that although Kuznets wrote extensively throughout the 1930s and onwards, regarding income inequality and ways in which statistical information on National Income could be compiled, it can be argued that the arrival and implementation of GDP and GNP were the culmination of a combination of individuals' work, including the likes of: Richard Stone, 1984:1986, Colin Clark, John Maynard Keynes and Wesley Mitchell. These and a number of others have all contributed over the years to the model through which we calculate and assess economic growth and development.

⁴² Further to this, GNH contains 38 sub-indexes, 72 indicators and 151 variables which are all considered through their assessments of peoples' overall happiness (GNH Centre Bhutan, 2018).

⁴³ Other methodological approaches implemented in research conducted in the arts and humanities include: Actor Network Theory (Michel Callon, Bruno Latour) and Grounded Theory (Barney Glaser, Anselm Strauss)

⁴⁴ While Crouch and Pearce consider that of the research approaches available, Ethnography, Narrative Research, Case Study and Action Research, (all of which are supportive of mixed methods) are more suitably associated and interconnected with creative practices for research purposes than most, and that these practices are beneficial for both the field of study and the field of methodology (Crouch & Pearce, 2012. p62-63). It should be noted that Real World Research inquiries allow for mixed method approaches to be utilised in reflection of the needs of the research (Robson & McCartan, 2016, p.150). Mixed method approaches have been accepted as effective ways to enrich investigations, granting more three-dimensional perspectives and qualities to the data pool and results (Halcomb & Hickman, 2015: Simons, 2007: Yin, 2014).

⁴⁵ This is a trend which is shifting gradually. New 'Design' based methodologies are continually in evolution. For an interesting read around one particular methodological approach see Dorst, K. (2015) *Frame Innovation*.

⁴⁶ The works of Gill and Johnson builds upon a proposal of research strategy and process presented by Sharp and Howard in 1983 – for further reading : *The Management of a Student Research Project* (1983). For further reading: Howard, K. Sharp, J. & Peters, J. (1983) *The Management of a Student Research Project*. New York: Routledge

⁴⁷ Iterative qualities and actions such as this speak strongly to an alternative methodological approach of Action Research, for further information around this particular area the writings of Kurt Lewin (in Lewin, 1946, and Burnes 2004) and contemporary works of and Denzin & Lincoln (2000: 2013), Reason & Bradbury (2001: 2006), Kemmis and McTaggart (2000: 2001). –

⁴⁸ For example, in considering the merits and failures of singular or individual case studies, Eysenck, a German born, English based psychologist, long portrayed these kind of case study (singular/individual) approaches as being little more than anecdotal and of lacking in any meaningful value (Flyvberg, 2011). However, interestingly, he eventually concluded that in fact, case studies offered unique opportunities to enhance our collective and individual knowledge stating that 'sometimes we simply have to keep our eyes open and look carefully at individual cases – not in the hope of proving anything, but rather in the hope of learning something!' (Eysenck, 1976 p. 9). Case studies offer unique points of insight and narrative about the world around us.

⁴⁹ For an interesting and detailed overview of the variations surrounding delivery styles in workshops see the works of Sims (2006) which offers an insightful breakdown of the differences in style of approach, materials and model of information sharing between Lecturers, Trainer/Leaders and Facilitator/Coaches (p.2).

⁵⁰ Hamilton (2016) proposes the ideal number of workshop participants as being between 12 and 20. This allows for ease of group formation and communication but can be scaled up to accommodate 100+ participants. For further information see *The Workshop Book: How to design and lead successful workshops*.

⁵¹ Rocca presents an extensive study that considers factors affecting both positively and negatively the experiences and learnings of students at university level. Within this he presents Greeson's 1988 work which promotes the use of student-centred spaces over teacher led classrooms as directly and positively impacting and influencing the quantity and quality of responses provided by students. For further reading: Rocca, K. (2010) *Student Participation in the College Classroom: An extended Multidisciplinary Literature Review*.

⁵² Controversy aside, the development of aided conversations through facilitation have brought many benefits to individuals and groups over the years. It is of vital importance that we culturally support everyone in finding and sharing their voices and opinions. A facilitator however must retain ethical integrity and communicate clearly what they are told in their participant's words. An interesting read around this area can be found in the works of Bilken, 2005, and the works of Mertens, D., Sullivan, M. & Stace, H. (2011) *Disability Communities*, pp 227- 241. in Denzin, N. & Lincoln, Y., (ed) (2011) *The SAGE Handbook of Qualitative Research*. 4th Edition. SAGE Publications. USA

⁵³ The works of Super, (1958/1980) considers life roles and career development. He proposes that there is a minimum of 8 such life roles for each individual: Child, Student, Leisurite, Citizen, Worker, Parent, Spouse and Homemaker which occur across 5 life stages. These are presented as: Growth (14 and under), Exploration (14 – 25), Establishment (25-45), Maintenance (45-65), Disengagement (65+).