Copyright Statement

Factors External to the Individual Encouraging Idea Generation in SME Contexts

by

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Abstract

Factors External to the Individual Encouraging Idea Generation in SME Contexts

(Graham Michael Perkins)

This thesis sets out to explore factors external to the individual that encourage creative idea generation in SME environments, understanding their importance in a variety of organisational contexts. The original contribution to knowledge made by this thesis is the creation of a framework which aids understanding by splitting the various factors into those responsible for initiating and sustaining idea generation.

Literature concerning creative idea generation is continuously developing and contains a broad spectrum of topics and understandings. Key amongst these are leadership, the nature of creative idea generation, theories such as the 'strength of weak ties', collective creativity and the concept of 'flow'. Fieldwork followed a primarily qualitative, inductive approach, using exploratory surveys, semi-structured interviews and participant observation to develop rich narrative 'stories' of idea generation for ten different organisations.

Data was analysed in accordance with the principles of grounded theory and resulted in numerous novel findings such as the importance of internal organisational contacts to the development of ideas, the notion that organisational visions can be used to guide idea generation and the effect that physical distance has on the development of interpersonal ties. Leadership also featured heavily within the analysis process with it being found that a combination of transformational and servant qualities best enables idea generation in SME contexts. These and other findings were reflected in the final framework produced by this thesis.

From a practical perspective findings from this study arguably have implications for both organisational and leadership development in SME contexts, although overall generalisability is hindered by the chosen sample. Future studies could potentially focus on applying quantitative methodologies to verify the final framework or extend understandings by interlinking organisational factors discussed by this thesis with individual characteristics, mental process and/or experiences that are also known to drive creative idea production.

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Acknowledgements

I have struggled to decide on a format for this page as this section could almost be as long as the thesis itself. I am sincerely grateful to everyone who has had an input into this study including numerous colleagues, friends, family members and even some of my students who have made me question different parts of my own work! I would like to reserve special thanks for my parents who have had to endure almost four years of continual discussions about idea generation, creativity and the philosophical underpinnings of management research. I would also like to thank colleagues at both Plymouth and Exeter Universities for their interest in my research and the general tips and guidance they have provided.

Of course, this thesis would not have been possible without interest from company owners and managers and I am very grateful for the time and access they have all provided. For confidentiality reasons I cannot provide their names but as I say, this thesis has only delivered the results it has because of their openness and co-operation. I would finally like to thank my supervisory team, Jon Lean, Robert Newbery, David Wheeler and especially Beryl Badger. You have always supported my research, constantly challenged and pushed me to things that I never thought I could be capable of. I cannot properly express my gratitude in words but I will always remember your influence for the rest of my career. It is because of you that I sit here today with all of these wonderful opportunities to explore. Thank you!

Graham Perkins, November 2013.

Author's Declaration

At no time during the registration for the degree of Doctor of Philosophy has the author been registered for any other University award without prior agreement of the Graduate Committee.

This study is the sole work of the author and was not produced in collaboration with any other individual.

Relevant research training was undertaken during the period of registration including but not limited to courses made available through Plymouth University's Researcher Development Programme.

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1.0 Introduction

Today's knowledge-based organisations depend for their success on creativity, innovation, discovery and inventiveness (Tushman and O'Reilly, 1997; Martins and Terblanche, 2003). Markets are subject to rapid change (Pech, 2001) and fierce competition (Klijn and Tomic, 2010) and in these settings long-term performance arguably depends on an organisation's ability to think differently (Burns, 2008). This extends to small medium enterprises (SMEs) who, due to resource constraints and intense competition, depend on ideas in order to survive (Banks et al, 2002; McAdam and Keogh, 2004).

Despite the recognition that new thinking is vital for all organisations, creativity as a term is often misinterpreted in the business world. Individuals frequently link notions of "creativity" to the arts including drama, literature and music (Robinson, 2001) while others see it as a "eureka!" moment or a sudden burst of insight (Johnson, 2010). It is perhaps because of these colourful, varied understandings that organisations often see creativity as something that is chaotic and unmanageable (Amabile and Khaire, 2008). Out of chaotic, chance encounters there is always the possibility that something "new" will arise (Ruef, 2002; Johnson, 2010), however it has been shown that structure and control is necessary in order to guide the processes of innovation to a successful conclusion (Busco et al, 2012).

With this as the context, the ability to generate new ideas is vital as it serves as an underpinning for the introduction of new products and services (Amabile et al, 1996), finding organisational efficiencies (Pullen et al, 2009; Houghton and

DiLiello, 2010), marketing products and brands (Powell and Ennis, 2007) and, above everything else, organisational survival (Martins and Terblanche, 2003). Without new ideas all organisations, irrespective of their size or sector, will stagnate and decline (Cummings and Oldham, 1997; Hughes, 2003; Dickson, 2010).

While previous studies have explored the connected fields of idea generation, creativity and innovation, this remains a dispersed and fragmented field of research. Useful contributions have been made to various sections of the literature by a wide range of researchers and writers. These contributions have focused on understanding relevant issues from a psychological perspective (Klijn and Tomic, 2010), a neurological perspective (Penaluna et al, 2010), the physical layout of workplaces (Meusburger, 2009; Sailer, 2011), understanding how leaders impact creativity (Politis, 2005; Kempster and Cope, 2010) and there is also a large selection of literature written by experienced practitioners (e.g. Catmull, 2008; Johnson, 2010) which may or may not have academic relevance. Indeed, previous attempts have been made to "model" the factors that impact creativity and innovation within organisations (see Woodman et al, 1993; Amabile et al, 1996; Ekvall, 1996).

Having highlighted a range of sources from the current literature it is important to note that this is very much a developing field. An example of the dispersed and fragmented nature of the present literature can be seen when the issue of "managerial control" is discussed. Some researchers state that 'too much' control can stifle creative ideas (Hitt et al, 1996), others note that a lack of control can inhibit innovation (Leonard and Swap, 2005), while others still

suggest that there needs to be a 'balance' (Busco et al, 2012) within control mechanisms. This divergence of views, of which this is just one example means that the literature surrounding creative idea generation in organisations lacks sharpness and focus. It can be argued that the disparate nature of the field means that both academic researchers and company owner/managers do not yet have a full understanding of creativity in organisations. Given that creativity is an important factor in organisational performance (Martins and Terblanche, 2003) academic studies seeking to bring coherence and structure to this field are likely to extend current understandings and have a practical impact within organisations. This thesis is therefore valid and will seek to make a contribution to the body of knowledge by adding structure and understanding to the field.

These first paragraphs have demonstrated that creative idea generation is an important contributor to organisational performance and hinted at the breadth of available literature. Before scoping out exactly what this study is and perhaps more importantly, what it is *not*, a few words need to be said about the thinking informing this research; the exploratory study.

1.1 The Exploratory Study

An exploratory study informed the thinking behind this research exercise by examining approaches to creativity in growth orientated small firms. This research exercise, conducted as part of the researcher's Masters degree, sought to understand the broad factors that might affect creativity in these organisations. It examined constraints and built an understanding of the basic

issues impacting creativity. The methodology adopted by this study included semi-structured interviews conducted with a series of company owner/managers and a series of “specialists” including accountants, strategy experts, HR consultants and so on. The study itself was inductive in nature, following a case study design in order to develop various “pictures” of organisational life which could then be compared and contrasted.

Ultimately this study found that the following factors have an impact on creativity within growth orientated small organisations;

- Risk taking
- Trust
- Finance
- Vision
- People
- Leadership
- Environment

Figure 1.1 shows the final model arrived at by the exploratory study.

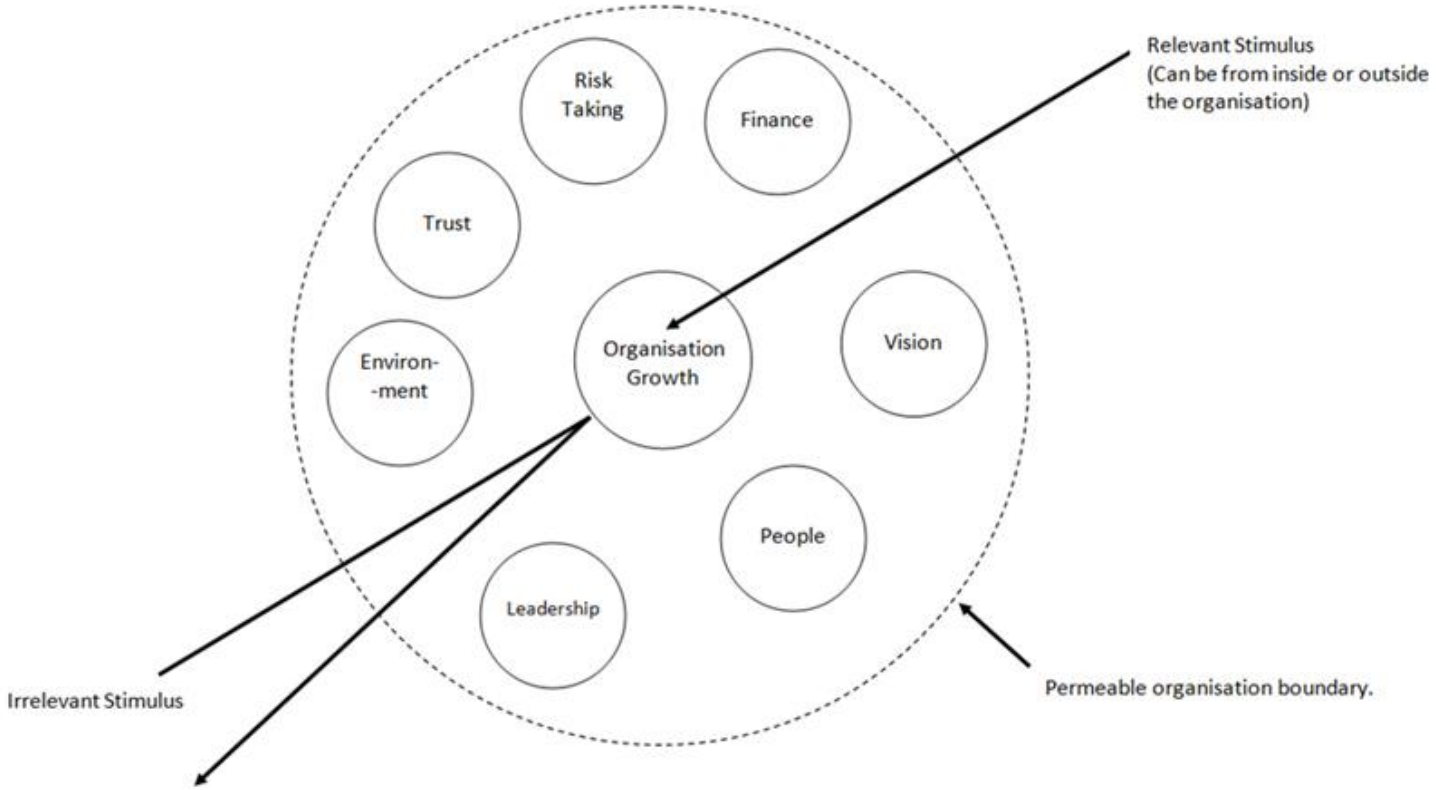


Figure 1.1: An Effective Approach to Creativity within a Growth Orientated Small Organisation

Source: Perkins (2010), p58.

Perhaps a key part of the model (Perkins, 2010) is the sense that an organisation's boundary is "permeable", in other words it is open to new stimuli from its environment. Notions of permeability have been previously discussed and found to be the foundation of increased creative achievement (Carson et al, 2003). The exploratory study suggested that once inside an organisation the various stimuli are manipulated by factors (leadership, risk taking and so on), which causes some to be rejected as irrelevant. As a practical example, a software development company may choose to avoid utilising a new programming language within a new product if it is deemed to be too "risky" by their standards.

Alongside the points made in the paragraph above the exploratory study did find that leadership was thought to be incredibly important to encouraging creativity in growth orientated small organisations. Evidence hinted that the existence of distributed (McCrimmion; 2005; Spillane and Diamond; 2007) and/or servant (Parolini et al; 2009; Sendijaya and Pekerti; 2010) leadership could have a positive impact on creativity.

Despite providing a useful insight into the issues that might impact creativity in growth orientated small organisations, the exploratory study perhaps raised more questions than it answered. It was found that almost every individual has a different understanding or interpretation of "creativity" and this resonates with contemporary literature (see, for example,Powell and DiMaggio, 1991; Davis and Scase, 2000; De Jong and Den Hartog, 2007; Klijn and Tomic, 2010). What was certain was that the exploratory research exercise only scratched the surface of key issues impacting creativity in growth orientated small

organisations. Having recognised that the exploratory study had limitations this thesis can still utilise the thinking to lay a basic foundation or rough roadmap which can be built on and improved. With this as a backdrop this present study now needs to be scoped effectively in order to ensure that it can ultimately arrive at a contribution to the selected theoretical field.

1.2 The Scope of this Study

In order to arrive at a useful contribution to a selected theoretical field it is very important that time is taken to define the scope of this study. Without this discussion it will very likely be impossible to develop meaningful research aims and objectives and without these, the research process will be ill-defined. For the purpose of deepening understandings developed within the exploratory study it is necessary to narrow down the field of study, developing tightly defined boundaries so that this study can arrive at a defined contribution to a selected theoretical field. The very start of this chapter provided an indication as to the breadth of the literature surrounding creativity and innovation. In order to narrow this study it can be argued that the very best place to begin is the start of the creative process, namely idea generation.

Having suggested that studying the concept of idea generation may well provide the tightly defined boundary required for this study, this raises another question, what is it? What is an idea? Before going any further in terms of scoping this research exercise it is crucial that the various terms (idea generation, creativity and innovation) are separated out and that the *nature* of the “idea” is examined.

1.2.1 Idea Generation and the Nature of the Idea

Existing literature often confuses the terms ‘idea generation’, ‘creativity’ and ‘innovation’. Definitions of creativity often focus on the nature of thought processes and intellectual activity used to generate new insights or solutions to problems (Martins and Terblanche, 2003). Others suggest that creativity is simply the generation of new ideas (Powell and DiMaggio, 1991), or believe that creativity is a social process that relies on fluid, open structures and a supportive culture (Davis and Scase, 2000).

Perhaps most helpfully, current definitions almost unanimously separate understandings of creativity and innovation into idea ‘production’ and idea ‘implementation’ respectively (see Amabile et al, 1996). This understanding is extended by further sources defining innovation as the intentional introduction and application of ideas, processes or products (West and Farr, 1990). From this evidence it can be suggested that creativity and innovation exist as part of the same system with the former preceding the latter.

Separating ‘idea generation’ from creativity is altogether more challenging. It can be argued that current definitions stating that creativity is simply the production or generation of new ideas (Powell and DiMaggio, 1991; Amabile et al, 1996) are too simplistic. The processes of creativity involve idea filtering and evaluation stages and these unquestionably require different skills and processes to those associated with the initial generation of ideas (De Bono, 1970; Penaluna et al, 2010). As a result of this there is a need to separate ‘idea generation’ as a term in order to explore the factors which affect it. Idea

generation itself is the very first stage of the creative process and involves pulling information, concepts and experiences together in order to produce something 'new' (Banks et al, 2002; Staber, 2008; Johnson, 2010). As a result of the different skills attached to the initial generation of ideas it is useful to be able to define and explore it separately from the broader creative process. The following model (McAdam and Keogh, 2004) adds further weight to the notion that idea generation can be viewed as a separate part of the creative process.

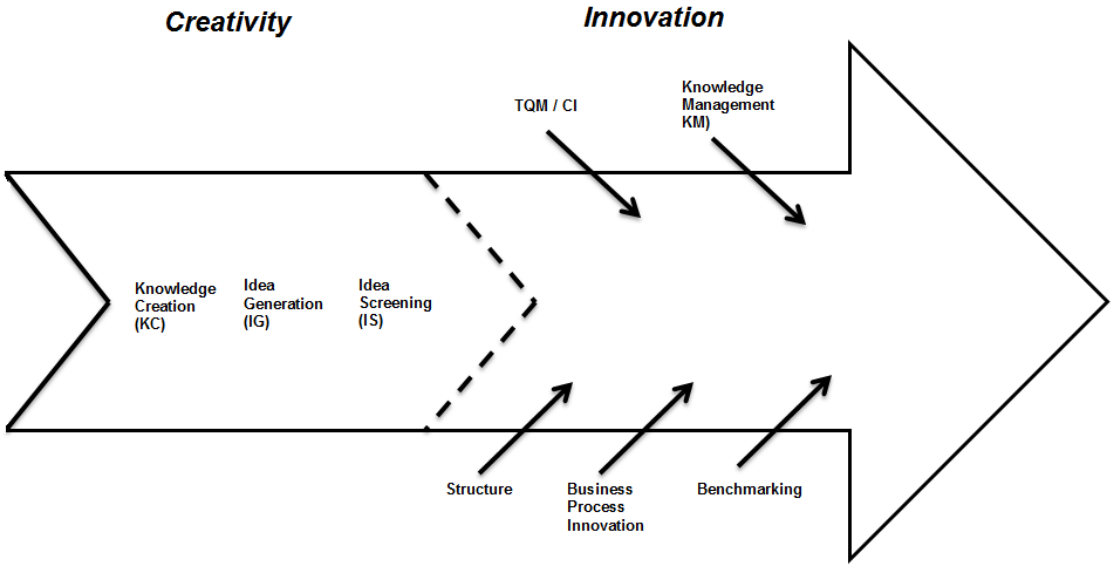


Figure 1.2: A Process Approach to Creativity and Innovation

Source: McAdam and Keogh (2004) p128

This model clearly demonstrates that idea generation (second from the left in the diagram) is its own separate part of the creative process, preceding idea screening (or filtering) and innovation. Based on this evidence it can be argued that without idea generation there can be no innovation. Further research into the factors that affect idea generation may therefore support the innovation system as a whole.

Having argued the case for a focus on idea generation it is necessary to understand the nature of the "idea". Plato was one of the earliest individuals to contemplate the nature of the 'idea' (Ross, 1951). Plato suggested that ideas are able to exist independently of any single individual and that they are 'perfect, eternal and immutable'. It is thought that because of these qualities real knowledge can only be had of unchanging ideas (Ross, 1951). In contrast to Plato the English philosopher John Locke (1690) defines the idea as;

"that term which, I think, serves best to stand for whatsoever is the object of the understanding when a man thinks, I have used it to express whatever is meant by phantasm, notion, species, or whatever it is which the mind can be employed about in thinking; and I could not avoid frequently using it."

Source: Locke, J. (1690) p2

Locke (1690) was one of the first individuals to make a connection between the 'idea' and the mental processes involved in thinking, understanding and contemplating. Further historical perspectives on the 'idea' are provided by other thinkers including David Hume (Magee, 2001) and Rudolf Steiner (1988). Hume narrowed the thinking of Locke (1690) by referring to the 'idea' as a vague mental reconstruction of perception while Steiner (1988) believed that 'ideas' are objects of experience apprehended by the mind much as the eye apprehends light.

A key theme running throughout these sources is that an idea is something which formulates in the mind of an individual in response to some form of stimulus. An idea is thought to be a product of some form of mental process and this resonates with understandings present within contemporary practitioner

literature (Johnson, 2010). These thoughts provide a focus around which a relevant definition of the 'idea' might be constructed for this study.

Drawing the literature together it can be suggested that for the purposes of this study an idea is;

"A tangible thought or suggestion which may or may not be expressed verbally but nevertheless adds to, transforms or manipulates current information, shared understandings or views in some substantial way."

This definition draws from the historical work of Plato (Ross, 1951), Locke (1690), Hume (Magee, 2001) and Steiner (1988) by focusing on the mental processes responsible for idea generation as well as the theory that ideas are generated in response to some form of stimulus (Steiner, 1988). Does it however follow that all ideas are 'creative'? **Section 2.2** will consider the nature of creative idea generation but definitions refer to such processes involving 'novel' (Amabile et al, 1996) or 'new' (Banks et al, 2002; Burns, 2008) thinking. Further definitions propose that creative ideas should 'change' an existing domain or create a new one (Csikszentmihalyi, 1996). This suggests that idea generation is inherently a creative act although this thesis does not set out to specifically examine creativity as a concept.

1.2.2 The Factors Affecting Idea Generation

There are many stories, notably in practitioner literature (Robinson, 2001, 2009; Godin, 2002; Baréz-Brown, 2006), which have a particular way of describing the

moment a creative idea strikes. These stories all appear to be geared around the creative idea being a very individual experience, something that wells up from inside in an almost spiritual way. Within these sorts of texts it is thought that creative ideas are either part of a person's nature or they are not. There are even "self-help" styled texts (Baréz-Brown, 2006; Hudson, 2007) which seek to provide activities or tools to increase personal creativity. All of these sources recognise that there is a link between new ideas and business success and/or growth but it arguably fails to logically deal with the broad range of factors that can, and do, affect idea generation in organisations.

There are a number of factors that can impact idea generation, which are both *internal* and *external* to an individual. In other words there are traits, individual experiences and events that are embedded internally within people which can, and do, affect their propensity to generate ideas. These have been dealt with extensively within academic literature (see De Bono, 1970; Csikszentmihalyi, 1990, 1996; Dewett, 2004; Puccio and Grivas, 2009; Baker and Baker, 2012). Alongside these *internal* factors there are a range of *external* influences that also impact idea generation. Some of these factors, much like *internal* qualities, have been discussed within relevant academic literature and a search reveals that these might include an organisation's attitude to risk (Powell, 2008; Moultrie and Young, 2009), leadership (Politis, 2005), control (Busco et al, 2012), organisational processes and systems (Pullen et al, 2009) and available resources and/or time (Amabile et al, 1996).

All research studies inevitably involve trade-offs in terms of coverage due to constraints imposed by resource, time, access, and even considerations

surrounding word limits. This study is no exception to these constraints and it is important to recognise that because this thesis seeks to take an *organisational* rather than a *personal* approach, a focus on factors *external* to the individual is likely to be appropriate in this instance. A study attempting to explore all of the various factors affecting idea generation, internal and external to the individual, would likely mean that depth of understanding would need to be sacrificed in order to achieve breadth of coverage. Any theoretical contribution made by such a study would likely be superficial and fail to stand up to the rigours of the peer review process. The decision to focus on external rather than internal factors affecting idea generation should not be seen to imply that external factors are in any way more important, simply that this thesis needs to make a choice in order to narrow the field of study. Studying factors external to the individual that affect idea generation ties together with the organisational approach adopted up to this point.

Additional justification for this approach surrounds the fact that as creative idea generation is important to organisations, firms therefore need to have an understanding as to how it can be encouraged. By focusing on factors *external* to the individual it is likely that this study will arrive at a series of steps or interventions or some form of framework that can assist organisations in this regard.

1.2.3 Organisations Targeted By This Study

At the very start of this introduction it was noted that all organisations depend for their success on creativity, innovation, discovery and inventiveness

(Tushman and O'Reilly, 1997; Martins and Terblanche, 2003; Houghton and DiLiello, 2010). With this as the backdrop it could be argued that this study should target a range of small, medium and large organisations in order to gather the most information possible about the factors external to the individual that affect idea generation. Despite this seeming to be a logical and rational perspective, SMEs in particular are known to be very important to the British economy (Burns, 2008; Wetherill, 2010). Discussions within this chapter have already noted that these firms are subject to significant resource constraints and intense competition which consequently means that they, perhaps more than some larger organisations, depend on ideas for their survival (Banks et al, 2002; McAdam and Keogh, 2004).

While there is a relatively clear case for targeting this study towards SMEs, both in terms of the significance of these organisations to the British economy (Wetherill, 2010) and the fact that exploratory work (Perkins, 2010) also targeted smaller organisations, the geographic scope of this study is still unclear. Again, it is worth considering that the exploratory study was based on organisations located in Devon and Cornwall and this fact, coupled with the physical location of the researcher makes it logical to focus this particular study in the same area. In these specific counties SMEs make up an even larger percentage of the economies (Wetherill, 2010), arguably making their survival and success even more vital for local employment and prosperity. It can also be suggested that focusing research within these areas should mitigate some access considerations (Thorpe and Holt, 2008) by lowering the costs and time involved with travel to each individual research site.

This thesis has made a case for idea generation being viewed as a distinct part of the creative process. Justification has also been brought forward for a focus on factors that are *external* rather than *internal* to the individual, as well as basing this study on SMEs located in Devon and Cornwall. These considerations will be reflected in the aims and outcomes that appear in **section 1.3**.

1.3 Aims and Outcomes

Although it is not possible to formulate specific, targeted research questions at this point of the study, it is possible to outline an overall aim and set of outcomes. These statements will help to further define the scope of this thesis and narrow the literature search. Knowing that the literature field is substantial (see, for example Amabile et al, 1996; Ruef, 2002; Politis, 2005; Staber, 2008; Penaluna et al, 2010; Klijn and Tomic, 2010; Sailer, 2011), it will be difficult to present a thorough, detailed review without an appropriate set of guidelines. With this in mind, and building from the information contained in **section 1.2** it is proposed that the aim of this study is;

"To explore the various organisational factors external to the individual that encourage the production of creative ideas in SME environments; what is their importance in a variety of organisational contexts?"

This aim emphasises that the purpose of this study is to explore factors that are *external* to the individual that impact idea generation and that the specific focus is on SME environments. Building on this, the second sentence within the aim

highlights a further point of interest, namely assessing the importance of the various factors that impact idea generation across a *variety* of organisational contexts. While the nature of this particular inquiry with its likely focus on qualitative data and associated methodologies may make generalisation difficult (Howell, 2013), exploration can only truly occur if *difference* is given a chance to enter the sample. This point will be debated in significantly more detail during the methodology. For now, it is sufficient to say that this study will examine idea generation across a selection of different organisations rather than examining one specific organisation, industry or sector of the economy.

Building on the aim, a set of outcomes which will guide the thesis from this point can now be articulated. Ultimately this study aims to find out;

- Whether there are common understandings of the factors affecting idea generation across different organisational contexts.
- How practitioner contributions link with more academically rigorous literature; do these contributions have merit within the context of this academic study?
- If it is possible to construct a robust, reliable methodology through which academics can enquire into the factors external to the individual that affect idea generation.
- If the factors affecting idea generation can be distilled into some form of general framework, map or other such understanding.
- Whether the production of any framework, model or understanding of the factors affecting idea generation has positive value / benefits to SMEs.

Most of the points above are relatively self-explanatory and require little further discussion; having said this point number two concerning “practitioner” literature does require a little more analysis. In scoping out this study it was discovered that a range of literature written by experienced practitioners exists which often has close associations with more traditional, academic literature. Examples of this include Catmull (2008), Robinson, (2001, 2009) Johnson (2010) and Rudkin et al (2001). While academic literature has been subject to the peer review process, practitioner contributions often have not meaning that while these sources may contain interesting information, it would be inappropriate to base conclusions solely on their content. Having said this, a review of such sources suggests that there is a wealth of potentially relevant information which, although less rigorous in nature, could well have strong relevance in terms of shaping understandings. Researchers need to cast a wide net in order to ensure that final contributions add to developing fields like this one.

Key objectives for this study include the need to understand the breadth and depth of the relevant field of literature and construct a rigorous methodology to allow for a sound, replicable enquiry into what is clearly a developing and changing field. Given that the intent behind this study is to *explore* the factors that affect idea generation it is clear that the methodology should allow for openness within the data collection process, so that new findings may emerge from fieldwork. Enquiring into this field using positivistic (Easterby-Smith et al, 2008) methodologies based on the principles of deduction (Bryman and Bell, 2007) is unlikely to be appropriate in this particular instance. More discussion surrounding the issues and debates concerning the nature of the knowledge present in this study will appear in the methodology.

The final two outcomes consider the construction of some sort of framework, model or hierarchy as the final output of this study. At this stage it would be unwise to predict the possible destination that this study will arrive at or its wider applicability; however these are logical goals when the overall aim requires the assessment of a range of factors and an understanding of their importance in a variety of contexts.

1.4 Beneficiaries of This Research

Research completed through the PhD process has obvious benefits for the academic community, the researcher themselves and their institution. The intention behind any thesis is to make a theoretical contribution to a selected field of study and this in turn should mean that the selected field of study is changed or added to in some specific way. It is intended that this study is no different and that its output causes others to reassess their understanding of the factors external to the individual that influence idea generation in SME contexts. It is hoped that research conducted for this thesis leads to the production of various journal and conference outputs and that further avenues of research are opened up for future inquiry.

Alongside academic contribution it is also hoped that this study will have direct and practical relevance for a range of SMEs based in Devon and Cornwall. It is frequently stated that a significant part of the UK's economic recovery strategy is pinned on the private sector, particularly enterprising individuals and small firms (RTSO, 2012; Business Centre Association, 2012; OECD, 2013). This

ultimately means encouraging creativity and innovation, which cannot happen without the ability to generate ideas. The economies of Devon and Cornwall are more reliant on SMEs to generate employment and prosperity than other parts of the United Kingdom (Cornwall Council, 2010; Devon County Council, 2012) and so this study, if it is ultimately successful, should have strong practical relevance not only for participating organisations but the wider economies of the region.

As a final thought it may also be the case that this study has implications for literature surrounding the "position of the researcher" in qualitative inquiries. Due to the nature of this study, the position of the researcher is something that requires significant thought and it may be the case that it has implications for the broader research methodology field as well as the specific idea generation and creativity literatures.

1.5 A Guide to the Thesis

In essence the body of this thesis is split into four main chapters which deal with the literature review, methodology, findings and analysis and finally the conclusion. The content of each chapter is relatively self-explanatory however there are one or two intricacies that are worth exploring here to aid the reader's understanding of what follows. It is necessary to state at this point that the "leadership" theme appears relatively often throughout this thesis, not because of a specific decision to focus on it but due to the significant amount of literature available and the depth with which it was discussed during fieldwork.

Beginning with the literature review it is helpful to note that discussions within the chapter focus on key findings from the exploratory study, setting the stage for the thesis by discussing the "nature" of creativity amongst other relevant issues. Key points from this discussion then inform the wider review of the literature which encompasses the notion of "collective creativity", the idiosyncrasies of SME environments, leadership, the "environment" for creative idea generation and other factors such as the "flow" state. Case studies are used at certain points of the literature review to aid understanding of key concepts and link discussions firmly to the reality of organisational life. Whilst covering necessary discussions on the nature of the knowledge presented in this study, research philosophy, approaches and design as well as sampling and data analysis, the methodology also includes a significant discussion about the position of the researcher. It is crucial to recognise that qualitative research involves a much more direct relationship between researchers and the objects of their study. Social systems are not natural phenomena; these systems must be interpreted by researchers, meaning that any findings and conclusions will inevitably be developed through the researcher's values, beliefs and cognitive structures.

The penultimate chapter within this thesis has the task of attempting to analyse and add structure to the data collected during the fieldwork phase. Text contained within this chapter provides further detail surrounding the analysis methods used by this study, explores factors uncovered by the literature review and also discusses "new" findings which have emerged during the course of fieldwork. A large section of this chapter is devoted to "leadership", not because this study has solely set out to understand the impact that leadership

has on idea generation, but due to the sheer volume of data collected about it. Towards the end of the chapter relationships and links between the various factors are discussed and explored with all of this analysis laying the foundations from which the conclusion builds.

The conclusion provides direct answers to the research questions formed from the literature review as well as a formal critique of the methodology employed by this study. Discussions highlight the formal contribution that this study makes to the selected theoretical field as well as its limitations. Towards the end of the chapter areas of possible future research are debated, discussions also cover the practical implications of this study.

2.0 Literature Review

Literature reviews are discussed and debated in many research texts (Bryman and Bell, 2007; Saunders et al 2009). The purpose of such reviews is to discover what is currently known about a particular subject area (Bryman and Bell, 2007) and, with this point in mind the aim of this chapter is to examine what is already known about the factors affecting idea generation in SME environments. The ultimate output of this process will be research questions which will shape the study from this point on. Although the concept of grounded theory will be discussed in more detail during the methodology it is important to recognise that there is a debate as to when the literature review should actually be conducted.

According to the principles associated with grounded theory (Glaser and Strauss, 1967), extensive literature reviews should not be conducted until at least a portion of the primary research has been gathered. This allows categories and frameworks to emerge naturally from empirical data, uninhibited by existing understandings and hypotheses. Despite this argument, Dunne (2011) points out that engaging with existing literature before primary data collection is generally accepted as a valid route of inquiry into a subject although the subject material is thought to influence choice in this regard. During this present study it can be argued that the principles outlined by Glaser and Strauss (1967) are being adhered to as the exploratory study (Perkins, 2010) can be considered to have generated a basic, underlying foundation. The model presented in **figure 1.1** highlighted key factors and while this framework is by no means complete, it provides a starting point for assessing

relevant literature during this chapter. With this in mind, the broad aim to assess the factors external to the individual that influence idea generation in SME contexts has given rise to a number of questions;

- What is the nature of creative idea generation?
- Are there specific factors that affect it inside SMEs; and
- Do these factors vary between contexts?

The remainder of this chapter will explore the current body of literature, seeking out existing understandings and theories which will allow for the formation of focused research questions. Alongside theories and conceptual models, case studies will also be included where relevant to highlight significant points and relate discussions back to the realities of organisational life. As already mentioned in this thesis the literature review will include reference to practitioner literature alongside more traditional academic content. The rationale sitting behind this decision is that the literature territory surrounding creative idea generation is developing at a rapid rate, as a result limiting oneself solely to peer reviewed content may miss important new ideas in the field. Having said this, conclusions will not primarily be based on practitioner literature; these sources will be used in conjunction with academically rigorous material.

Literature surrounding idea generation and its associated subjects such as culture, leadership and organisational behaviour is vast. Therefore the first task within this literature review is to consider which aspects of the literature are relevant to this study and which are not. The conceptual model emerging from the exploratory study (**figure 1.1**) highlighted seven key factors which were

thought to influence creativity including; trust, the environment, risk-taking, finance, vision, people and leadership. Perhaps most significant among the findings from exploratory work was the sense that leadership was of crucial importance to creativity within a small business environment.

This thesis seeks to build from this base and use the knowledge generated to explore factors which affect idea generation in SME environments. To accomplish this task the literature review will, at least in part, be guided by the results of the exploratory study. There will undoubtedly be "new" factors or issues of interest that arise while reviewing the literature and it is crucial that these are referenced in any understanding or conceptual model emerging from this review. As a result of the decisions made in scoping this study the reader will find that this chapter includes a specific section (**2.5**) discussing the idiosyncrasies of SME environments. In order to help locate this study within the wider whole, discussions will also consider creative idea generation in 'larger' organisations (**section 2.4**). To begin, however, there needs to be a review of the key findings from the exploratory study.

2.1 Exploratory Study

Discussions have already noted that exploratory work suggested that leadership is crucial to growth orientated small organisations. Primary research revealed the strength which effective leaders conveyed to their organisations through the application of appropriate visions and strategic goals. This finding resonates with the wider literature (Moultrie and Young, 2009; Kempster and Cope, 2010; Houghton and DiLiello, 2010) although the exploratory study highlighted the fact

that small organisations often struggled to find what might be termed ‘effective’ leadership. Again, this issue is covered in the present literature (Phelps et al, 2007; Kempster and Cope, 2010) although it is not made clear what ‘effective’ leadership for creative idea generation might be. This is therefore a point that can be held up as worthy of further investigation.

Two overarching concepts emerging from primary research were distributed (McCrimmion, 2005; Spillane and Diamond, 2007) and servant (Parolini et al, 2009; Sendijaya and Pekerti, 2010) leadership. These concepts were not overtly mentioned by any research participant however organisation structures and processes appeared to include elements hinting at their existence. One particular example of possible servant leadership characteristics occurred during an interview with one owner/manager who proposed that his role was simply to provide an “environment” that was conducive to creativity. Based on this evidence it is certainly arguable that there perhaps needs to be a particular focus on understanding whether distributed and/or servant leadership has a positive impact on idea generation in SME environments.

Creativity itself was the subject of much debate during exploratory work with some individuals remarking that they found it difficult to locate within a business context, seeing the term as something which was more appropriate to the arts instead (Robinson, 2001). Creativity was perhaps best described as ‘non-process thinking’ and several participants suggested that they felt most creative when engaged in discussions with other individuals, building from the ideas of one another. Despite this emerging as a dominant theme, several different definitions of creativity were uncovered. Some of these revolved around

‘eureka’ moments and others around the ultimate output, i.e. tangible ideas which could be developed into products or services. Because of this divergence it can be argued that the nature of creativity, and by extension, idea generation, needs to be assessed in greater detail. Mapping this finding back to current literature suggests that there are different views of the concepts (see, for example, Powell and DiMaggio, 1991; Davis and Scase, 2000; De Jong and Den Hartog, 2007; Klijn and Tomic, 2010), it is therefore of fundamental importance to understand the nature of creative idea generation.

A further concept which, despite it not being mentioned overtly, was hinted at widely during exploratory work was the notion of ‘collective creativity’ (Chaharbaghi and Cripps, 2007; Catmull, 2008; Sarmiento and Stahl, 2008). Individuals often suggested that they felt most creative when involved in group discussions, building on and improving the ideas of others. This was a commonly held view during exploratory work and due to literature that exists on the subject (see, for example, Chaharbaghi and Cripps, 2007; Catmull, 2008; Sarmiento and Stahl, 2008) it arguably needs to be understood more fully here. What exactly is it about the “collective” that encourages idea generation? This is a key question that this literature review will need to explore.

Putting the nature of creativity aside for a moment, two further interconnected topics which arose from the exploratory study were trust and the notion of error. During the initial literature search it was found that there is a theoretical relationship between success and failure in an entrepreneurial organisation (Burns, 2008). This understanding is depicted in **figure 2.1**.

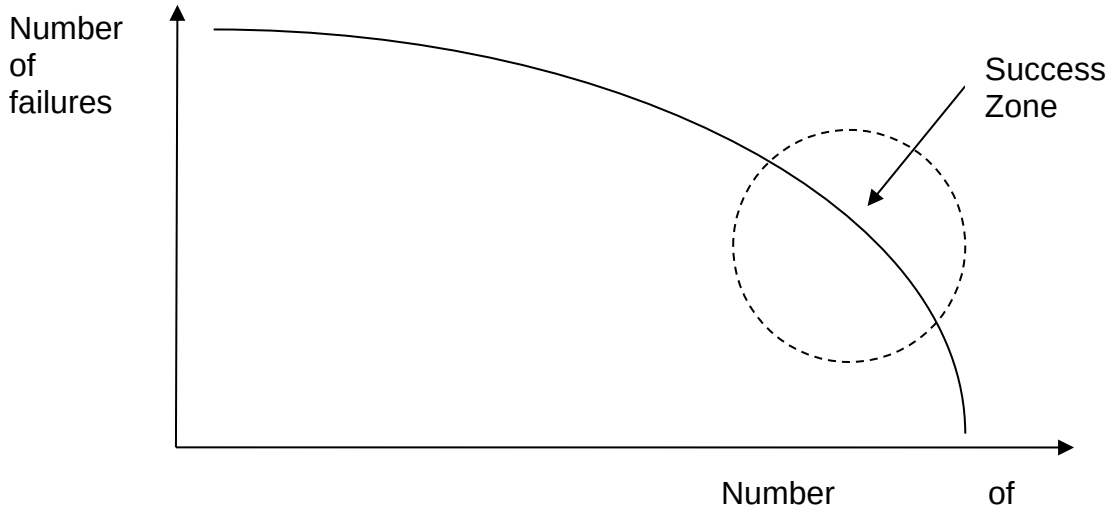


Figure 2.1: Success and Failure in an Entrepreneurial Organisation

Source: Burns (2008) Page 124.

Findings from exploratory work corroborated the understanding that organisations occasionally fail when pursuing new ideas. Despite failure being a necessary step in the creative process, it was also said that more successful organisations would build in measures to carefully assess and filter ideas, hence reducing the likelihood of future similar error(s). Primary research discovered that it is important for an owner/manager to have trust in his or her employees, although the word 'trust' was not adequately defined. These findings around trust and error perhaps need to be developed further during this study, relating these concepts specifically to idea generation rather than the broader creative process.

A penultimate area of interest is 'vision'. The initial literature review within the exploratory study discovered that vision was very closely associated with the dominant ideas and theories surrounding leadership. During primary research it was apparent that there was no universal formula for what an effective vision is, although it was clear that leaders need to assess their goals and articulate an

‘appropriate’ vision for their organisations. It was said that the environment which the leader creates through his or her vision and behaviour is a crucial factor in allowing creativity and innovation to take root. In more than one study organisation it was clear that loose structures were deliberately adopted in order to facilitate the leader’s vision although this finding was not linked back to the literature. A new search reveals that literature exists on the ‘environment’ for idea generation (Johnson, 2010) and the relationship between leadership and vision (Powell and Dodd, 2007; Ucbasaran et al, 2010). These avenues could therefore be pursued by this thesis.

The final focus of exploratory work was organisational culture (Schein, 2004; Catmull, 2008; Mintzberg et al, 2009). Nearly every individual questioned during primary research arrived at a different definition of the term ’culture’. One business specialist suggested that culture can be impacted at numerous different levels, from individual behaviour through to the prevailing culture of an industry or a country. Key findings from primary research were summarised in the following diagram.

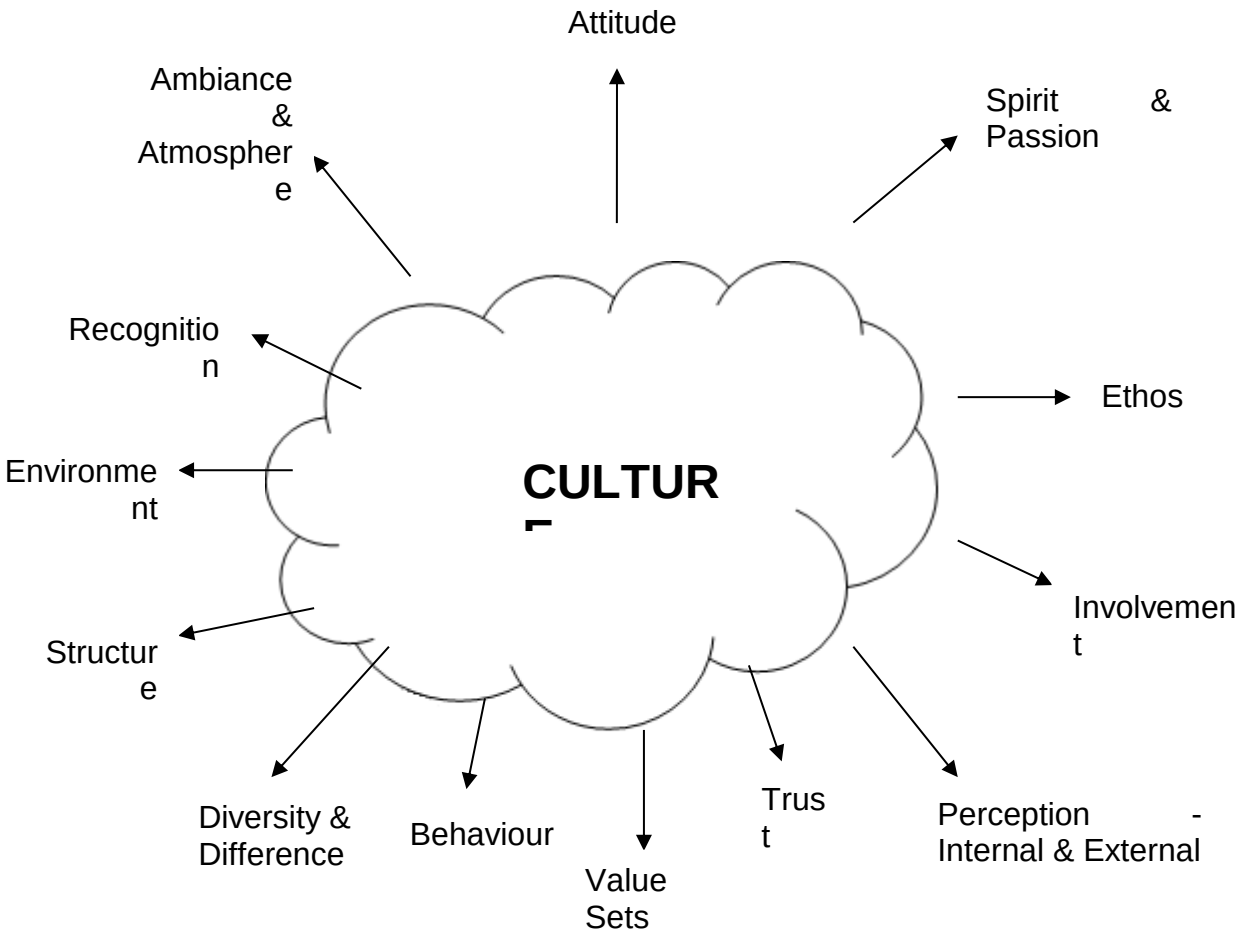


Figure 2.2: Key Facets of Culture

Source: Perkins (2010, p50)

Perhaps the most important finding from **figure 2.2** is that many of the words and phrases seem to be describing the 'environment for creativity' (Johnson, 2010) within organisations. Contributions including 'ambiance and atmosphere', 'ethos' and 'behaviour' provide validation for this assertion. This adds further weight to the belief that it will be important to understand the 'environment' for creative idea generation during this study.

With all of these considerations in mind, the territory of this thesis has become somewhat clearer with concepts such as leadership, the environment for

creative idea generation, error and trust being highlighted by exploratory work. A further area of interest stemming from the nature of creativity is the 'human factors' which are at work in organisations. These might include the concept of 'flow' (Csikszentmihalyi, 1990) and social networks (Bruggeman, 2008). It is important at this point to reiterate the overarching aim of this thesis, which is;

"To explore the various organisational factors external to the individual that encourage the production of creative ideas in SME environments; what is their importance in a variety of organisational contexts?"

This present study is not concerned with internal factors that affect an individual's predisposition toward idea generation; it is solely concerned with understanding the effect that factors external to the individual have on the idea generation process. The guiding aim should be kept in mind whilst reading the remainder of this chapter which begins by examining the nature of creative idea generation.

2.2 The Nature of Creative Idea Generation

Literature surrounding idea generation (and creativity more broadly) contains many different contributions from many different researchers and authors. Some studies seem to hold one view of the subject while others put forward different, often contrary viewpoints.

Essentially the creativity (and by extension idea generation) field can be split into two wide schools of thought. One school discusses an individual, process

driven view of idea production while the other discusses the creative idea as a ‘network’. The first of these schools argues that creativity is the production of new ideas which 'have a benefit' (Rudkin et al, 2001; Robinson, 2001; Banks et al, 2002; Burns, 2008). Building on this, it is often argued that creativity is the production of novel, workable ideas and solutions to problems and innovation is the implementation of those ideas within an organisational context (Amabile et al, 1996). This, as was seen in the introductory chapter, is a common distinction made between ‘creativity’ and ‘innovation’. While the work of Amabile et al (1996) is built on an understanding framed from empirical study other contributions, for example Rudkin et al (2001) and Robinson (2009) have arisen from practical, professional experience. Despite these differences both present remarkably similar views and understandings.

In contrast to the evidence above, other studies have approached creativity from a psychological (Klijn and Tomic, 2010; De Jong and Den Hartog, 2007) perspective. This is not an uncommon stance in the field with proponents arguing that creative idea generation can be seen as the mental process that allows people to think up new and useful ideas.

The understandings discussed so far, although related, can be used to represent a general split within this particular school of thought on creative idea generation. The first group of authors clearly refer to the processes of idea generation while the alternative definition refers primarily to mental factors. It can be argued that mental processes are a part of idea generation although contributions which reflect the wider realities of organisational life including leadership and the environment surrounding the individual (Rudkin et al, 2001;

Amabile, 2006; Robinson, 2009), present a somewhat wider understanding of creativity than others that focus solely on ‘mental processes’ (De Jong and Den Hartog, 2007; Klijn and Tomic, 2010).

Following up literature associated with the ‘mental processes’ of creative idea generation in further detail reveals other work of relevance (e.g. Amabile, 1983). Here it is argued that there are generally five phases to creative thought;

- Problem or task presentation
- Preparation
- Response generation
- Response validation
- Outcome

This study (Amabile, 1983) approaches creativity from a psychological perspective similar to that adopted by others (Klijn and Tomic, 2010), accepting that measuring mental processes is difficult and arguing that this is perhaps why creativity as a subject is sometimes overlooked by researchers. It is argued that in practice most research into creativity has been done through questionnaires and assessments of creative outcomes in organisations even though this may not drive into the heart of what it means to be 'creative'. This statement would seem to indicate that researchers and practitioners with experience of ‘creativity in the field’ (see Rudkin et al, 2001; Burns, 2008; Robinson, 2009) are at least somewhat reliable sources as their work reveals something about the day to day operation of creative idea generation in organisations.

Literature on creativity has been added to by others such as Csikszentmihalyi (1996) who proposes that creative ideas should change an existing domain or create a new one. This contribution reflects the underpinning belief that to be creative means opening up new territory which has previously been unexplored. Csikszentmihalyi has submitted many works on the concept of 'flow' and conducted extensive research into the nature of creative thought. The assertion that creativity should change an existing domain arguably sits alongside the thoughts of others who claim that creative ideas should 'have a benefit' (Robinson, 2001). While certain works on the 'flow' state appear in academic literature (see Csikszentmihalyi, 1997 and 2000) other works have been derived from professional practice (see Csikszentmihalyi, 1990 and 1996). These contributions will be discussed and critiqued at a later point of this review.

Attempting to fit these contributions back into the work environment is a complex task. It is thought that creative ideas ultimately come from an individual or a group of individuals (Burns, 2007), although others argue that organisational creativity can be interpreted as the production of something new by individuals working together in a complex system (Woodman et al, 1993). Alongside these thoughts there is a further view suggesting that in order to promote innovation as an outcome of creativity, organisations themselves must be creative by 'learning' (McLean, 2009). It is important to note here that organisations themselves cannot learn or be creative in themselves (Hortho and Champion, 2011); McLean (2009) clarifies this particular thought by suggesting that organisational creativity can be encouraged by informal and 'perceptive' management styles.

Literature on organisational learning (Hislop, 2009) provides evidence to support the view that it is individuals, rather than organisations that learn (McLean, 2009; Hortho and Champion, 2011). Organisations can be understood to learn, not because they ‘think’ independently of individuals who work within them, but through the embedding of individual and group learning in organisational processes, routines and structures (Hislop, 2009).

Echoes of both Csikszentmihalyi (1996) and Robinson (2009) can be seen in the pattern of thought presented above although previous research (Woodman et al, 1993) goes further by hinting at the concept of collective creativity and the issue of organisational complexity. While Woodman et al (1993) is arguably a more rigorous source, coming from a peer reviewed journal, it can be seen that the practitioner literature typified by Robinson (2009) puts forward many similar arguments. Discussions regarding the nature of creativity could perhaps be left at this point but this would not capture the complete picture presented by the literature. In more recent times, a different understanding has entered the field; the theory that creative ideas are in fact 'networks'.

The 'network' school of thought contrasts with the theories presented above and puts forward a very different view of the creative ‘idea’. This school of thought has many contributors (Staber, 2008; Johnson, 2010; Penaluna et al, 2010; Sailer, 2011; Martinez and Aldrich, 2011), again both academic and practitioner in nature. Two of these contributors in particular (Johnson, 2010; Penaluna et al, 2010), consider the nature of creative thought in general terms and draw from biological constructs to illustrate their arguments. It is suggested that

creative ideas can ultimately be traced back to networks of neurons firing inside the brain with individuals who can cultivate serendipitous connections in their mind being more prone to generating creative ideas (Johnson, 2010; Penaluna et al, 2010).

The ideas of Amabile et al (1996), Robinson (2009) and Rudkin et al (2001) are contradicted by this school of thought where it is often suggested that creative thoughts are not necessarily 'new', but instead are formed out of the remnants of old ideas and 'hunches' which linger inside individuals and organisations (Staber, 2008; Johnson, 2010). This view is a departure from traditional thinking about the nature of the creative idea, although this does not necessarily mean that individuals should adopt an either/or view. Creativity is arguably an evolutionary concept rather than a revolutionary one (Staber, 2008; Penaluna et al, 2010) with individuals and groups developing new solutions out of the 'spare parts' and old hunches which are ‘littered on the boardroom floor’ (Johnson, 2010). Parallels can perhaps be seen between this view and that which was presented earlier, where it was suggested that a key characteristic of creative thought was that it changes an existing domain (Csikszentmihalyi, 1996).

The case study on the next page (Burns, 2007) provides an excellent, practical example of this evolution (Staber, 2008; Johnson, 2010; Penaluna et al, 2010) happening in practice.

Case Study: Who Invented the World Wide Web?

The first electronic mail transfer took place in July 1970 in the laboratories of consultants Bolt, Baranek and Newman. Building on the work of Paul Baran of the RNAD Corporation, it was the result of a contract placed by the US Advanced Research Projects Agency (ARPA) to build a distributive network that enabled researchers at one site to log onto and run programs at another.

Computer networks were also being built elsewhere and ARPA brought researchers from Britain, France, Italy and Sweden to form an international 'Network Working Group' to investigate how the various networks could be connected. In 1973 there was a breakthrough as researchers realised that instead of trying to create a common specification, all they had to do was use dedicated computers as gateways between each network, thus creating a 'network-of-networks'. In 1977 the concept was made a reality as a message was sent on a 94,000 mile round trip from San Francisco to University College, London and back to the University of Southern California. An international network – or 'internet' – was created.

In 1990, an Englishman, Tim Berners-Lee, working at CERN, proposed a solution to the problem of capturing and coordinating the work of the scientists and then locating it in such a way that this accumulating knowledge was easily available. He devised a 'hypertext' system that would give access across the internet, allowing users to access the same information from different computer systems and add their own links to information. It also enabled links to be made to live data that kept changing. The system was called the World Wide Web. Shortly after this he devised a 'browser' that linked the resources on the internet

in a uniform way. He also devised a protocol to specify the location of the resources and one to specify how information exchanges between computers should be handled. Finally, he invented a uniform way to structure documents.

In 1993 a University of Illinois team working at the National Centre for Supercomputer Applications (NCSA) developed the CERN system, which used high powered workstations and the Unix operating system, to operate on PCs and Macintosh. In the same year one of the team, Marc Andreesen, posted a message on some specialist Usesnet conferences. It read: 'By the power vested in me by nobody in particular, alpha/beta version 0.5 of NCSA's Motif-based networked information systems and World Wide Web browser, X Mosaic, is hereby released. Cheers, Marc.' The World Wide Web, as we know it, had been born.

With the help of Jim Clark, the wealthy founder of Silicon Graphics, Marc Andreesen and others in the team went on to set up Netscape. When the company went public it was valued at $3 billion, a valuation that in those days was huge.

Source: Burns (2007) Page 84.

This case clearly illustrates the notion that a creative idea can be an evolutionary phenomenon rather than the typical 'eureka!' moment. The narrative picks up on the notion that creative ideas can come about when one individual builds on and improves the ideas of others. Within the case this process can be seen at work when Berners-Lee built on and developed new insights on the back of the foundations laid during the 1970's. The final

paragraph of the case study demonstrates that it was another group of innovators led by Marc Andreesen who built a commercial platform on Berners-Lee's architecture, again demonstrating the evolutionary nature of the creative idea.

Moving back to academic literature, it is thought that even though creative idea generation is a key requirement for organisations, institutional environments tend to 'kill' it rather than nurture it (Arad et al, 1997; Penaluna et al, 2010; Busco et al, 2012). It is believed that creativity gives an organisation a critical edge in the marketplace (Handy, 2010) and that part of this process involves 'divergent thinking' (Penaluna et al, 2010). It is believed that divergent thinking involves some kind of cognitive process in which a person generates many unique, creative responses to a single question or problem (Klijn and Tomic, 2010; Penaluna et al, 2010); **figure 2.3** shows how this process operates.

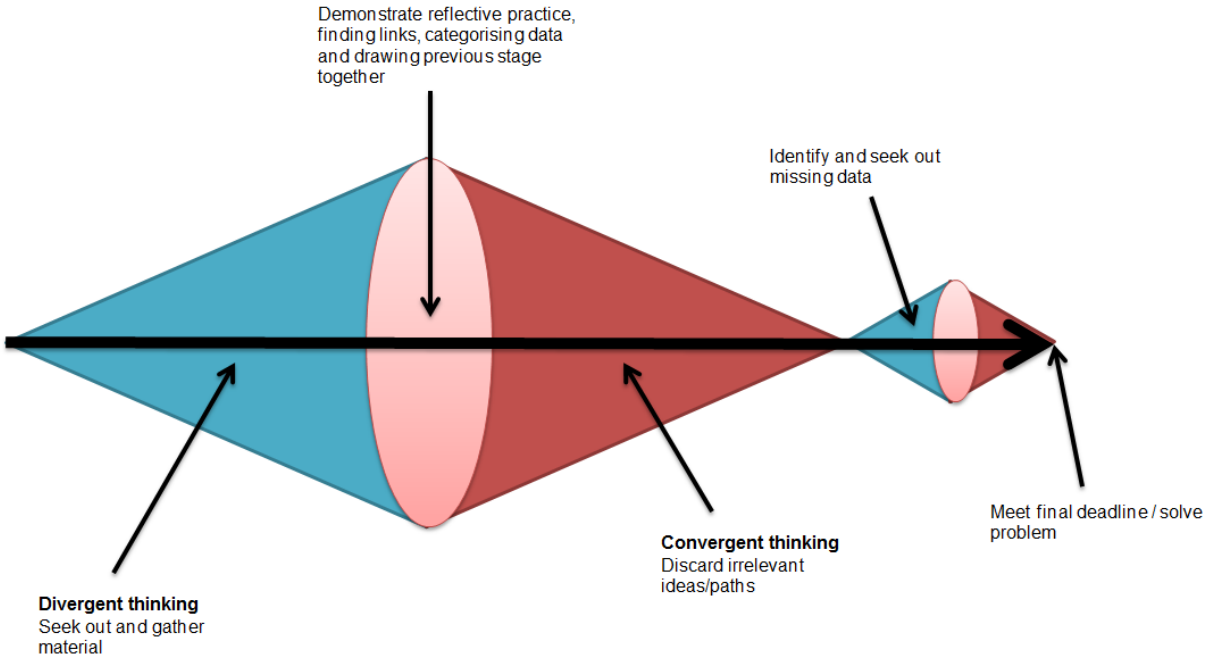


Figure 2.3: Divergent and Convergent Thinking

Adapted from: Penaluna et al (2010) page 667.

Figure 2.3 shows that there are several different steps associated with creative thinking. Horizons are initially expanded through divergent thinking and then drawn to a focal point through convergent thinking when decisions need to be made, the diagram also notes that this process can have multiple phases; in this case two are visible. Of crucial importance here is the understanding that divergent thinking is, in itself, *internal* to an individual. While this study is not assessing factors internal to the individual it is important to recognise that internal processes like divergent thinking are likely to be influenced by factors, such as time allocation (Penaluna et al, 2010), from the *external* environment. So as not to become side tracked at this point, discussions regarding the 'environment' for creative idea generation will be formally introduced during **section 2.7**.

Related to the concept of divergent thinking is the notion of 'latent inhibition' (Carson et al, 2003). This theory suggests that individuals naturally focus on specific stimuli from their environment, with exploratory work (Perkins, 2010) finding a connection between this and levels of creativity in micro organisations. It is understood that individuals with high latent inhibition are good at blocking out irrelevancies while individuals who can foster lower levels of latent inhibition are open to more varied stimuli (Carson et al, 2003). It can therefore be hypothesised that individuals who foster lower levels of latent inhibition will be able to draw a wider range of information into their decision making processes, with the result being that they may be more likely to generate something new or different through their divergent thinking processes. It is understood that an effective external focus is necessary for individuals to produce creative ideas (Amabile et al, 1996; Martins and Terblanche, 2003; Powell, 2008; Sawang and Matthews, 2010), and the work on latent inhibition appears to support this conclusion. Further work in the field of psychology (Anderson, 2009) balances this argument by suggesting that in order to achieve goals individuals need to be able to focus their attention toward specific stimuli when necessary. Whilst it is important to recognise the debate between openness to external stimuli and the ability to focus attention, this literature review will not explore these issues in more depth as they are outside the core remit of this study.

While discussing the concept of divergent thinking, it is important to consider the seminal work of De Bono (1970). While conducting research within this field De Bono (1970) coined the terms 'lateral' and 'vertical' thinking. It quickly becomes apparent that 'lateral' thinking is closely associated with divergent thinking while 'vertical' thinking is associated with convergent thinking. It is

thought that every individual can think ‘laterally’ and that there are steps and activities which individuals can work through in order to improve their abilities in this area (De Bono, 1970; Roffe, 1999). Main differences between lateral and vertical thinking are highlighted in **table 2.1**.

Lateral Thinking	Vertical Thinking
Generative	Selective
Moves in order to generate a direction	Moves only if there is a direction in which to move
Provocative	Analytical
Makes leaps or jumps	Sequential
Being ‘correct’ at every stage is not important	One must be correct at each juncture
No ‘negative’	Uses the negative to block off certain pathways
Welcomes chance intrusions	Concentrates on task at hand and excludes irrelevancies
Classifications and labels are not fixed	Classifications and labels are fixed
Explores the least likely paths	Explores the most likely paths
Probabilistic	Finite

Table 2.1: Lateral Thinking vs. Vertical Thinking

Source: De Bono (1970) Pages 37 to 43.

The table demonstrates that there are clear differences between the concepts of lateral and vertical thinking. It is argued that lateral thinking is concerned with generating possibilities and widening horizons while vertical thinking highlights the importance of process and sequence (De Bono, 1970), and that individuals need to be able to mix the two in order to arrive at creative ideas. It is apparent that there is a consensus forming between the theories of De Bono (1970) and Penaluna et al (2010). **Figure 2.3**, for instance, demonstrates that both lateral/divergent thinking and vertical/convergent thinking are in operation within the process of creative idea generation. This diagram clearly shows how

lateral/divergent thinking is used to expand the scope of an issue or problem and then how vertical/convergent thinking is used to filter out irrelevancies.

Creativity itself is said to be incredibly diverse and it is proposed that every individual has a different mix of competencies and personal qualities which affect their predisposition to generate creative ideas (De Bono, 1970; Robinson, 2001). Thoughts along a similar line (Majaro, 1992) argue that while stereotyping needs to be avoided, creative 'types' do exhibit some similar characteristics, these are captured in **table 2.2**.

Characteristic	**Description**
Conceptual fluency	They are able to produce many ideas
Mental flexibility	They are adept at lateral thinking
Originality	They produce atypical responses to problems
Suspension of judgement	They do not analyse data too quickly
Impulsive	They act impulsively on an idea, expressing their 'gut-feel'
Anti-authority	They are always willing to challenge authority
Tolerance	They have a high tolerance threshold towards the ideas of others

Table 2.2: Creative Characteristics

While Majaro (1992) is arguably a more academic source, parallels can be drawn between these ideas and similar views advanced by others (see De Bono, 1970; Robinson, 2001). The various lists of 'creative' characteristics agree on the fact that idea generation revolves around flexibility and inviting the 'new' to enter mental processes. Perhaps an important point of note is that judgement needs to be suspended (Majaro, 1992). This is not something that is

explicitly mentioned by others, although similar sources do state that lateral thinking is ‘provocative’ in nature (De Bono, 1970). When these theories are combined a general view of creative thought can be formed which revolves around generative thinking exploring as yet undiscovered territory and patterns.

It can be argued that in a system dominated by convergent or vertical thinking ideas which deviate from the required specification will quickly be discarded. Evidence to back up this assertion appears when it is suggested that during vertical thinking ideas need to be correct at each stage of the process (De Bono, 1970). During lateral thinking initially ‘incorrect’ ideas may form the basic blocks of another generative piece of thinking which solves a problem in a new way. It can be argued that being quick to judge new ideas will therefore limit the idea generation process as these initial ideas will not be given the space they need to develop. Practitioner literature discusses the preconditions for creativity in organisations (Rudkin et al, 2001), arguing that the concept of ‘greenhousing’ or protecting young ideas is of critical importance to the creative process. It is proposed that when the principles of greenhousing are adopted, organisations significantly increase their propensity to produce creative ideas and a marked improvement in creative output can be seen. The process of greenhousing, alternatively known as ‘suspending judgement’ can be seen in the case study on the next page.

Case Study: Snapshots

This example of greenhousing led to the launch in 1999 of Snapshots – the world's first flavoured, carbonated spirit sold in a shot glass.

This is a recollection of two or three minutes of a stimulus and ideas session we ran with the senior marketing and development team at Bass Brewing in the UK, when the energy just seemed to flow. We blindfolded the team and gave them a series of weird and wonderful taste experiences – from cold baked beans to chilli peppers to chocolate.

The idea was to get them to think about alternatives to the traditional drinks experience. One specific stimulus was an ice cube made from pure lemon juice. The moment it exploded on the taste buds people spat it out, shocked and wondering what sadistic maniacs had convinced them to do this; but they suspended their judgement, which allowed them to explore what could be. The conversation went like this...

Conversation	***Commentary***
Yeuch, I'd never think that in a month of Sundays.	*Initial strong reaction*
Ok, Ok, but what principle could you steal from this to create a new drink?	*Suspend judgement and explore*
Well, it's certainly a shock to the system.	*State principle*
Yeah, it goes straight to the back of your head.	*Understand and explore*
I like that – a drink that does straight to	*Nurture and build*

the back of your head. Feels like a big head rush.	
Like champagne with sugar and brandy; the bubbles go straight to your head.	*Explore*
So, what if you could put pure bubbles in someone's mouth?	*Nurture*
Then down them in one, like a tequila shot.	*Build*
You'd sell it in a shot glass. You know, like the girls in the Mexican bars.	*Understand and explore*
So what we've got is a champagne slammer sold in a shot glass.	*Build*
Yeah, only it could be vodka. It's much cooler.	*Build*
And you'd probably flavour it as well.	*Build*

This is what you want more of, and what's really great is that by the end of the session it's no longer just one person's idea, it's the team's idea. This is 'ideas democracy' in action. The result of these two minutes of greenhousing was a flavoured vodka drink sold in a shot glass. It was launched nine months later.

Adapted from: Rudkin et al (2001) Pages 65 to 66.

The narrative in the case study demonstrates that suspending judgement allows ideas to develop in a generative way (Rudkin et al, 2001). In this example Bass Breweries came up with a revolutionary new combination of ideas within a single brainstorming session. Within the case the notion of 'collective creativity' is hinted at and evidence that the new idea was in fact a network of old ideas, similar to that described within other parts of the literature (Staber, 2008;

Johnson, 2010) can be seen. It can be argued that triangulating the information between the sources provides clear evidence that creative idea generation is generative in nature and enhanced when different individuals contribute to the process. Ideas can be seen to be evolving during the discussion and being 'right' at every stage of the process was not an important factor. Divergent thinking led to Bass Breweries producing a revolutionary product.

2.3 Creative Idea Generation: A Focus on the "Collective"?

Many definitions and understandings of creative idea generation include some reference to it being a 'social' process (David and Scase, 2000; Johnson, 2010; Catmull, 2008). The term 'collective creativity' appears relatively widely in the literature (Chaharbaghi and Cripps, 2007; Sarmiento and Stahl, 2008; Hargadon and Bechky, 2006; Parjanen et al, 2012) and given the overarching question this study is seeking to address, this is likely to be an important part of the literature territory.

In modern, ever changing organisations, complex problems require solutions that draw on the minds of many rather than one single individual (Hargadon and Bechky, 2006). It is this collective cognition (Meindl et al, 1996; Thompson et al, 1999) that is believed to enable organisations to arrive at superior results. With this in mind it is therefore crucial that organisations can successfully 'design' the collective context (Chaharbaghi and Cripps, 2007), providing an environment which is conducive to the production of ideas. Collective idea generation has been studied within practitioner literature, specifically where Johnson (2010) has explored the presence of creative 'networks' in society. It

is important to state that collective creativity is not thought to be a 'hive mind' inside an organisation. From a historical perspective large collectives are believed to be fundamentally less creative and innovative (Johnson, 2010). It is suggested that it is not so much the ‘wisdom of the crowd’, but the ‘wisdom of someone in the crowd’. Individuals are thought to be more creative because of their connection to a network rather than networks themselves being creative. These discussions can be linked back to **section 2.2** where it was said that creative ideas come from individuals or groups of individuals rather than organisations or group structures themselves (Hislop, 2009; McLean, 2009; Hortho and Champion, 2011).

Having recognised that the collective context might be an important enabler of idea generation, what does this context look like and how can organisations build these types of environments? Helpfully Catmull (2008) provides a practical perspective on the subject having examined collective creativity in operation at Pixar. Perhaps a key point within this analysis (Catmull, 2008) is that problem solving within Pixar is a ‘peer-driven process’ (Catmull, 2008; Pixar, 2012a). This process, encapsulated in the organisation’s Creative Brain Trust, is believed to be behind its string of successful movie releases. This finding clearly resonates with the understanding that organisations must successful ‘design’ the collective context in order to encourage the production of ideas (Chaharbaghi and Cripps, 2007).

Relating the thoughts presented so far back to the SME context is challenging, although not impossible. Like operations in larger organisations, leaders and managers must encourage collective effort by not giving ‘priority’ to individual

talent (Akehurst, 2009), but through a focus on optimising the collective as a whole (Sarmiento and Stahl, 2008). In addition to these points it is believed that (in all organisations) strict processes and systems can systematically eliminate creative output by stressing a need for conformity and standardisation (Amabile and Khaire, 2008). Building on this, researchers must recognise that collaboration between individuals cannot be forced (Chaharbaghi and Cripps, 2007). Organisations need to be able to create a collectivist culture where the team is the unit of work rather than the individual if creative idea generation is to flourish.

Having established that an individual's connection to a collective is an important enabler of idea generation it is necessary to understand more about the nature of this 'connection'. A relevant concept discussed in the literature is known as the 'strength of weak ties' (Granovetter, 1973; Ruef, 2002). It is argued that levels of creativity and innovation are enhanced when an individual engages with a broad social network which extends outside their immediate collective and involves people from diverse fields of expertise (Ruef, 2002). Further to this point, empirical research has found that the cross-fertilisation of ideas does indeed lead to improved creative output (Granovetter, 1973; Tekla, 1995; Sailer, 2011). Peer reviewed work in this field (Ruef, 2002) demonstrates that individuals having many weak ties are three times more innovative than those in uniform, vertical networks. It is argued that in groups united by shared values and long term familiarity, conformity and convention tended to dampen the creative 'spark' (Ruef, 2002). Without the strength of many weak ties individuals are believed to rarely engage with information or new concepts external to their immediate social network.

Given this understanding an organisation set up to generate many new ideas may appear similar to the diagram presented in **figure 2.4**. Within this diagram individuals are depicted by circles and their immediate team relationships are shown by solid lines. The dotted lines are informal relationships or 'weak ties' between different individuals and groups.

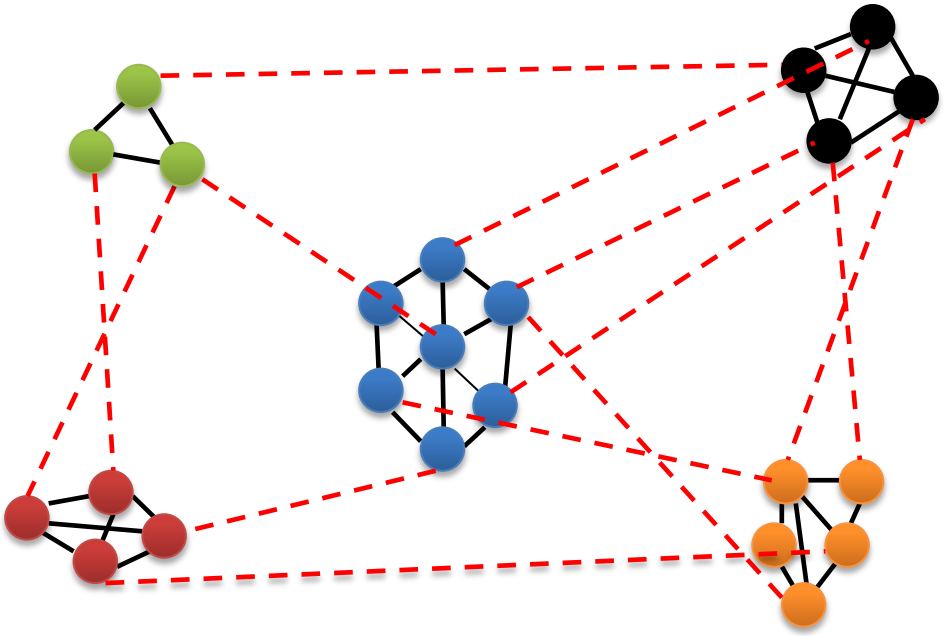


Figure 2.4: The Strength of Weak Ties

These informal relationships may have developed for a number of reasons, for example, the individuals may form part of the same friendship circle or community of practice (Hislop, 2009) within the organisation. Academics and practitioners alike argue that by forming more diverse networks creative idea generation is enhanced as individuals are able to tap into a wider pool of expertise (McAdam and McClelland, 2002; Ruef, 2002; Johnson, 2010; Martinez and Aldrich, 2011). For example, if the organisation depicted in **figure 2.4** is involved in making computer equipment and each team are working on a

different component, it is thought that the final product will be more innovative if 'weak ties' (the dotted lines) between teams are encouraged. Links exist between this literature and the notion of 'social capital'. Putnam (2000, p19) suggests that;

"The core idea of social capital theory is that networks have value . . . social contacts affect the productivity of individuals and groups… Social capital refers to connections among individuals – social networks and the norms of reciprocity and trustworthiness that arise from them."

This understanding is built on by others who suggest that the essence of social capital is that connectedness is a valuable asset for human beings (Rutten and Boekema, 2007). Further to this point, Wu et al (2008) highlight that groups and organisations which display strong social capital are characterised by a greater frequency of interaction and communication. It is suggested that trust, commitment and a willingness to share knowledge are vital foundations of such environments. This discussion will be picked up again when issues around the environment for creative idea generation are debated.

Alongside the points presented thus far diversity, both in terms of group membership and connections, is thought to support the production of creative ideas (McAdam and McClelland, 2002; Daniels and Macdonald, 2005; Ucbasaran et al, 2010; Martinez and Aldrich, 2011). It is thought that increasing diversity is one of the tasks which effective leaders need to accomplish (Amabile and Khaire, 2008; Ucbasaran et al, 2010). There is a contention in the literature however, suggesting that groups which are 'too diverse' are often not

cohesive (Daniels and Macdonald, 2005). Infinite diversity does not equal an infinite number of creative ideas; it is thought that group diversity needs to be managed effectively for maximum benefit. The following case study drawn from Daniels and Macdonald (2005) highlights these issues within a learning environment.

Case Study: Group Diversity

On a degree course within a university, about 50 per cent of the students were of a UK-white ethnic origin, and the other 50 per cent were from a range of overseas countries. A crucial part of the course was for students to carry out some research in individual groups and then present their findings. The presentation was an assessed piece of work.

The lecturer decided to divide the students into groups with an equal balance of UK and overseas students. Immediately difficulties occurred. These included:

- *UK students dominating the group discussion, because they could speak English (the working language of the group) more fluently than the overseas students.*
- *Ideas of some students being dismissed because they did not express them clearly enough - again a language issue.*
- *Some students, who came from a culture where speaking out was not encouraged, being too shy to contribute.*

It was realised that the students had not taken time to understand the different cultures within the groups, and the expectations of behaviour that came from these cultures. It was questioned whether the groups were too diverse, and whether they would ever be successful. With some guidance from the lecturer, the groups did work more effectively but there remained some difficulties and it was never felt that the groups really operated to full efficiency.

Source: Daniels and Macdonald (2005) Page 33.

This extract demonstrates the importance of group cohesion and follows previous thoughts that organisations must successfully 'design' the collective context (Chaharbaghi and Cripps, 2007). Further research builds on these thoughts and hints that the relationship between diversity and teamworking takes a U-shaped form (Williams and O'Reilly, 1998; Webber and Donahue, 2001; Richard and Shelor, 2002) with small increases in diversity having small positive effects on the overall functioning of a group. Balancing this it is proposed that very diverse groups offer little improvement in group problem solving and creativity because they are less cohesive.

Parallels can be drawn between the thoughts of Daniels and Macdonald (2005) and Ruef (2002). On the basis of this analysis it can be argued that diverse networks are beneficial to creative idea generation although the sources do present an area of contention as well. Daniels and Macdonald (2005) highlight that groups which are very diverse can have a negative impact on cohesion while Ruef (2002) argues that individuals need to maintain many social connections outside of their immediate field of expertise to increase their tendency to have creative ideas. When producing a synthesis between these

views it can be proposed that work environments need to establish an 'effective' level of diversity. The U-shaped relationship between diversity and group cohesion is depicted in **figure 2.5**.

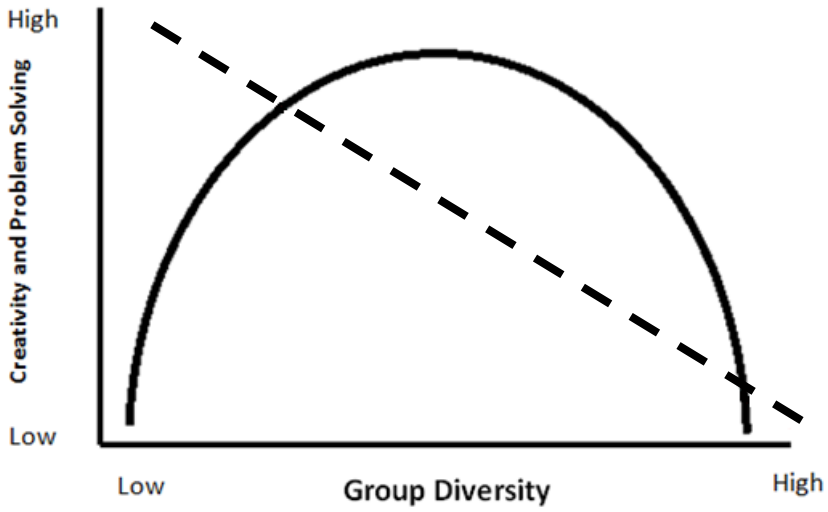


Figure 2.5: Diversity and Group Cohesion

The bell shaped curve in **figure 2.5** demonstrates the relationship between group diversity and the relative levels of creativity and problem solving while the dotted line depicts the inferred level of group cohesiveness. A concept related to this is the notion of "groupthink". This is;

'A mode of thinking that people engage in when they are deeply involved in a cohesive in-group, when the members' strivings for unanimity override their motivation to appraise realistically the alternative courses of action.'

Source: Huczynski and Buchanan (2001) Page 756.

Diversity arguably has a role to play in mitigating groupthink (Huczynski and Buchanan, 2001; Daniels and McDonald, 2005). In order to prevent groupthink, individuals who disagree with the group's 'evolving consensus' must be willing

to make their voices heard. Empirical research into groupthink demonstrates that it is most likely to occur in situations where a leader is particularly dominant (Huczynski and Buchanan; 2001).

Having now examined the nature of creative idea generation and understood, in particular, the notion of collective creativity and associated theories, it would be easy to skip on to other key factors that might impact idea generation such as leadership and facets of organisational environments. These discussions, however, would be of little use unless they are grounded in the wider context. As a result the following parts of this chapter will discuss firstly creative idea generation in larger organisations and then the idiosyncrasies of SME environments. The rationale for first examining creative idea generation in larger organisations is simply that there is a wider, well-established body of literature to explore.

2.4 Creativity in Large Organisations

Creativity and innovation are the “sparks that make good companies great” (Hughes, 2003; p5). Within the literature there are many discussions surrounding how large organisations can encourage creative idea generation in their processes and systems including Nokia (Costello, 2010), 3M (Hindo, 2007; Gunter et al, 2010) and Google (Mayer, 2006). A particular focus for this section of the literature review will be the creative processes of 3M and Google as well as some of the well-known models of the creative process (Osborn, 1953; Altschuller and Shapiro, 1956). The understanding generated within this section will help to frame discussions in **section 2.5**.

3M is thought to be a large corporation that is well equipped for creativity (Sloane, 2003). The organisation is understood to display best practice in innovation management by building it into the fabric of their processes, therefore ensuring that the organisation remains fluid and open to new ideas (Sloane, 2003). An example of this best practice is the well-known '15 per cent rule' where 3M engineers can dedicate 15 per cent of their working week to personal projects (Hughes, 2003). One often highlighted idea to arise from this personal time is the post-it note (Baréz-Brown, 2008); 3M derives more than a third of its annual revenue from these new products (Gunter et al, 2010). It is argued that the creative process which Art Fry used to develop the post-it note was not random (Hughes, 2003); instead it is thought that Fry used the Creative Problem Solving (CPS) process developed by Osborn (1953) to piece his idea together.

By way of comparison, Google, another innovative organisation was formed in 1998 by Sergey Brin and Larry Page with a mission to organise the world's information and make it universally accessible and useful (Google, 2011). The rate of corporate growth and introduction of new products and services has set Google apart from almost every other organisation (Zakaria, 2011; Gordon-Murnane, 2011). Much like 3M, however, creative idea generation is not thought to be random, indeed Marissa Mayer lists nine 'lessons' that the organisation has learnt about the concept (Mayer, 2006). These include;

- Ideas come from everywhere
- Share everything you can

- “You’re brilliant, we’re hiring”
- A licence to pursue dreams
- Innovation not instant perfection
- Data is apolitical
- Creativity loves constraint
- Users not money
- Don’t kill projects, morph them

Mayer understands that from an external perspective, new product ideas and launches from Google may at times appear to be chaotic (Mayer, 2006). Despite this, the nine items highlighted above demonstrate that the organisation does indeed employ some sort of process to guide creative idea generation. Like 3M, Google allows its employees to spend time focusing on their own projects although it is noted that the organisation does not seek to micro-manage every initiative (Mayer, 2006). Within Google there is a belief that ‘smart people’ do not need to be surrounded with bureaucracy and having a flat management structure means that the company can empower employees far more effectively. Parallels can be drawn here between these views and other parts of the literature (Amabile and Khaire, 2008; Busco et al, 2012). There appears to be a common thread within this literature that ‘over-control’, whatever this might mean in reality, is negatively associated with the generation of creative ideas.

It is important to note at this stage that Marissa Mayer was speaking from an internal perspective as, at that particular point in time, she was an employee of Google. She may therefore be accused of bias toward her then employers.

Balancing this view though, independent commentators (Zakaria, 2011; Gordon-Murnane, 2011) concur with the points that she discusses, hence it is likely that her view provides an accurate representation of the reality that exists within the organisation.

As highlighted earlier, Art Fry's initial idea for the post-it note came about through the use of a specific creative problem solving process (Hughes, 2003) which Osborn (1953) terms the 'Creative Problem Solving' (CPS) process. Within this process individuals are thought to go through the following steps;

- Objective finding
- Fact finding
- Problem finding
- Idea finding
- Solution finding
- Acceptance finding

This systematic way of viewing the generation of creative ideas (Osborn, 1953) echoes the sentiments of other researchers quoted within this review (De Bono, 1970; Penaluna et al, 2010) by suggesting that at each stage of the process from fact finding to solution finding, both divergent and convergent thinking are required. It has been argued that the application of the CPS process is evident within 3M (Hughes, 2003) but it is still vital to recognise that there are critics of this 'process-driven' view of idea generation. Creative thinking, particularly within the arts is not thought to follow any set "model" (Vinacke, 1953), while, in a similar vein, others suggest that the creative process must be seen as an

integrated line of thought which cannot be easily dissected into segmented stages (Wertheimer, 1945). While neither of these specific sources has been subjected to the academic peer review process, the authors are well-known psychologists with a track record in their field and the inclusion of these views helps to add balance to this argument.

Alongside the CPS model (Osborn, 1953) there are many other models and interpretations of the creative process. As this thesis is *not* about a review of these models it would make little sense to devote significant time to this discussion, however, for a point of comparison, it is informative to examine one other theory; the Theory of Inventive Problem Solving or 'TRIZ'. TRIZ was developed by Genrich Altshuller and colleagues during the 1940's and 1950's (Altshuller and Shapiro, 1956). The theorists found, through significant primary research, that the vast majority of problems which require creative solutions generally reflect some sort of need to overcome a dilemma or trade-off between two contrasting elements (Altshuller and Shapiro, 1956). The purpose of the TRIZ framework is to apply strategies and tools to find solutions which can overcome the need for compromise between the two elements and therefore reveal optimal solutions. The TRIZ model has been widely applied in industry with organisations as diverse as Ford, Procter and Gamble and LG using these methods (Wallace, 2000; Lewis, 2005; Hamm, 2008).

In the same vein as the CPS model (Osborn, 1953), the TRIZ framework points to a logical process which can be used in situations requiring a creative solution (Altshuller and Shapiro, 1956). While there are commonalities between the frameworks, the fundamental premise of the TRIZ framework is that creative

solutions are fundamentally necessary where there is a need to overcome some sort of dilemma or trade-off. The CPS framework (Osborn, 1953) makes no such claim with it being suggested that it is useful in any situation which requires a creative response.

Creative idea generation is needed in all organisations, regardless of size (Cummings and Oldham, 1997; Martins and Terblanche, 2003; Dickson, 2010). 3M and Google are examples of large, creative organisations and while previous parts of this literature review indicate that creative idea generation is very diverse and unpredictable, discussions here suggest that large organisations do adopt a somewhat planned approach to it. Having examined this understanding with reference to two well-known models of the creative process (Osborn, 1953; Altschuller and Shapiro, 1956), **section 2.5** will build on this by examining the idiosyncrasies of SME environments.

2.5 The Idiosyncrasies of SME Environments

In the UK SMEs generate 62% of employment and over 25% of GDP (Burns, 2007). The picture in Devon and Cornwall is subtly, but significantly different with the counties relying on a huge number of both micro and small firms to generate employment and prosperity (Wetherill, 2010; Cornwall Council, 2010; Devon County Council, 2012).

Perhaps of even more significance is the argument that the world is experiencing an ‘entrepreneurial revolution’ (Burns, 2007) caused by the increasing pace of change (Pech, 2001). There is an argument that the nature

of change itself has changed in that it has become more discontinuous, abrupt and all pervasive (Burns, 2007). Alongside this fact it is highlighted that small, entrepreneurial firms are better able to cope with change as they can be more flexible than their larger counterparts and respond more quickly to new market conditions (Okpara and Kabongo, 2009; Leitner and Güdenberg, 2010). The essence of small business success surrounds spotting an opportunity which arises out of change and then being able to focus resources on delivering what the market wants as quickly as possible (Allocca and Kessler, 2006).

Recent survey research suggests that SMEs can struggle at times with the conflicting aims of developing new products and technologies and minimizing costs (Pullen et al, 2009). This particular research was conducted across European, Australian and American contexts, indicating that the issue is something that transcends national boundaries. The authors do note however, that reductionism may be an issue with this particular study and suggest that further studies adopt a systems approach to explore relationships between the variables to overcome this (Pullen et al, 2009)

Previous research corroborates these findings (Nooteboom, 1994; Kaufmann and Tödtling, 2002), with it being noted that SMEs can face greater financial constraints than large organisations and have more manpower ‘bottlenecks’ as they have too few or inadequately qualified personnel. The implication that human resources may constrain creative processes is a potential line of inquiry which could be exploited by this study.

Despite the issues highlighted, it is thought that SMEs have advantages over larger organisations with regard to creative idea generation and innovation because they are generally less bureaucratic and have greater 'drive' for success (Nooteboom, 1994; Michael and Palandijan, 2004). Further to this, it is understood that SMEs must find a way of achieving high performance in innovation because it is an important contributor to their competitive advantage (Pullen et al, 2009). One suggestion here is that successful SMEs will be those that achieve an effective fit between their internal structures and the external environment which they face (Pullen et al, 2009). This arguably highlights the need for this study into the factors external to the individual that affect idea generation, where these linkages and relationships might be mapped in greater detail. Further studies (DeWeerd-Nederhof, 1998; DeWeerd-Nederhof et al, 2007) arrive at a similar conclusion to that put forward by Pullen et al (2009) but fail to provide a clear articulation of exactly what an effective structure for creative idea generation in SMEs might look like in practice. It is also vital to note that neither of the latter papers are specifically based on UK SMEs so the generalisability of the findings to the UK context is perhaps questionable.

Building from this discussion the conceptual model shown in **figure 2.6** seeks to provide a base from which the innovation practices within SMEs might be compared (Pullen et al, 2009). This model is intended to highlight the internal characteristics which enable an SME to be creative.

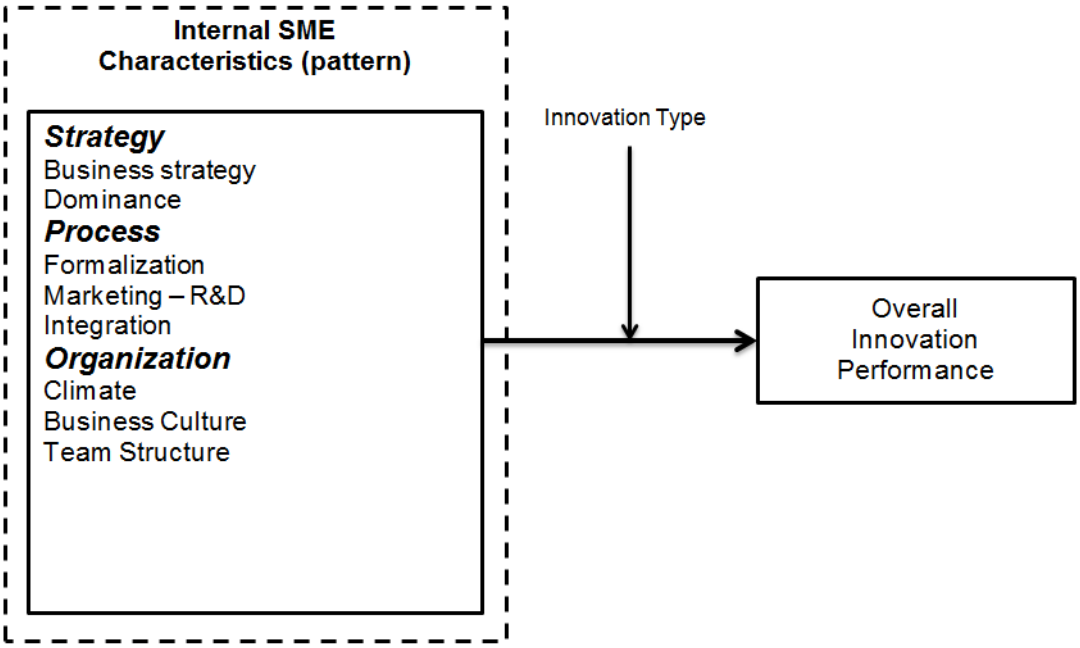


Figure 2.6: Conceptual Framework Developed by Pullen et al (2009)

Source: Pullen et al (2009) Page 212.

Figure 2.6 highlights three areas of general concern; strategy, process and organisation and eight sub-sections; business strategy, dominance, formalisation, marketing-R&D, integration, climate, business culture and team structure. It is thought that organisations which achieve high performance in the domain of creativity and innovation perform well in these areas although there are some areas of contention within these findings (Pullen et al, 2009). It is thought that 'formalised processes', for instance, were not necessarily seen in practice because innovative practices become routine in an organisational setting. It is also argued that while 'team structure' is important, formal project steering committees seen in larger organisations are not appropriate in smaller settings. Functional team structures within an 'entrepreneurial' business culture are proposed as the most effective driver of creativity and innovation (Pullen et al, 2009). This conclusion, while perhaps not as complete as it might be, does

sit comfortably alongside the understandings generated earlier in this literature review when collective creativity was the subject of inquiry (Chaharbaghi and Cripps, 2007; Catmull, 2008).

Continuing on the theme of examining the differences between SMEs and larger organisations, it is understood that SMEs differ from large organisations in a number of important ways (Burns, 2007). Small firms cannot be viewed as scaled down versions of large ones; instead it is argued that they go about their business in a number of fundamentally different ways (Burns, 2007). The defining characteristics of smaller organisations are typically uncertainty, innovation and evolution (Casson, 1982; Wynarczyk et al, 1993) although exactly how these qualities relate to idea generation is under-developed within the present literature. Broadly speaking it is suggested that SMEs;

- Revolve around personal relationships
- Approach risk and uncertainty in a particular way that sometimes may seem far from rational
- Are typically short of cash and cannot raise capital in the same way that a large organisation can
- Are likely to operate in a single market or a limited range of markets and therefore are reliant on a small number of customers
- Cannot influence market price in the same way a large organisation can
- Are not affected by economies of scale in the same way as larger organisations e.g. taking on a new member of staff is a major strategic decision because of the cost involved

Building on these points it is argued that small firms can be described as 'having two arms, two legs and a giant ego', in other words the small firm is an extension of a person (Burns, 2007). It can be argued that this is perhaps why small organisations are thought to be creative; they can become an extension of the founder's creative impulse. If the owner/manager can be such a dominant factor is it therefore relevant to examine factors external to the individual in SME environments; is there enough of the organisation that is not 'the owner'? **Figure 2.6** arguably indicates that there is a wide range of issues surrounding strategy, process and organisation affecting innovative performance in SMEs (Pullen et al, 2009) although care will need to be taken to separate the 'leader' from the 'organisation' during fieldwork. Further to these points discussions have highlighted that creative ideas come from individuals or a group of individuals rather than from an organisation itself (**section 2.2**). This debate is further added to by the proposition that large bureaucracies are variety reducing systems and that the principles of 'self-organisation' are what leads to the generation of creative ideas (Morgan, 1997).

Despite the tendencies highlighted above, the argument is balanced with the understanding that small firms are incredibly diverse and therefore any generalisations about them and the people that manage them are just that; generalisations that are supposed to cover a field that makes up almost 95% of organisations in most countries (Burns, 2007). Small firms are not homogenous and each are said to interact with their external environment in a different way. It is also said that small organisations are less likely to introduce radical innovations into the marketplace because they have fewer resources at their disposal (Allocca and Kessler, 2006). Instead of developing something that is a

radical departure from the norm it is thought that SMEs instead focus on developing something 'marginally different' from competitors and thus find a niche position which they can exploit (Burns, 2007). Generating creative ideas and 'being innovative' is therefore of vital importance if a small firm wants to survive and be successful. The consensus presented here, principally between Pullen et al (2009) and Burns (2007), indicates that creativity is an important field of interest for SMEs which owner/managers need to understand and act on if they are to be successful.

Along similar lines to research quoted above, further UK based studies (O'Regan et al, 2006) have demonstrated that although culture and team structure were important variables, leadership played a comparatively larger role in overall corporate performance. This specific research, conducted within manufacturing SMEs found that enhanced effectiveness in communication and functional co-ordination were key drivers of success. It is thought that SMEs often develop 'appropriate' strategies but can struggle to operationalise these and it is here that effective leadership makes a contribution to the success of the organisation (O'Regan et al, 2006). Within the context of the small firm it is argued that entrepreneurial leadership (Gupta et al, 2004) is crucial for success (Perren and Burgoyne, 2002; Kempster and Cope, 2010). While these sources are slightly different in nature, the former engaging in empirical, qualitative research with the latter presenting a critical literature review, they both dig a little deeper into the reality found within modern SMEs.

Empirical research suggests that few leaders in small organisations have received any formal leadership training as they are often put into the position of

leader by default (Kempster and Cope, 2010). Either they lead the organisation because they founded it or they inherit their position from a departing family member. This may be at least part of the reason why small businesses are thought to lack appropriate leadership in some circumstances. Building on this notion, it is proposed that one of the tipping points in the growth of small organisations is the importance of managing people as the venture evolves (Phelps et al, 2007). Effective personnel management is said to be a prerequisite skill which small businesses need to develop and improve as they grow. Phelps et al (2007, p8) state that;

"The implications of growth is that founders and owner/managers move towards employment situations where tasks are delegated and people have to be managed… developing the people-management skills to encourage delegation (participation and empowerment), communication and teamwork is a primary need for firms that need to make the transition from owner micro-management to larger-scale professional structures."

Empirical research into this particular issue (Kempster and Cope, 2010) comes to the conclusion that the lack of formal leadership and human resource management (HRM) training can have a detrimental impact on SMEs. The internal validity of these conclusions is strong as they are based on in-depth research but the generalisability may be slightly less robust given the number of cases within the sample (nine). It is noted within this research that individuals in leadership positions struggled to hold down a conversation about the role of leadership in organisations, further emphasising the perceived lack of knowledge about the subject (Kempster and Cope, 2010). This finding

somewhat contradicts the view put forward by Pullen et al (2009) arguing that leadership plays an important part in corporate performance. In spite of the importance of leadership it is thought that those in leadership positions can lack theoretical knowledge and formal training (Kempster and Cope, 2010). This is an area of contention which this study should arguably investigate in relation to its potential impact on creative idea generation.

SMEs inevitably have quirks and idiosyncrasies and are faced by dilemmas that do not impact larger organisations. On the one hand SMEs are more flexible than their larger counterparts (Okpara and Kabongo, 2009; Leitner and Güdenberg, 2010), but at the same time the conflicting aims of developing new products/services whilst minimising costs can impinge on creative performance (Pullen et al, 2009). The insight into SME environments built within this part of the literature review, where it is said that there is a drive for success (Nooteboom, 1994; Michael and Palandijan, 2004), the understanding that the small firm is an extension of its owner (Burns, 2007) and that these organisations struggle with leadership (Kempster and Cope, 2010) and people management (Phelps et al, 2007) issues, builds a picture which will help to guide the remainder of this literature review. There are factors, external to an individual, that significantly impact the generation of creative ideas in these environments and these will be examined closely during coming sections. As leadership appears to be a key theme within the literature discussed here it is logical to focus the next section on this.

2.6 Leadership

Leadership, as a factor affecting creative idea generation, was first mentioned during the introduction where it was said to be incredibly important to encouraging creativity in growth orientated small organisations. Further weight has been added to this statement during the first sections of this chapter although discussions a moment or two ago highlighted that leadership could potentially be somewhat of a problem for small organisations (Phelps et al, 2007; Kempster and Cope, 2010). Before moving further with this discussion it is important that the limitations of the exploratory study are recognised. That specific study was conducted in micro organisations employing less than ten individuals. As a result the conclusions reached may not be applicable to larger organisations, particularly those employing a significant number of individuals. It is known that SMEs are very diverse (Burns, 2007), therefore it would be inappropriate to generalise findings from the exploratory study to larger SMEs. Despite the limitations of the exploratory study, work conducted there still provides a useful base upon which to build.

Like contemporary literature on the subject (Phelps et al, 2007; Kempster and Cope, 2010) exploratory work found that while ‘effective’ leadership was of vital importance to the creative process, it is an area in which small organisations can struggle. During fieldwork a consensus was formed that the role of the leader was to build an environment in which individuals could engage with their own creative processes. Control was highlighted as an issue of importance although the application and extent of this control remained elusive. Business specialists questioned during the exploratory study argued that the way in which leaders communicate was of vital importance. Behaviours were discussed in detail and many individuals commented that leaders need to ensure that their

actions align with their rhetoric. Empowerment was also suggested to be a relevant topic and the concepts of distributed (McCrimmion, 2005; Spillane and Diamond, 2007) and servant (Parolini et al; 2009; Sendijaya and Pekerti; 2010) leadership were briefly covered.

As mentioned a moment or two ago, this foundation is useful but it is in no way complete. Discussions from here need to build on this understanding and relate it directly to well-known theories of leadership. It is also possible that some of the more recent contributions to this field, both academic (Ucabasaran et al, 2010) and practitioner (Zander and Zander, 2000) in nature, may help to build an understanding of how leadership operates to influence creative idea generation in SMEs.

Stogdill and Bass (1990) produced arguably one of the most widely quoted definitions of leadership. Their work defines leadership as the process of influencing the activities of an organised group in its efforts toward goal setting and goal achievement. Despite this seeming to be relatively clear, it is vital to recognise that there are contested understandings about exactly what 'leadership' is. Much like creativity, the term leadership means different things to different people (Yukl, 2002), although most understandings contain some reference to 'group', 'influence' and 'goal' (Bryman, 1992). Further emphasising this point, other researchers suggest that leadership is a process of influencing others towards the achievement of some kind of desired goal (De Jong and Den Hartog, 2007). This certainly resonates with the view put forward by Stogdill and Bass (1990) and adds weight to the school of thought having been the product of rigorous empirical research.

Literature around the concept of leadership has developed significantly over the last century. The 'great man' theory provided the foundations of trait theory (Stogdill, 1974). Style theories (Lewin et al, 1939), looking at leadership as a set of behaviours predated this although more recent times have seen the development of other concepts including situational, transformational, adaptive, contingent and servant leadership (De Jong and Den Hartog, 2007; Sendjaya and Pekerti, 2010). All of these theories have sought to understand exactly what 'effective' leadership is although this debate is still currently on going.

Entrepreneurial leadership has already been discussed in this literature review (**section 2.5**) with it being suggested that it is crucial to the success of small organisations. Literature argues that entrepreneurial leadership (Gupta et al, 2004) is vital in turbulent and competitive business environments although Kempster and Cope (2010) argue that there has been little analysis of how entrepreneurs learn to become leaders in small organisations. It is thought that entrepreneurial leaders demonstrate personal drive, innovation and vision and tolerate a degree of risk (Kempster and Cope, 2010). Having said this, research into entrepreneurial leadership does not focus on individual traits, rather it concentrates on what leaders do, embracing a systematic view of leadership as a process of social influence in a specific context (Yukl, 1998; Emrich, 1999).

Alongside entrepreneurial leadership, the last twenty years have seen the growth in popularity of theories including transformational and charismatic leadership (De Jong and Den Hartog, 2007). Different research studies argue

that transformational leadership can encourage creativity in organisations and groups (Kahai et al, 2003; Shin and Zhou, 2003), although it is worth noting that neither of these studies specifically focuses on leadership in the context of UK SMEs. As a result of this their relevance to this particular study is questionable.

Theories of transformational leadership have existed since the 1970's (Parolini et al, 2009), seen in many quarters as the successor to transactional leadership (Bass, 1990). Transactional leadership revolves around defining what followers must do, how they will do it and what they will receive in return (Bass, 1990), if they successfully achieve set goals. While perhaps effective in lower skill contexts, Bass (1990) contends that transactional leadership is no longer enough in a world dominated by increased globalisation, consumerism and de-regulation. It is said to be simply a 'prescription for mediocrity'.

Transformational leadership has been defined as motivating others by transforming their individual self-interest into the goals of the group through trying to make people feel part of an organisation (Rosenar, 1990). Studies have argued that transformational leadership is positively associated with creative idea generation in organisations (Rickards and Moger, 2000; Parolini et al, 2009), and that it occurs when leaders broaden and elevate the interests of their employees by generating awareness and acceptance of the purpose and mission of the group (Bass, 1990). A key characteristic of transformational leadership is that the leader encourages individuals to look beyond their own self-interest for the good of the group (Bass, 1990). Consensus between these sources also indicates that transformational leadership concerns the initiation

and subsequent handling of change (Rosenar, 1990; Bass, 1990), while, at the same time, also concentrating on renewing and re-inventing organisations.

Building on this information, transformational leaders are thought to display the characteristics captured in **table 2.3** (Taffinder, 1995).

Characteristic	Description
Create strategic white space	Change the rules by which your business has always played, encourage entrepreneurial action and pull the threads together at the corporate level.
Blow it up	Institute radical change, where nothing is sacred; imagine the organisation as a blank sheet of paper and be prepared to think the unthinkable.
Make leaps	Ignore incremental changes and look for breakthroughs that will take you onto a higher plain. This means empowering the innovators and being prepared to take risks.
Create corporate transparency	Communicate constantly inside and outside the organisation, where your business is, where it has come from and where you hope the transformation will take it.
Integrate change tactics	Mobilise the right change initiatives, sustain and co-ordinate them and ultimately bring them together.
Aim for change overload	Since organisations are typically slow to change, you have to aim for change overload otherwise you will be left with incremental change and the same amount of pain.

Table 2.3: Characteristics of Transformational Leaders

Linking these points to those discussed previously it is clear that a consensus emerges surrounding the view that transformational leaders create and sustain change (Taffinder, 1995; Parolini et al, 2009). It is argued to be this environment that fosters creative idea generation (Shin and Zhou, 2003). This argument is further enhanced by the view that transformational leaders stimulate their followers to view problems in new ways and help them to develop their full potential (De Jong and Den Hartog, 2007). While not overtly mentioning it, this contribution also centres on the notion of “change”. These

findings (Shin and Zhou, 2003; De Jong and Den Hartog, 2007; Parolini et al, 2009) have been based on extensive empirical research which further enhances the credibility and significance of the views discussed. The relationship between 'change' and creative idea generation is something that will likely need to be explored during the fieldwork phase of this present study.

Despite the evidence discussed so far, the subject of transformational leadership is a source of contention within the research community. While the research highlighted above (De Jong and Den Hartog, 2007; Parolini et al, 2009) appears relatively convincing it is vital to recognise that other studies (Jaussi and Dionne, 2003), failed to find evidence to support the same hypothesis. These studies took place in differing contexts which may explain the different findings but nevertheless, this study must keep this contention in mind and seek to uncover the truth for SMEs based in Devon and Cornwall.

A further theory which is thought to be positively related to creative idea generation is participative leadership (Monge et al, 1992; Yukl, 2002; Politis, 2005). Connected to this notion is the understanding that employees are more creative when they are provided with significant levels of autonomy (King and West, 1985), with the role of the leader being to provide a 'positive climate' within which individuals can work (Politis, 2005). Evidence to support the link between participative leadership and idea generation was found within biotechnology organisations (Judge et al, 1997), although it is again important to note that this research did not take place in the UK. Empirical research within that particular study concluded that an innovative culture which effectively encouraged creativity was supported by operational autonomy (Judge et al,

1997). From a practical perspective remarkably similar findings were uncovered at Pixar (Catmull, 2008), with participative leadership being hinted at without being overtly mentioned. This study could seek to explore the concept of participative leadership in more detail.

Recent work in the leadership field has examined how leadership styles influence the environment for creativity in jazz teams (Ucbasaran et al, 2010). While not, as yet, published in an academic journal, this paper was presented at the 2011 Institute for Small Business and Entrepreneurship (ISBE) Conference and as the findings emanate from empirical research they have value when considered alongside the aims of this study. It is to be noted that many researchers (Brown and Eisenhardt, 1998; Moorman and Miner, 1988; Barrett, 1998) have presented jazz bands as a valuable theoretical model for understanding how organisations can achieve innovation and flexibility. It is therefore valid to study this particular contribution, linking it to other theories of leadership as and where appropriate.

Effective leaders in jazz groups arguably develop a joined up approach to three critical factors; team formation, team coordination and team turnover, this is the platform that allows creativity and innovation to thrive (Ucbasaran et al, 2010). In this setting it is thought that team diversity can positively contribute to the generation of new ideas although there is recognition that dysfunctional conflict is an inherent issue within diverse teams (Ucbasaran et al, 2010). Linking back to **section 2.2** it is clear that there are synergies between these thoughts about leadership and the need for an ‘effective’ level of group diversity (Daniels and

MacDonald, 2005; Chaharbaghi and Cripps, 2007; Ucbasaran et al, 2010) in order to encourage creative idea generation.

From a leadership perspective, it is thought that the way a leader coordinates his or her team can mitigate some of the worst parts of dysfunctional conflict although it is crucial to recognise that this is managed informally rather than formally (Ucbasaran et al, 2010). Implicit coordination emanating from team members themselves rather than external controls were thought to guide creativity, facilitated by the leader who sets a higher goal (in this case the production of innovative jazz music) (Ucbasaran et al, 2010). Synergies again exist between this understanding and the view that social rather than formal controls (Busco et al, 2012) are most effective at guiding idea generation. Implicit coordination is argued to occur dynamically from a group without formal communication or planning (Ucbasaran et al). It is possible, in the light of these findings that 'servant' leadership may have a role to play in encouraging idea generation.

A final, critical area discussed in this research is the issue of team turnover, which is thought to be a common feature of highly diverse, creative teams (Ucbasaran et al, 2010). Turnover, rather than being negative, is described as a positive facilitator of creative idea generation (Wiersema and Bantel, 1993; Ucbasaran et al, 2003), encouraging the introduction of new skills and knowledge into a group as well as helping to shed dysfunctional members (Ucbasaran et al, 2010). Leaders, in this context, play a subtle rather than overt role in terms of creating frameworks, triggers and cues which give direction and inspiration to their followers. When leaders are confident in the talents and

skills of their team members they work to bring out the best in them rather than developing moulds that team members need to fit into (Ucbasaran et al, 2010). The mark of a great leader, therefore, is being able to draw the talent out of an individual without having to 'demand' it. Clear contrasts can be seen between this theory of leadership and the transactional school of thought (Bass, 1990). This understanding of leadership is arguably more closely aligned with views of the necessary climate for creative idea generation already discussed in this chapter (Martins and Terblanche, 2003; Amabile and Khaire, 2008; Catmull, 2008; Johnson, 2010).

Something not discussed within this research (Ucbasaran et al, 2010) is the relationship between leadership and trust. Exploratory work highlighted trust as an important factor affecting the environment for creativity but did not specify whether this was trust in an organisation as a whole, trust in the leader or trust in a first line, direct supervisor. The issue of trust will now be explored, with reference to the concept of servant leadership (Sendjaya and Pekerti, 2010).

A growing area of literature considers the issue of trust in an organisational context (Dirks and Ferrin, 2002; McEvily et al, 2003a; Burke et al, 2007). A key theme from this literature, confirming the findings of the exploratory study, is that trust is a fundamental factor affecting cooperation within organisations. As this is a growing field of interest, there is divergence in the research (Sendjaya and Pekerti, 2010) concerning the way in which trust is formed and evolves within an organisational setting. Due to the fact that trust is a socially constructed phenomenon, much like creativity, there is no single universal definition that has been agreed (Sendjaya and Pekerti, 2010). This view is

repeated in other parts of the literature (Atkinson and Butcher, 2003) although there is acceptance across publications that trust revolves around some form of risk and acceptance of vulnerability. Illustrating this point, trust in a leader is typically defined as the willingness of a subordinate to be vulnerable to the behaviours and actions of his or her leader which are beyond the subordinate's control (Mayer et al, 1995). Trust is thought to be important to all leadership models and it is thought that servant leadership is particularly strongly associated with it (Melrose, 1995; De Pree, 1997; Joseph and Winston, 2005).

Work on the issue of trust and servant leadership conducted by Sendjaya and Pekerti (2010) focused on two different educational institutions with a total sample size of 550 interviews. This large sample size lends credibility to the findings although wider generalisability is again questionable outside of the immediate sector; education institutions. Having said this, the theories may well prove useful in terms of laying a foundation upon which this study can build.

Theories of servant leadership suggest that these leaders emphasise the holistic needs, development and autonomy of their followers rather than being preoccupied with mobilising them to achieve through 'performance beyond expectation' (Graham, 1991). It is thought that this process can create a climate within which creative idea generation can thrive because of the clear focus on issues including autonomy and holistic development (Graham, 1991; Parolini et al, 2009). Links can again be made between this point and earlier thoughts about the necessary environment for creative idea generation (Martins and Terblanche, 2003; Amabile and Khaire, 2008; Catmull, 2008; Johnson, 2010;).

Figure 2.7 contains a hypothetical model depicting the possible way in which leaders may engender followers' trust (Sendjaya and Pekerti, 2010).

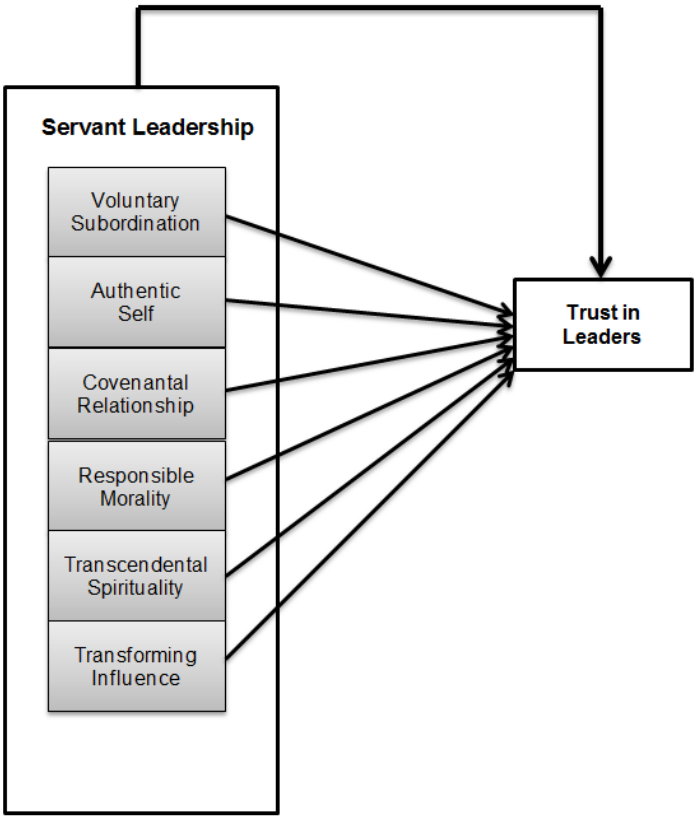


Figure 2.7 How Servant Leaders Engender Followers' Trust in Leaders

Source: Sendjaya & Pekerti (2010) Page 646.

Words such as 'authentic' and 'transforming' make an appearance in this hypothetical model, indicating that there is a cross-over between the various schools of thought in the leadership field. Perhaps more interestingly, the hypothesised relationship between servant leadership and trust in leaders is indicated only in one direction. Despite this, it is understood that this relationship may well be reciprocal (Sendjaya and Pekerti, 2010) and this is something picked up by separate studies in the same field (Mayer et al, 1995;

Dirks and Ferrin, 2002). Both of these sources pursued empirical research in a similar way to Sendjaya and Pekerti (2010) although in different contexts and with different samples. Given that they arrive at similar points of view however, adds significant weight to the hypothesis that there is an important relationship between trust and servant leadership. This study could attempt to explore this finding in more detail within the context of SMEs based in Devon and Cornwall.

In sum, it is argued that irrespective of the relationship's direction, trust in an individual's direct leader is vital to the success of creative idea generation, innovation and consequently organisational survival (Sendjaya and Pekerti, 2010). The behaviours highlighted in **figure 2.7** are argued to be more likely to engender follower's trust in a leader, and it is proposed that articulating a shared vision within which both parties operate is of crucial importance in this regard.

Links can be drawn between studies of servant leadership (Sendjaya and Pekerti, 2010) and research which has examined the interaction between leadership and creativity in jazz teams (Ucbasaran et al, 2010). Both of these studies propose that it is the role of the leader to create an environment in which creative processes can operate effectively. The latter study is more conclusive and detailed in this regard, emphasising that leaders need to create frameworks, triggers and cues which give direction and inspiration to their followers (Ucbasaran et al, 2010). In the wider leadership literature, parallels can be drawn between the work of Ucbasaran et al (2010) and theorists from the transformational school while the theory of servant leadership appears somewhat isolated from the mainstream. It can be hypothesised that this is

because the theories of servant leadership (Graham, 1991; Parolini et al, 2009) are fundamentally different to any other leadership model as they depict the leader as a supporter of individuals rather than an individual at the forefront of the organisational picture, as is the case with transformational leadership (Rosenar, 1990; Taffinder, 1995; De Jong and Den Hartog, 2007). The concept of the leader serving the group is very different to traditional models of leadership but perhaps has a connection with practitioner literature (Zander and Zander, 2000; Zander, 2009).

Sources discussed above (Zander and Zander, 2000; Zander, 2009) contain language that resonates with other areas of literature (Sendjaya and Pekerti, 2010; Ucbasaran et al, 2010). Within this material, leadership is argued to be critical to organisational effectiveness and it is proposed that individuals in leadership positions must act as 'enablers of achievement' (Zander, 2009). Similarities exist between this statement and the theories of servant leadership (Sendjaya and Pekerti, 2010). A particular focus of the literature is the language used by those in leadership positions, with it being proposed that leaders need to 'radiate possibility' to their followers (Zander and Zander, 2000). This work can be linked to more recent ideas (Goffee and Jones, 2009) where it is suggested that one of the most significant contributions leadership makes is the provision of meaning and purpose which allows creative energy to flow.

Linking back to the notion that SMEs can struggle with the concept of leadership, one final area of interest that must be explored in this part of the chapter is Greiner's (1972) growth model. A copy of this model is reproduced in **figure 2.8**.

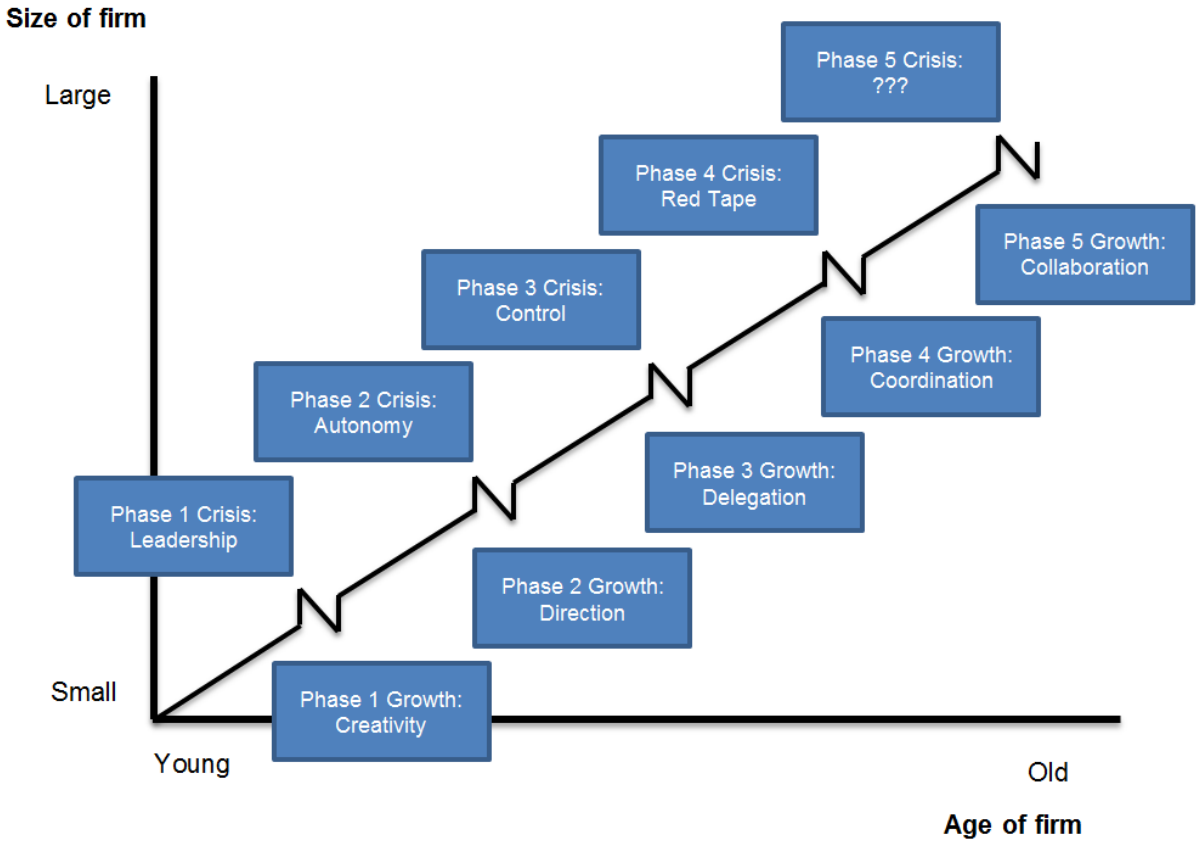


Figure 2.8: The Greiner Growth Model

Source: Greiner (1998)

Greiner's (1972) model perhaps offers a reason as to why exploratory work discovered that some small organisations struggle to find 'effective' leadership. The model is built from the understanding that initial organisational growth comes about because of entrepreneurial creativity. It is thought that because the leader is focused solely on seeking out new opportunities, other members of staff fail to understand the focus of the business, hence "leadership" being the first crisis (Greiner, 1972). Even though the leader of the organisation may be acting 'creatively', the organisation itself has little or no direction and therefore it can be proposed that an effective internal 'environment' for creative idea generation does not exist. In order to understand more about this particular

phenomenon, and whether SMEs based in Devon and Cornwall experience the same issues, this study could attempt to map organisations onto the Greiner growth model in an effort to understand the challenges facing those in leadership positions.

Discussions within this part of the chapter have considered a wide range of leadership theories, focusing mainly on more recent contributions to the literature (Parolini et al, 2009; Sendjaya and Pekerti, 2010; Ucbasaran et al, 2010). While various parallels can be drawn between these theories, and indeed to elements of practitioner literature (Zander and Zander, 2000; Zander, 2009), the concept of servant leadership (Sendjaya and Pekerti, 2010) arguably goes against most of the accepted wisdom. Given the extent of the literature surrounding leadership and its impact on creative idea generation, this will clearly be a significant part of this study, perhaps requiring its own specific research question in order to delve into some of the contentions and debates in the necessary level of detail. Attention now turns to a thought mentioned several times during this chapter, the environment for creative idea generation.

2.7 The 'Environment' for Creative Idea Generation

Exploratory work found that organisational culture and particularly the environment created inside an organisation has a powerful influence on creativity. This is reflected in elements of the practitioner literature, as evidenced by the following quote;

"The poet and the engineer may seem a million miles apart in their particular forms of expertise, but when they bring good ideas into the world, similar

patterns of development and collaboration shape that process. If there is a single maxim… it is that we are often better served by connecting ideas than we are by protecting them… The truth is, when one looks at innovation in nature and in culture, environments that build walls around good ideas tend to be less innovative in the long run than more open-ended environments. Good ideas may not want to be free, but they do want to connect, fuse, recombine."

Source: Johnson (2010) Page 22.

From an academic perspective the key point emerging from the text above is that similar patterns of development and collaboration are thought to shape the idea generation process, no matter the context (Johnson, 2010). Environments that connect ideas with one another are thought to be fundamentally more innovative than those that do not (Johnson, 2010; Sailer, 2011). Similar arguments are put forward within other parts of the literature where it is proposed that organisations are an extension of natural community life, and have become gradually more purposeful and designed more consciously throughout history (Bruggeman, 2008). A key underlying philosophy is that organisations should be seen as networks of individuals and that the boundaries between individuals, groups and organisations should not be distinct, but should be 'fuzzy' interfaces through which information freely flows (Bruggeman, 2008; Sailer, 2011). Individuals are thought to be members of many different groups at once and have ties which extend far beyond the organisation which provides them with employment (Bruggeman, 2008; Johnson, 2010).

Clear links exist between the thoughts presented above and the 'strength of weak ties' (Granovetter, 1973) concept first covered in **section 2.3**. It is clear that there are distinct overlaps throughout the literature, from practitioner to

academic in nature, arguing that organisational boundaries should not be seen as clear, fixed lines. In particular it is thought that individuals inside organisations need to develop diverse networks of weak ties in order to increase the number of ideas they produce (Kanter, 1996; Ruef, 2002; Johnson, 2010).

While this literature review is not going to consider organisational culture in depth, the exploratory study did indicate that the subject area was interconnected with the environment for creativity. Culture is a common set of shared meanings or understandings about a group or organisation and its problems, goals and practices (Pullen et al, 2009). This understanding can be fused with the notion that organisational culture is an 'expressive social tissue' (Pettigrew, 1985). What is meant by this is that culture binds the bones of organisational structure to the muscles of organisational processes (Pettigrew, 1985). This demonstrates why it is an important factor to consider when creating a climate to foster creative idea generation. Despite stating that culture is not a subject which this literature review will focus on in detail, a question which is relevant concerns how culture is influenced by organisation size, given the diversity of SMEs (Burns, 2007).

Cultures are argued to act as perceptual filters, affecting decision making styles and causing resistance to strategic change (Mintzberg et al, 2009). They evolve as organisations grow and sub-cultures can emerge given the necessary conditions (Burns, 2008). Creative cultures within small organisations can become more rigid as these firms move through the growth phases shown in **figure 2.8** (Pullen et al, 2009). It is also known that incremental innovation is

dependent on traditional structures and radical innovation depends more on informal structures (Pullen et al, 2009). Given this information, it can therefore be suggested that the definition of an 'effective' culture will be dependent on the context of the organisation and what it is attempting to achieve.

Moving back to the 'environment' for creativity, a relatively recent literature review shows that there are three essential questions that may form the basis of further inquiry (Staber, 2008). These are;

- What are the origins of new ideas?
- How are ideas selected and transmitted?
- How are ideas retained, and how is inertia overcome?

While this study is not specifically concerned with the first of the questions the latter two do have relevance and sit alongside other theories which have already been debated (Ruef, 2002; Bruggeman, 2008; Sailer, 2011). In particular there is a strong connection between these questions (Staber, 2008) and the perspective from practice introduced at the start of this subsection (Johnson, 2010). As noted above, it is thought that connecting ideas in an organisational environment is of crucial importance (Johnson, 2010) and on the face of it this theory appears to answer, at least in part, the third question above.

A key variable in the encouragement of new ideas is the 'ecological' structure of the environment in which they compete for human attention (Staber, 2008). In this sense 'ecology' means that it is not isolated ideas, but ideas in combination

with others that make creative production possible (Staber, 2008). This argument is illustrated in **figure 2.9** which shows a comparison between low and high density networks. Again this theory is very similar to that advanced by practitioner literature (Johnson, 2010).

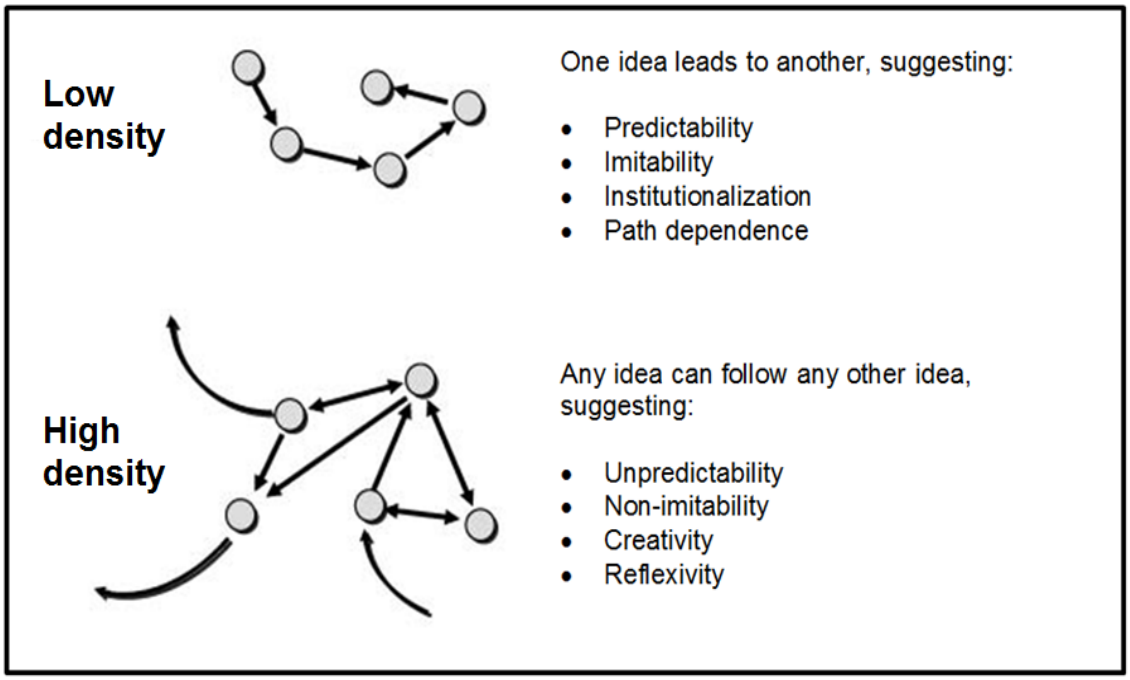


Figure 2.9: Density of Networks of Ideas

Source: Staber (2008) Page 576.

Figure 2.9 demonstrates differences between low and high density networks. A high density network is thought to provide an environment in which more 'chance' collisions can occur and it is argued that this type of environment can be created through a myriad of weak ties (Ruef, 2002). Different sources (Rutten and Boekema, 2007; Staber, 2008) argue that high density networks lead to increased creative idea generation, suggesting that in this sort of environment, individual ideas can connect and fuse more readily. Separate studies support this understanding and argue that new research needs to focus on the interactions between ideas as well as the interactions between people in

order to add value to the field (Weick et al, 2005). This is a further consideration which this study needs to take on board before fieldwork begins.

The argument above has wide reaching implications for how organisations foster an effective culture in which creative idea generation can thrive and indeed how organisations learn. Yet another piece in this jigsaw is the notion that organisations need to value and reward creativity in order to unlock its potential (Andriopoulos, 2001; Mayfield, 2009). The proposition is that creative idea generation flourishes in a trusting environment (Politis, 2005) that does not seek to over-control (Busco et al, 2012) creativity but provides open internal and external channels of communication (Martinez and Aldrich, 2011). This thought can be linked back to the idea that organisations have 'fuzzy' boundaries with multiple lines of communication flowing in many directions at any one time (Bruggeman, 2008). Further links can also be traced back to the theories of servant leadership (Graham, 1991; Parolini et al, 2009) and discussions concerning the strength of weak ties (Granovetter, 1973; Ruef, 2002). Previous discussions have linked servant leadership with trust (Sendjaya and Pekerti, 2010), indicating that this is a very important factor in determining what 'effective' leadership is. Further weight is added to the points discussed in this paragraph where it is suggested that the ultimate issue in an organisation's internal environment is the degree of freedom given to individuals (Sinetar, 1985). It is argued that individuals need freedom to work creatively and a degree of slack in the resources that they control (see Amabile et al, 1996). From a manager's perspective, encouraging creative idea generation can potentially mean building tolerance for a level of disorder and unconventional thinking.

There is thought to be a limit to disorder and unconventional thinking with counter arguments stating that 'unfettered' creativity can be very dangerous and that there is a fine line between being creative and unleashing chaos in an organisation (Burns, 2007). To guide the process it is argued that a commercial outlook is needed together with a disciplined approach to exploiting the ideas and opportunities generated by creative thinking (Busco et al, 2012). This is an understanding which resonates with the findings of the exploratory study although again it is not clear how the idea generation process operates in larger SME environments.

Building on the points made so far, a further theme in the present literature is that organisations need to tolerate a degree of error. Arguably organisations that focus too heavily on error prevention are likely to have poor levels of exploration (i.e. idea generation) and innovation (Kirkman and Den Hartog, 2004). Significant further weight is added to this emerging consensus by another source which engages in empirical research (Hitt et al, 1996). This specific study examined innovation in 250 R&D firms and found that companies with the strictest financial controls were the least innovative (Hitt et al, 1996). Having said that strict controls have the potential to stifle creative idea generation, other areas of literature suggest that the opposite is also true; too little control also limits creativity and innovation (Leonard and Swap, 2005). Far from stifling creative thought, monitoring and guidance mechanisms are needed to improve innovative output (Leonard and Swap, 2005), arguably because good ideas are not otherwise forced through the decision making chain. Links can be drawn between these thoughts and the third research question posed by

Staber (2008) regarding organisational inertia. Returning to the context of jazz, it is again noted here that error can become a “positive springboard to prime the musical imagination” (Barrett, 1998; p610). This idea is also developed within practitioner literature where a case is built for organisations to encourage what is known as ‘generative error’, in other words, building and iterating from mistakes rather than apportioning blame and stopping projects. Synthesising from this literature it appears that there is a case for organisations adopting an *effective* level of monitoring although it is not known what this level is. This study should seek to understand more about the relationship between idea generation and error.

Discussions regarding the relationship between error and creative idea generation would not be complete without drawing on other relevant areas of literature. Practitioner literature, in particular, notes that error and mistakes are phases which organisations need to ‘suffer’ through on their path to new innovations (Catmull, 2008; Baréz-Brown, 2006 & 2009). Keeping with this particular point other sources suggest that rather than ‘suffering’ through mistakes, error itself can create a path which leads out of comfortable assumptions (Jevons, 1958; Johnson, 2010). Although the former is a relatively dated source, it proposes that being ‘right’ keeps you in place whereas being ‘wrong’ forces you to explore (Jevons, 1958); this understanding has clear links to the generation of creative ideas, where exploration is thought to be a key driver. Empirical research drawing similar conclusions has examined innovation in numerous different settings including mock juries, boardrooms and academic seminars and found a paradoxical truth (Nemeth, 1995). From this research it was understood that creative ideas were more likely to emerge in environments

which contain a certain amount of error, the conclusion being that the best innovation labs are always a little contaminated (Nemeth, 1995).

In order to maximise creative idea generation it is therefore likely that organisations need to leave a certain degree of space for generative error in their operations (Jevons, 1958; Nemeth, 1995; Johnson, 2010). It is accepted that too much error is costly and time consuming, but mistakes are said to be an inevitable step on the creative path (Catmull, 2008; Baréz-Brown, 2006, 2009). Empirical research already conducted into this issue (Nemeth, 1995) adds significant substance to this understanding with it being noted that innovative environments thrive on error and suffer when formal quality or risk management processes overwhelm them (Nemeth, 1995; Hitt et al, 1996; Busco et al, 2012). Interestingly, researchers do not argue for the absence of managerial control, it is instead suggested that control processes should not overwhelm creative thought (Leonard and Swap, 2005; Busco et al, 2012). This synthesis would not be complete without reference to the work of Staber (2008) which presents a similar view that imperfections in perception, communication and so forth should be celebrated as a source of new variation within the idea generation process. Fundamentally, error is thought to support creative idea generation rather than undermine it.

Moving on from the notion of error it is suggested that organisations need to model themselves on the dynamics of intelligence (Robinson, 2001). This understanding argues that many organisations stifle creative idea generation by putting rigid structures in place and promoting a conformist ethos. The argument develops with the suggestion that environments that discourage ideas

cause the creative impulse to do one of two things; desert or subvert authority (Robinson, 2001). Creativity is argued to be ever present in a latent capacity whether it is encouraged or not, and can either work for or against an organisation (Robinson, 2001).

Notions that creative idea generation can be influenced by the work environment appear relatively widely in the literature (see, for example Amabile et al, 1996; Park, 2005; Amabile, 2006; Mayfield, 2009). In particular the seminal work of Amabile et al (1996) requires additional attention. This research studied over 12,000 cases which lends significant levels of internal validity and generalisability to the findings (Amabile et al, 1996). Ultimately the research produced a model exploring various factors in the work environment that can affect creativity; this is reproduced in **figure 2.10**.

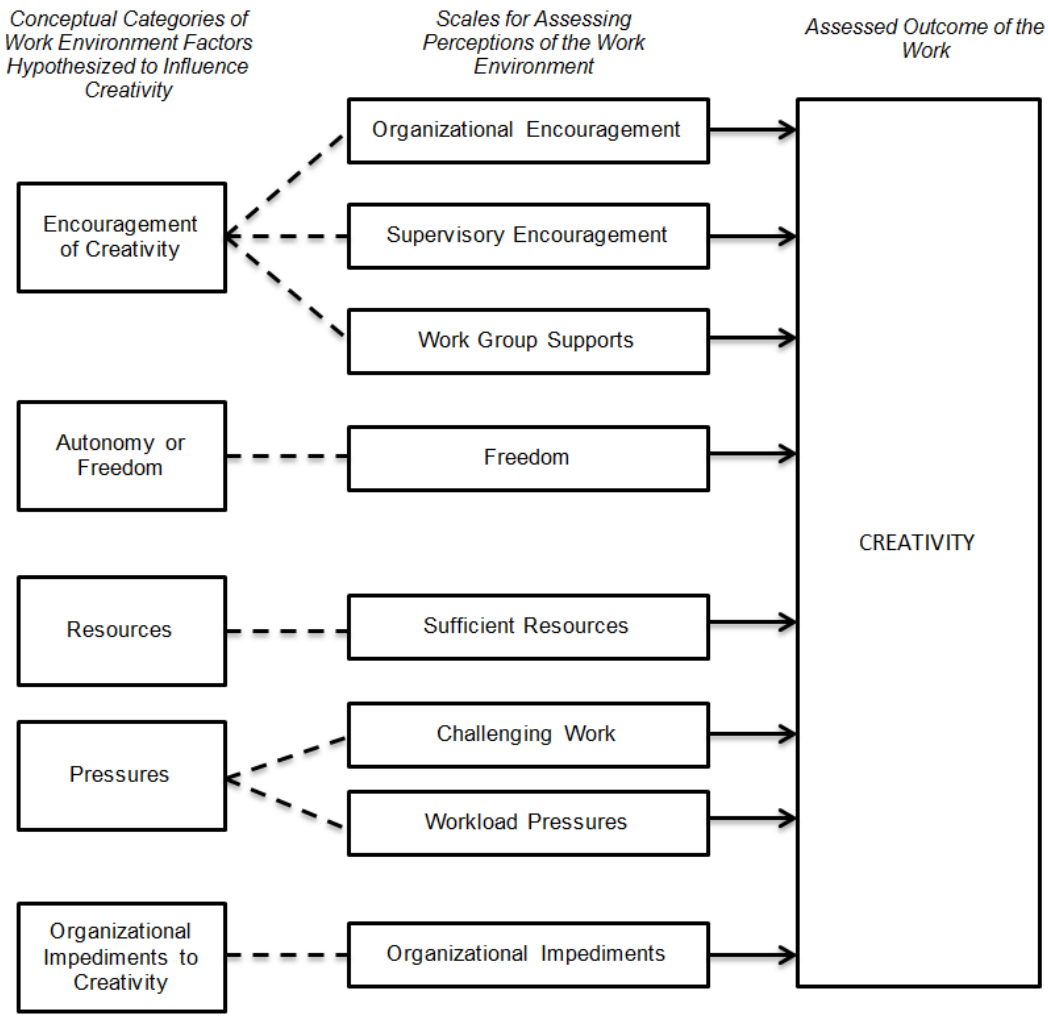


Figure 2.10: Conceptual Model Underlying Assessment of Perceptions of the Work Environment for Creativity

Source: Amabile et al (1996) Page 1159.

Amabile et al's (1996) model is split into three distinct parts, on the left are areas of the work environment that are believed to influence creativity, including autonomy/freedom, resources and organisational 'impediments'. These then feed into what are termed 'scales', or specific elements of these factors that are believed to influence the production of creative ideas. Clear links can be made between this model developed from rigorous, empirical research and further contributions discussed in this part of the chapter (Sinetar, 1985; Robinson, 2001; Park, 2005; Mayfield, 2009). It could perhaps be instructive to use the

understanding developed through this particular model (Amabile et al, 1996) to, at least in part, guide the fieldwork phase of this study.

A final element of theory which merits consideration here surrounds the notion that work environments which hope to encourage creativity must be 'safe' (Kiljn and Tomic, 2010). This idea is based on a similar foundation to that of other, practitioner sources (Catmull, 2008; Baréz-Brown, 2006 & 2009) which, as previously mentioned, discuss error and the fact that mistakes are an inevitable step on the creative path. It must again be stated that this particular source (Kiljn and Tomic, 2010) does not engage with empirical research, rather the journal article presents a critical literature review, examining sources within the creativity field published since 1985. This somewhat limits the contribution of this work as the argument is purely theoretical rather than being based on primary evidence. This said, the paper provides a useful foundation for further work, such as this study. Moving back to the argument at hand, the definition of a 'safe' environment is thought to be a space where team members feel able to present new ideas as they will not be ridiculed or criticised (Klijn and Tomic, 2010). This understanding is reinforced when examining the environment within Pixar (Catmull, 2008), where this organisation utilises a 'creative brain trust' or safe space within which creative thoughts can be discussed and improved.

Pixar's creative brain trust consists of the company directors along with the producers of a particular film and anyone with relevant expertise (e.g. a computer animation specialist). The group watch the current version of a project and then engage in a give and take discussion which revolves around refining the ideas and tackling specific issues. This arrangement is thought to

work successfully because there is no ‘ego’ and every member is invested in helping the organisation turn out a polished final product (Catmull, 2008). It is thought that the problem solving powers of this particular group arrangement are immense and have helped the organisation to grow and develop (Catmull, 2008). Evidence, in the form of Pixar’s creative output would seem to support this assertion (Pixar, 2012b).

Evidence presented in this part of the literature review tends to suggest that the environment created inside an organisation has a powerful bearing on its ability to be creative (Jevons, 1985; Nemeth, 1995; Amabile et al, 1996; Catmull, 2008; Johnson, 2010). Discussions have helped to build an understanding of what an environment that produces many creative ideas might look like. Environments which support creative idea generation should arguably;

- Provide a degree of autonomy or freedom
- Have a structure which enables communication between different individuals
- Encourage individuals to think differently
- Tolerate a degree of ‘error’ and use this to drive ideas forwards
- Allow individuals physical and mental ‘space’ to tap into their creative thoughts
- Connect rather than protect new ideas
- Be open to new sources of information (both external and internal to the organisation)

2.8 Human Factors

The title of this subsection is deliberately vague as there are many different factors, both individual and collective which influence an individual's tendency to produce creative ideas (Roffe, 1999; Martins and Terblanche, 2003; Staber, 2008). This chapter has already explored some of these factors in detail such as the strength of weak ties theory (Granovetter, 1973; Ruef, 2002). As a result, this part of the literature review is not going to focus on the nature of creativity as this particular issue was addressed in **section 2.2**. In the same vein it will not examine leadership as that was dealt with in **section 2.6**. It is also important to restate at this point that this study is assessing factors *external* to the individual that impact idea generation rather than *internal* traits, beliefs or experiences that contribute to someone being creative. With this in mind the title of this section, human factors, may cause some concern that discussions are drifting from the external to the internal. This is not the case. Discussions here are intended to establish whether there are any human factors linked to creative idea generation that can be influenced by external forces.

A key concept, bearing in mind the notes above, is the 'flow' state (Csikszentmihalyi, 1990). This is described as the state where most creative ideas are produced and defined as a feeling of energised focus and involvement (Csikszentmihalyi, 1990). Individuals who have a flow experience typically discuss the following characteristics (Csikszentmihalyi, 2004);

- Completely involved in what they are doing; focused and concentrated
- A sense of ecstasy; of being outside everyday reality

- Great inner clarity; knowing what needs to be done and how well they are doing
- Knowing that the activity is doable; that their skills are adequate to the task
- A sense of serenity; no worries about oneself, and a feeling of growing beyond the boundaries of the ego
- Timelessness; thoroughly focused on the present, hours seem to pass by in minutes
- Intrinsic motivation; whatever produces flow becomes its own reward

Mihalyi Csikszentmihalyi's work is primarily based on empirical research with data collected through in-depth semi-structured interviews over a significant period of time. This longitudinal research strategy (Bryman and Bell, 2007; Saunders et al, 2009) has allowed for the mapping of the flow state for different individuals. It has been found that each individual has a different set of characteristics which will encourage a flow experience (Csikszentmihalyi, 1990). This theory can be related back, at least in part, to previous understandings generated in this literature review (Robinson, 2001; Penaluna et al, 2010), where it was proposed that every individual can be creative but that the concept of creativity is subtly different for everyone. Work on the flow state has been widely discussed (see Coles, 2003; Taylor, 2005). Indeed peer reviewed material has been published specifically on the subject (see Getzels and Csikszentmihalyi, 1969; Csikszentmihalyi, 1997; Csikszentmihalyi, 2000).

Literature notes that the flow experience is inaccessible unless an individual has requisite experience in a specific field (Csikszentmihalyi, 2000); it is thought to be a truism of creativity that individuals require a minimum of ten years'

experience in a field before they can hope to *do* something which changes it in some way (Csikszentmihalyi, 2004). Tied to requisite levels of experience individuals need a certain level of skill and challenge in order to access the flow state, this is noted in **figure 2.11**.

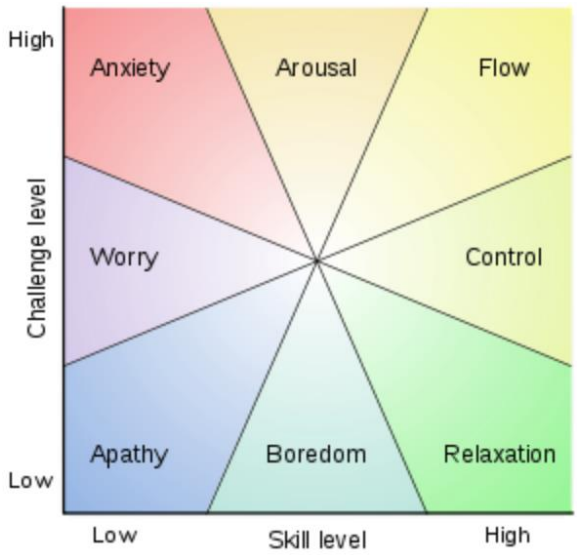


Figure 2.11: Skill, Challenge and Flow

Source: Csikszentmihalyi (2004)

By positioning flow in the top right hand corner of the chart **figure 2.11** demonstrates that it can only be achieved when an individual is challenged in an area that they have high skill. An example of this might be an experienced biologist attempting to discover something new about the way the human body reacts to a virus. The following quotes presented by Csikszentmihalyi (2004) add weight to this point and begin to show how the flow concept fits into a business context.

I've always wanted to be successful. My definition of being successful is contributing something to the world… and being happy while doing it… You have to enjoy what you are doing. You won't be very good if you don't. And secondly, you have to feel that you are contributing something worthwhile… If either of those ingredients are absent, there's probably some lack of meaning in your work.

Norman Augustine, former CEO of Lockheed Martin

Look for your passion. What makes you excited? What turns you on? Go towards companies that you really like, really admire… What do you admire about them? If you can spend an internship there or just knock on the door and say 'Hey, can I work here for cheap?' Find organisations that move your spirit if you can… There's so much fun to be had… When you spend 95% of your life in a work environment it can't be dour.

Anita Roddick, founder of the Body Shop

'To establish a place of work where engineers can feel the joy of technological innovation, be aware of their mission to society, and work to their heart's content.'

The first 'purpose of incorporation' of Sony, written by Masaru Ibuka

The characteristics of challenge and skill can both be seen in each of these examples, Norman Augustine for instance notes that individuals have to 'enjoy' work otherwise they will not be very good at it. The concept of flow is enticing from the point of view of this research as it appears to demonstrate a state which individuals can be moved to under a specific set of circumstances. It can therefore be argued that managers and leaders may have the ability to manipulate *external* factors to bring about this *internal* state that is conducive to creative idea generation. As flow is suggested to be the state where most ideas are generated (Csikszentmihalyi 1990, 2000), it can be argued that organisations must provide the conditions for individuals to transition into this

mode. There are parallels between this theory and thoughts about the nature of creative idea generation examined earlier in this chapter (Amabile, 1983; Johnson, 2010; Klijn and Tomic, 2010) although Csikszentmihalyi does not provide detail as to how his theories may operate in an organisational context. It is stated that if an individual is in a state of 'control' or 'relaxation' then all that has to be done is to increase the level of challenge for that individual to enter flow, and produce more ideas as a result. Despite this seeming relatively simple, the level of challenge needed will inevitably be different for every individual so this will likely require careful management. Further links can be made between this line of enquiry and theories of job design (Garg and Rastogi, 2006; Hall and Heras, 2010).

Armstrong (2006, p330) suggests that job design is;

"The specification of the contents, methods, and relationships of jobs in order to satisfy technological and organisational requirements as well as the social and personal requirements of the job holder."

Well-designed will provide intrinsic motivation to the job holder (Armstrong, 2006; Garg and Rastogi, 2006) and previous studies have shown that jobs allowing a high level of employee control provide many opportunities for development and the exercise of skills (Morrison et al, 2005). Given what is understood about the flow state, it may be that these sorts of jobs automatically give rise to greater levels of creative idea generation. It is recognised that the relationship between flow and job design could form the basis of a separate thesis so these discussions will not be continued here. It suffices to say that having reviewed the theory of flow, job design could play an important part in creating these experiences. Existing literature notes that jobs must be designed

with the social and personal requirements of the job holder in mind (Armstrong, 2006) and perhaps this can be taken as a link to the concept of flow in itself.

The concept of flow is built on by further literature (Robinson, 2009) based on extensive interview based research with individuals who are commonly thought to be ‘creative’, including Gillian Lynne, Don Lipski, Paul McCartney and Matt Groening amongst others. From this research it is proposed that in order to be most creative, individuals need to find their ‘element’ (Robinson, 2009). This place is said to be the meeting point between natural aptitude and personal passion and it is therefore very similar to the concept of flow (Csikszentmihalyi, 1990, 2000, 2004). Individuals managing to find their ‘element’ are acting as their authentic selves and are consequently more alive, more centred and more vibrant and therefore, more creative (Robinson, 2009). One particular quote which emphasises this state comes from an interview with the playwright Aaron Sorkin.

“When it's (the process of writing) going well,' he said, 'I feel completely lost in the process. When it's going poorly, I'm, desperately looking for the zone.'... 'When it's not going well, I put it away and try again tomorrow or the next day. One thing I do is drive around in my car with music on. I try to find someplace where I don't have to think about driving much, like a freeway, where you don't have to stop at red lights or turn or anything.'... At its best, the process of writing for Aaron is completely absorbing. 'Writing for me is a very physical activity. I'm playing all the parts; I'm getting up and down from my desk. I'm walking around. When it's going well, in fact, I'll find that I've been doing laps around my house, way out in front of where I type.”

Source: Robinson (2009) Page 88.

To demonstrate that this theory is not confined to the process of writing, similar experiences are highlighted in the following quote (Robinson, 2009) from a professional billiards player, Ewa Laurance;

"You're almost unconscious to what's going on around you… It's like being in a tunnel but you don't see anything else... Time changes. Somebody could ask you how long you've been doing it and you could have said twenty minutes but it was actually nine hours… I have never had it with anything before or since, even though I am very passionate about a lot of other things. But the feeling of playing billiards is unique for me."

Source: Robinson (2009) Page 88.

Both of these individuals hint at some sort of zone that appears similar to the flow state (Csikszentmihalyi, 1990, 2004). This is characterised by a feeling of timelessness which appears to haul individuals away from their day to day activities and transport them to a place, especially for Aaron Sorkin, where many creative ideas are produced. Further sources make reference to the concept of flow (Lewis, 2011) and argue, like Mihalyi Csikszentmihalyi, that it occurs when the challenge of work matches an individual's level of skill. Flow is thought to occur in different ways for different individuals (Lewis, 1990; Csikszentmihalyi, 1990) and the consequence for managers is that they need to understand how to build activities which create flow into the working day in order to unlock new insight and creative ideas.

Relationships between flow and job design have already been discussed although it is less clear how managerial control might be maintained in such an environment. As discussed previously, creative ideas thrive in environments where there is an effective level of managerial control (Leonard and Swap,

2005; Busco et al, 2012) and this is supported by the thought from Staber (2008) that organisations must seek to overcome inertia in order to generate ideas. When attempting to develop a synthesis between these strands of literature it quickly becomes apparent that there could well be a degree of contention and contradiction in the literature between the issue of managerial control and the concept of flow. This is an area that this study should seek to investigate in detail.

Adding further weight to the picture developed in this part of the literature review different sources suggest that the concept of flow can indeed be related back to the work environment (Morgan, 1997). Western cultures are argued to be leaving the age of the 'organisation' and moving to an era where the ability to understand, facilitate and encourage processes of self-organisation has become a key competence (Morgan, 1997). Bureaucratic organisations are said to reduce variety through their rules, patterns, programs and standardised frames of reference, and, this conformity is thought to limit the production of new ideas (Morgan, 1997). Links can be made between this contribution and others highlighted towards the start of discussions in this chapter. The need for lateral or divergent thinking (De Bono, 1970; Klijn and Tomic, 2010; Penaluna et al, 2010) is understood to be a precursor for the production of creative ideas and contributions here suggest much the same thing (Morgan, 1997). Despite setting out interesting thoughts and theories Morgan (1997) provides few tested, concrete processes for operationalising the concept of self-organisation. This is yet another area into which this study could provide insight and firmer structure.

Having made the points above, self-organisation is also thought to increase variety in a system because it improves an individual's capacity for learning, dialogue and change (Morgan, 1997). Self-organising systems are thought to embrace openness as a source of vitality and consequently this encourages increased levels of creative energy, this links to theories presented by Carson et al (2003), Johnson (2010) and Ucbasaran et al (2010). Other literature argues that an allegiance to rules and procedures can easily frustrate creative idea generation (Roffe, 1999). This source, a substantial critical literature review, suggests that overly rational thinking tries to place creative processes into systematic models and this can lead to organisational inertia and creativity 'deserting' the minds of employees (Roffe, 1999). Further academic discussions add to this base by proposing that creative ideas depend on vibrant, on-going collaboration and a free flow of ideas, both of which tend to dry up as an organisation adds people and projects (Amabile and Khaire, 2008). As organisations grow this often spells the end of entrepreneurial spirit, risk taking and learning from mistakes, all of which are considered central to the creative process (Jevons, 1958; Majaro, 1992; Nemeth, 1995; Amabile and Khaire, 2008). While a firm link cannot be made back to Greiner's (1972) growth model based on these findings it can still be suggested that there are parallels between this model and the theories advanced by Amabile and Khaire (2008).

A final thought that needs to be examined in this chapter is the notion that a growing organisation often encounters a problem when an emphasis on efficiency causes managers to try to avoid the duplication of effort (Christensen, 2006; Amabile and Khaire, 2008). In order to generate creative ideas

individuals must be able to approach a problem from different angles in order to generate new thinking (Christensen, 2006; Amabile and Khaire, 2008; Johnson, 2010). Without exploration and the ability to make connections between new ideas the creative process will stumble and fizzle out. This is emphasised by the following quote;

"The strange and beautiful truth about the adjacent possible is that its boundaries grow as you explore those boundaries… Think of it as a house that magically expands with each new door you open. You begin in a room with four doors, each leading to a new room that you haven't visited yet. Those four rooms are the adjacent possible. But once you open one of those doors and stroll into that room, three new doors appear, each leading to a brand new room that you couldn't have reached from your original starting point.

Source: Johnson, S. (2010) Page 31.

While practitioner rather than academic in nature, this thought resonates with the wider literature, again emphasising the need for divergent thinking (De Bono, 1970; Hughes, 2003; Klijn and Tomic, 2010; Penaluna et al, 2010). The key issue is that the 'adjacent possible' (Johnson, 2010) hovers at the edge of what we know; we only produce new insight and new connections by exploring this edge. Links can also be made here to previous discussions suggesting that that the role of the leader is to create an environment within which individuals can explore whilst given 'effective' levels of supervision and guidance (Kirkman and Den Hartog, 2004; Leonard and Swap, 2005; Busco et al, 2012). This discussion also extends to encompass the work of Sawyer (2006) who argues that it is a fallacy to believe that creativity happens in a sudden moment of insight. The key to creative idea generation, at least for Sawyer (2006) is collaboration, the development of networks and time being scheduled for freewheeling and unstructured discussions. This sits together with the strength

of weak ties concept (Granovetter, 1973; Ruef, 2002) and further literature discussing the presence of structural holes in networks (Burt, 1992; Zaheer and Soda, 2009).

Business arguably needs to forget the romantic myths that creativity is all about being 'artsy' and gifted (Sawyer, 2006). Creative idea generation is about building environments where individuals can work hard, explore the adjacent possible and make serendipitous connections which turn individual thoughts into a collection of useful insights and future innovations.

2.9 Distilling the Literature and Building a Conceptual Model

Before the findings from this literature review are considered in detail it is important to critically assess the rigour of the sources used and highlight any potential issues, particularly because this study has made use of both practitioner and academic literature. From an academic stance it is important that sources are both reliable and valid, providing a strong base from which primary research can build (Bryman and Bell, 2007; Saunders et al, 2009). Specific comments have been made throughout the chapter where relevant and this section will briefly summarise the main trends.

The majority of the sources used in this chapter, typified by Amabile et al (1996), Kemster and Cope (2010), Klijn and Tomic (2010), Penaluna et al (2010), and Sailer (2011) are academic, peer reviewed papers. Most (see Amabile et al, 1996; Kempster and Cope, 2010; Sailer, 2011) engage in empirical research examining various aspects of the creative process while

others, (see Staber, 2008; Klijn and Tomic, 2010) conduct critical literature reviews. The key purpose of the academic peer review process is to ensure quality, although the process is thought to be changing in the wake of new communication methods (Baker, 2008). It is important to recognise that the methods used by some sources quoted in this chapter are not likely to be replicable in this study (for example Penaluna et al, 2010; Ucbasaran et al, 2010). In both cases unique research frameworks were developed allowing access to specific phenomena in set contexts which are not necessarily generalisable to the context of this particular study. The methodologies adopted by other studies (for example Amabile et al, 1996), however, have produced conceptual frameworks which arguably have greater generalisability and might well inform part of this study's approach to primary research.

Alongside peer reviewed sources this literature review has also utilised academic texts including seminal work on the concept of lateral thinking (De Bono, 1970), transformational leadership (Taffinder, 1995) and insights into entrepreneurship in small businesses (Burns, 2007). While not subject to the peer review process these sources have been written by widely published and cited authors therefore their inclusion in this review is merited.

The nature of creative idea generation means that there are several literature sources available which do not fall under either of the categories above (see Zander and Zander, 2000; Rudkin et al, 2001; Robinson, 2001; Baréz-Brown, 2006, 2009; Robinson, 2009; Johnson, 2010). These sources are written by experienced practitioners, thinkers and writers in the field of creativity. At the start of this chapter it was noted that literature within the defined field is

developing at a rapid rate, hence it would be inappropriate to exclude these sources simply because they have not been peer reviewed. What has been done over the course of this chapter is to interweave these texts with academic literature, pointing out where there are consistencies or inconsistencies and where practitioner literature may be able to extend current knowledge. The practical nature of many of these texts (see Rudkin et al, 2001) arguably allows access to the realities of organisational life and therefore their inclusion is merited alongside more rigorous, peer-reviewed material. Conclusions reached by this thesis may add reliability and credibility to practitioner literature by assessing its relevance in an academically rigorous way.

2.9.1 Distilling the Literature

In order to begin distilling the literature covered by this chapter into some form of core understanding, proposition, hypothesis and/or model it is necessary to create some sort of classification system (Easterby-Smith et al, 2008). This system must be broad enough to cover the diverse territory but yet sufficiently detailed to enable the discovery of key understandings and linkages within the material. With this in mind the main themes from this chapter will be drawn together under the following five headings;

- Definitions and Underlying Meanings
- Structures and Skills
- Networks, Groups and Relationships
- Guiding and Structuring Creativity
- Leadership

These headings have been selected because they capture the essence of the discussions whilst remaining non-technical. They have evolved from a systematic analysis of the literature covered in this chapter and were selected because they best represented the key issues discussed. Some commentators may suggest categorising the literature by using an existing framework, such as those provided by Woodman et al (1993), Amabile et al (1996) or Ekvall (1996) but, as it has been stated that the existing literature is not complete, this would limit the extent to which this study can add to the field. Following the development of the categories the key arguments emerging from the literature review were summarised in short sentences and then collated under one of the headings; this is captured in **table 2.4**. In order to then understand how the concepts might link together a perceptual map was developed by arranging each summary point around its relevant category. Potential links were then drawn between the various points by thinking critically and systematically about the relationships uncovered in this chapter. The perceptual map appears in **figure 2.12**.

The perceptual map is not intended to be a final model, but rather a way of indicating and examining the linkages within the literature territory as well as the relative strength of different theories and issues. On the map, concepts in bigger type and links highlighted with thicker lines are more prevalent in the literature and will therefore more heavily influence any conceptual model and forthcoming research questions.

Definitions and Underlying Meanings	
1	Creative idea generation means different things to different people
2	Different schools of thought on creative idea generation: process and network
3	There are several different factors which influence creative idea generation in organisations
4	Small businesses can have conflicting aims
5	Creativity is always present in organisations and will either work for or against them
6	Creative idea generation is diverse but it is built on the same characteristics (conceptual fluency, mental flexibility, originality, suspension of judgement, impulsive, anti-authority, tolerance)
7	Organisational creativity is said to be the production of something new in a complex system
8	Creativity ultimately comes from an individual or a group of individuals. It is not the 'network' itself that is smart, rather that individuals get smarter because they are connected to the 'network'
Structures and Skills	
9	Both divergent / lateral and convergent/vertical thinking are important at different times
10	Flow experience – individuals more likely to produce creative ideas
11	Self-organisation is an important new competency
12	Effective communication and functional co-ordination are keys to success
13	Ability to recognise relationships between things is a crucial skill
14	Organisations need to model themselves on the dynamics of intelligence - Robinson
15	Individuals need challenges and requisite skill to enter the flow state
16	Role of the leader is to create an environment in which creative idea generation can flourish
Networks, Groups and Relationships	
17	Optimising the collective environment is important
18	High density networks are more creative (idea connection and fusion)
19	Heterarchy not hierarchy
20	Strength of weak ties – i.e. wide spectrum of relationships leads to diverse thoughts
21	Need diversity but it is also important to ensure the cohesiveness of groups/organisations
22	Personal relationships are of key importance within SME environments
23	Fuzzy interfaces and lots of weak ties are important in the creative environment
24	Collective creativity is an important topic
25	The environment for creative idea generation is thought to have the same characteristics irrespective of context

Table 2.4: Key Themes from the Literature Review

26	Creative environments should: provide freedom, have a structure that enables individuals to communicate, encourage individuals to think differently, tolerate a degree of generative error, allow individuals physical and mental space to explore creative thoughts, connect new ideas (rather than protect them) and be open to sources of new information
27	Creating an environment where the team is the unit of work rather than the individual
28	Collective creativity – it is important to 'design the context' successfully
Guiding and Structuring Creativity	
29	Measuring mental processes (i.e. ideas) is difficult
30	Encouraging serendipitous connections
31	Tolerance of generative error is good (being wrong forces you to explore)
32	Uncontrolled creativity can be chaotic – effective control needed
33	A degree of irrationality helps the idea generation process
34	New ideas formed out of the remnants of old ideas and hunches
35	Effective fit needed between internal environment and external environment for SMEs
36	The way organisations design jobs/roles is important
37	Creative idea generation is 'hard work'
Leadership	
38	The way leaders form teams, co-ordinate teams and control turnover is critical
39	Transformational leaders can encourage creative idea generation
40	Leadership is potentially an issue in SMEs due to a relative lack of training and HRM skills
41	Managerial control needs to be "effective"
42	Leadership in general terms was found to be important in the exploratory study
43	Small business success comes from spotting an opportunity and exploiting it quickly
44	Servant leadership emphasises the holistic needs of a group and can encourage creative idea generation
45	Despite there being many different leadership theories and models suggesting that certain 'acts' or 'traits' encourage creative idea generation no 'one best way' emerges from the literature

Continued: Table 2.4: Key Themes from the Literature Review

Figure 2.12: Perceptual Map of the Idea Generation Literature

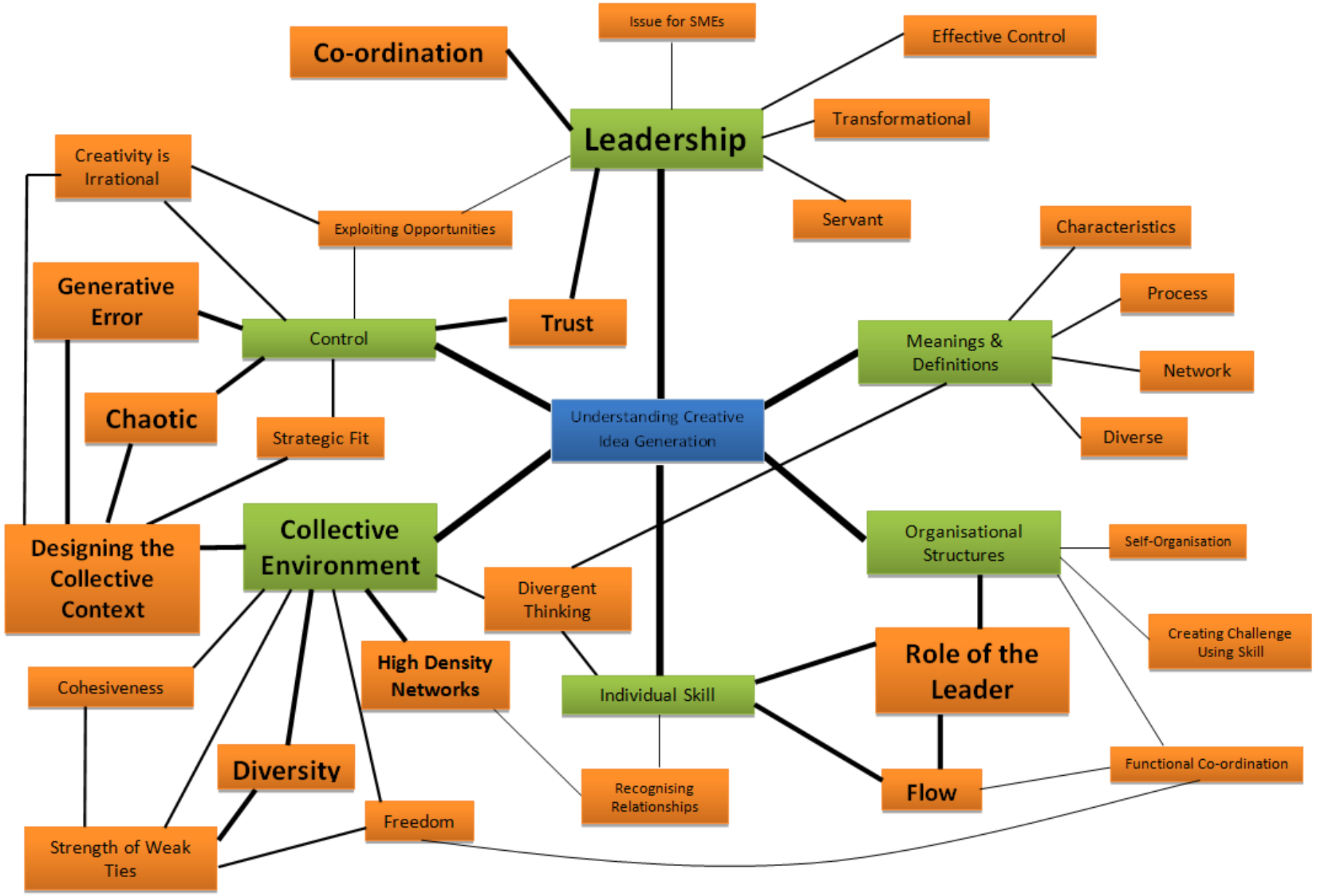


Table 2.4 makes it clear that although a wide range of sources and views have been incorporated into the literature review, key threads can be reduced down as there are different areas in which sources overlap or arrive at similar conclusions. The relative 'strength' of different theories and linkages between them can be seen in **figure 2.12**. An example of overlap in the theoretical territory can be seen during the discussions around managerial control, which is captured in point 40 (**table 2.4**). Although there were differing notions about why managerial control was necessary, the literature presents a consensus demonstrating that 'effective' managerial control is required to enable creative idea generation. During fieldwork it will be vital to investigate exactly what 'effective' managerial control is and if it is the same in different contexts.

Perhaps the best way to form a conceptual model and relevant research questions capturing key understandings is to look closely at each part of **table 2.4** and draw out the most important findings.

Table 2.4 begins by discussing the different definitions and underlying meanings associated with creative idea generation. It is important to state that creative ideas are thought to arise from individuals or groups of individuals as stated in point 8 (**table 2.4**). The main differences in definitions and underlying meanings can be found in the perceptual map and the findings support the exploratory study's view that creativity can mean different things to different people. One school of thought clearly focuses on defining creative idea generation around the steps of the creative process while another school presents the view that creative ideas are in fact networks. Very interesting discussion points surround the notion that creativity is always present in

organisations and will either work for or against them (Robinson, 2001). Fieldwork could attempt to find evidence which either supports or refutes this statement. A further interesting point is that although creative idea generation is diverse it is said to be built on the same characteristics (Majaro, 1992). These were captured within **table 2.2**.

Discussions in this review (**section 2.2**) noted that these thoughts (Majaro, 1992) were not isolated; it was found that similar views were held throughout the literature (De Bono, 1970; Rudkin et al, 2001; Burns, 2007). Creative idea generation is thought to be built on lateral (De Bono, 1970) or divergent (Penaluna et al, 2010) thinking which is provocative, generative and explores paths in a probabilistic way. These thoughts clearly tally with the characteristics listed above (Majaro, 1992). It is important to note that some of these thoughts and theories (e.g. De Bono, 1970) are not yet fully linked to the reality which exists in organisations. Practitioner literature (e.g. Rudkin et al, 2001) does this to an extent but a key way in which this study could therefore add to the territory surrounding creative idea generation is by making this connection and exploring its implications in detail.

Moving onto the second major section of **table 2.4**, structures and skills, the key aim here was to condense points around human factors relevant to creative idea generation and functional parts of the environment for creativity. **Figure 2.12** separates the main findings into two categories, organisational structures and individual skill. Contributions from Csikszentmihalyi (1990, 1997, 2000) and Morgan (1997) are present in this section where it is argued that entering a state of flow and embodying the principles of self-organisation are vital enablers

of the creative process. Despite discussing flow and how it relates to creative idea generation, Csikszentmihalyi does not provide explicit guidance highlighting how an understanding of the concept can be related to creative idea generation in an SME environment. This gap in the literature could be addressed by this study and consideration should specifically be given to assessing whether this state has relevance to creative idea generation in day to day organisational life.

Discussions in this part of the table also demonstrate that the environment in which individuals find themselves is an important variable and that it is the role of the leader to create an environment in which creative idea generation can flourish. Literature contains many different notions about what this environment is and how it might be enabled and points 8, 12, 14 and 15 (**table 2.4**) typify some of these. The literature review contains a variety of contributions within this field (Zander and Zander, 2000; Goffee and Jones, 2009; Sendjaya and Pekerti, 2010; Ucbasaran et al, 2010). An important point highlighted in detail was the understanding that leaders need to create frameworks, triggers and cues which give direction and inspiration to their followers (Sendjaya and Pekerti, 2010). Further literature supports this (Ucbasaran et al, 2010), arguing that the way leaders form teams, control teams and manage team turnover are also crucial variables. This particular point will be picked up under the heading 'leadership' in a few moments time. From this brief discussion it is clear that a key marker of environments that tend towards the production of many creative ideas is effective structures which allow individuals to 'make the best use of their talents'.

‘Networks, groups and relationships’, the third part of **table 2.4** is undoubtedly the largest and the perceptual map refers to these concepts under the heading ‘collective environment’. **Table 2.2** again demonstrates that the ‘environment’ for creative idea generation plays a part in this section and point 16 argues that the role of the leader is to ‘optimise’ this collective setting. Contributions from a variety of sources were examined and critiqued during this chapter (e.g. Chaharbaghi and Cripps, 2007; Bruggeman, 2008; Catmull, 2008; Sarmiento and Stahl, 2008), finding that while academically credible, they do not explicitly discuss the relationship between the collective context and leadership. Fieldwork can contribute to this area and provide empirical evidence which demonstrates how the subject areas inter-relate in practice.

Building on this point, the ‘network’ theme can be seen in points 18, 20, 23 and 27 (**table 2.4**). The strength of weak ties concept (Granovetter, 1973; Ruef, 2002) in particular appears to link strongly with other contributions in this field (Bruggeman, 2008; Johnson, 2010), specifically those surrounding social capital (Putnam, 2000; Rutten and Boekema, 2007; Wu et al, 2008). There is a suggestion that organisations should develop ‘fuzzy boundaries’ and that communication should not just happen in a hierarchical manner (Bruggeman, 2008). It is argued that having a wide range of contacts both internal and external to the organisation will help to improve levels of creative idea generation (Carson et al, 2003). It can therefore be argued that organisations need to act as platforms for idea generation by enabling individuals to develop many weak ties (Granovetter, 1973; Ruef, 2002) with diverse individuals. The perceptual map highlights relevant linkages and suggests that high density networks (Staber, 2008) encourage wider relationship recognition and that both

cohesiveness and diversity (Williams and O'Reilly, 1998; Webber and Donahue, 2001; Richard and Shelor, 2002; Daniels and McDonald, 2005) are important enablers of collective idea generation. Due to some sources (Staber, 2008; Klijn and Tomic, 2010) being critical literature reviews rather than empirical research, this study could add to the field by uncovering evidence to demonstrate how network and relationship theories link to the other factors affecting idea generation in SMEs.

Heterarchy is a key word appearing in point 18 of **table 2.4**. Exploratory work noted that micro organisations tended to strip away their hierarchy during the idea generation process and this finding was found to relate strongly to theories contained within the present literature (see Chaharbaghi and Cripps, 2007). **Figure 2.12** highlights the importance of these themes under the heading 'designing the collective context'. It demonstrates that this particular issue has potentially wide links to notions of strategic fit, the nature of creative idea generation and the understanding that 'generative error' needs to be encouraged in order for the maximum number of ideas to be produced.

The penultimate section of **table 2.4** has been titled 'guiding and structuring creativity' and the main themes can be seen in the perceptual map around the box marked 'control'. Current literature contains sometimes contradictory evidence regarding how much freedom individuals should be given to explore and how much managerial control is necessary to guide creative idea generation (Hitt et al, 1996; Leonard and Swap, 2005; Busco et al, 2012). Managerial control, as its own specific issue, will be discussed in the last section below so it will not be covered here. Measuring creative idea

generation, and mental processes in general, is difficult (Amabile, 1983) which is perhaps why the subject of creativity has not been studied in detail. Many sources (Baréz-Brown, 2006, 2009; Catmull, 2008; Johnson, 2010;) make the case for a degree of error to be tolerated in order to encourage creativity although Johnson (2010) goes further by explaining that only generative error should be encouraged. On paper this appears to be a reasonable conclusion but in practice it could be difficult to assess what forms of error are 'generative' and what forms simply waste time and resources.

The perceptual map arguably provides guidance on this particular issue as it suggests that there are links between control, generative error and the design of the collective context. Effective error control mechanisms could therefore be a key marker of environments that tend towards the production of many ideas. There is a clear link from this point back to the small business literature (Burns, 2007; Pullen et al, 2009). These sources propose that SMEs do not have the resources to explore numerous simultaneous avenues and that they instead rely on quickly spotting and exploiting a market niche in order to make a profit. It can therefore be hypothesised that effective environments for idea generation will have highly developed control or error spotting mechanisms and that these will work with the creative process in order to distil relevant ideas that have commercial potential.

A counter argument to the points discussed above suggests that a degree of irrationality is actually a positive influence on the creative process as it means that organisations will be able to explore different paths (Sawyer, 2006; Johnson, 2010). Creativity in itself is thought to be an evolutionary process with

new ideas being formed out of old ideas and hunches that litter the boardroom floor (Johnson, 2010). With this in mind, a key marker of environments that generate many new ideas may be the existence of some form of repository which captures old ideas and 'hunches' for later use. The perceptual map highlights this and links the idea of irrationality back to the design of the collective context. This is a tangible point which can be either confirmed or rebuffed by primary research.

The final area of interest emerging from this chapter is the issue of leadership. It can be argued that far from providing clarity, this review has actually posed more questions and that the issue of what 'effective' leadership for creative idea generation is now needs to be investigated in detail. The perceptual map demonstrates that leadership links widely within the territory to issues such as co-ordination, trust and control. Theories of transformational and servant leadership have risen as potentially being effective enablers of creative idea generation however these styles contain clear differences and primary research might consider if they are mutually exclusive or supportive. The literature review highlighted the following characteristics of transformational leaders (Taffinder, 1995);

- Create strategic white space
- Blow it up
- Make leaps
- Create corporate transparency
- Integrate change tactics
- Aim for change overload

These characteristics certainly appear to resonate with the qualities that creative individuals are thought to display (Majaro, 1992) however it is not clear how they relate to the characteristics of servant leadership. These leaders are understood to emphasise the holistic needs, development and autonomy of their followers rather than being preoccupied with performance beyond expectation (Graham, 1991; Sendjaya and Pekerti, 2010). This understanding is clearly very different to that of the transformational leader. It must also be noted that the leadership literature fails to consider the impact of concepts such as flow and high density networks. Fieldwork can therefore add to the existing knowledge base by highlighting whether (and how) these issues can be reconciled into a single model demonstrating how they interact in different environments.

A final area of contention in the literature surrounds managerial control. Certain theorists argue that strict managerial control is likely to inhibit creative idea generation (Hitt et al, 1996; Kirkman and Den Hartog, 2004), while others propose that that too little monitoring can also lead to poor levels of innovation (Leonard and Swap, 2005). It can therefore be argued that an 'effective' level of managerial control is likely to be a key marker of environments tending toward the production of many ideas, although the scope of the 'control' might be different in each context. Fieldwork will need to investigate the issue of managerial control and assess how it interacts with the other factors identified as being important to the generation of ideas.

2.9.2 Building a Conceptual Model

Discussions have now reached a point where the literature can be reduced down to a series of summary statements that best reflect current understandings of the factors external to the individual that affect idea generation. Given the analysis in **section 2.9.1** it can be proposed that these factors are;

- Provocative thinking which explores new paths in a flexible, probabilistic way
- An environment which enables individuals to enter the 'flow' state
- Enabling frameworks, triggers and cues which are supplied from the leader(s)
- 'Fuzzy' permeable boundaries and structures which facilitate the formation of many diverse ties between individuals and groups
- Tolerance of generative error which is guided by appropriate managerial control mechanisms
- Repositories of old ideas and hunches

While analysis of the literature could perhaps end here with research questions being introduced, the development of some sort of conceptual model may help to improve shared understanding of the literature territory. The model could then be used as a basis for data analysis, providing a useful starting point from which discussions could build. The model presented in **figure 2.13** has been constructed around the statements presented in the bullet list above. This model seeks to present the factors in a logical order, based on the researcher's analysis of the literature. It is a flow diagram, moving from left to right which

seeks to understand where the various factors might ‘sit’ in relation to one another. It is a hypothetical arrangement based on critical and systematic analysis of the existing literature which may or may not be modified as this study progresses. Discussions surrounding the conceptual model will continue in greater detail after **figure 2.13** has been introduced.

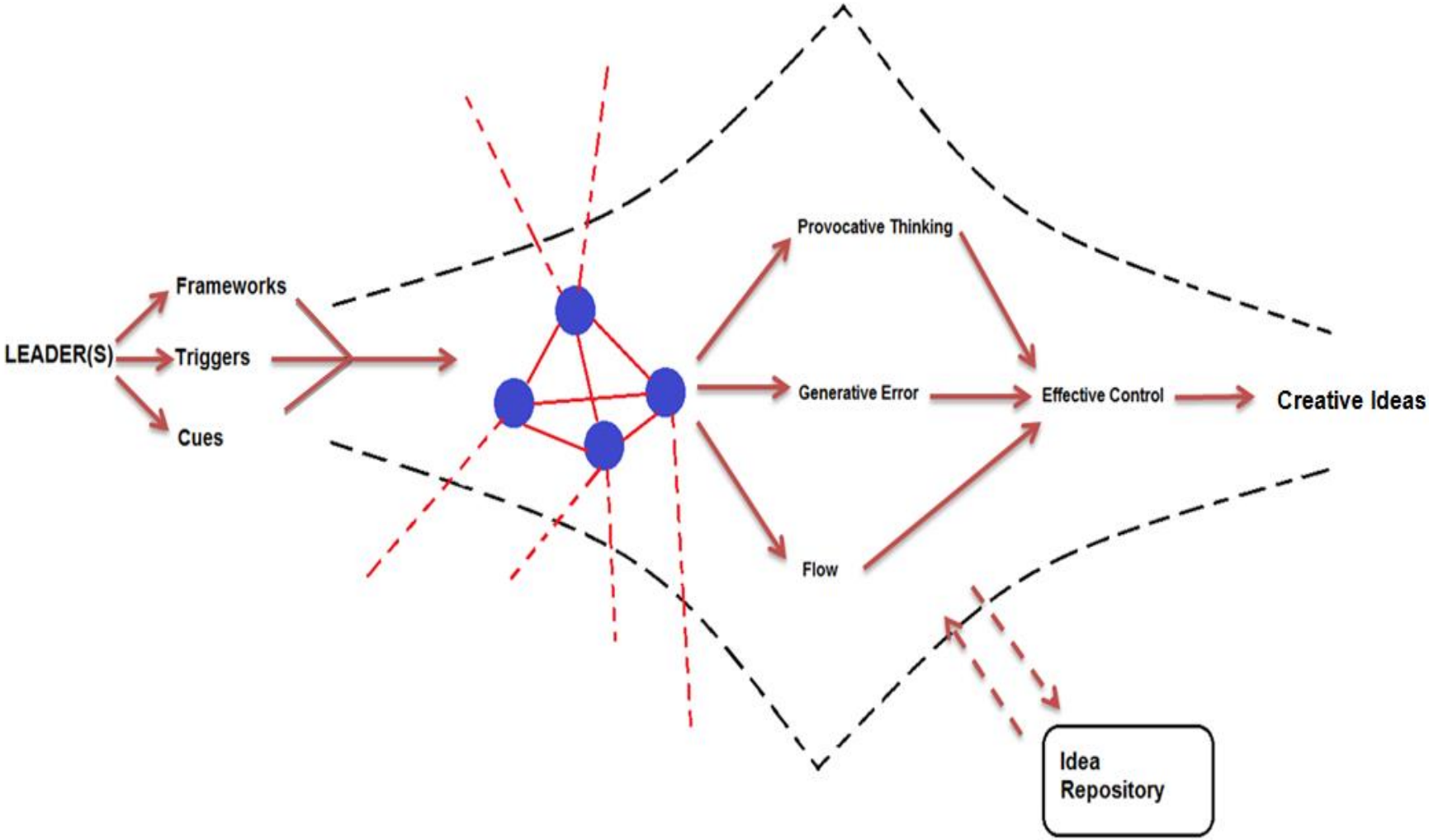


Figure 2.13: Conceptual Model Emerging from the Literature Review

Figure 2.13 shows how the key concepts identified in this literature review might interrelate. This model takes into account the fact that the literature surrounding idea generation in SMEs is not complete and that there are many different interpretations of the various factors. Arguably, there is broad consensus within the current body of knowledge that idea generation is important to SMEs but there is little agreement on exactly which factors external to individuals influence it and in what way. Perhaps a reason for this is the fact that small firms are incredibly diverse and therefore any generalisations about them are just that, broad generalisations which attempt to impose homogenous models onto heterogeneous organisations (Burns, 2007). This is why the conceptual model opposite above uses broad, common sense language, capturing the essence of concepts but not imposing complex, tightly defined constructs.

Despite highlighting potential issues associated with the production of a conceptual model, there are clear indications in the literature that leadership, the strength of weak ties, provocative thinking, flow, idea repositories, generative error and effective control are all important factors influencing idea generation. Having said this, it is important to recognise that reductionism (i.e. oversimplifying detailed concepts to the point of distorting them) is avoided during this study. While broad terms do need to be allocated to a model it is crucial that this thesis does not lose sight of the wider whole. Fieldwork and subsequent analysis will need to weave a richly detailed picture of idea generation in SMEs in order to examine potential ways in which these factors (and perhaps others) link together. Moving back to the literature, several sources quoted during the course of this review make generalisations about

idea generation and the factors that affect it but fail to point out whether these theories or suggestions are relevant across different organisations and sectors (see Pullen et al, 2009; Kempster and Cope, 2010). A significant number of these contributions are practitioner based (see Rudkin et al, 2001; Robinson, 2001, 2009; Johnson, 2010) and this study will, in part, add to the field by assessing the relative worth of these works.

Examining the conceptual model in more detail reveals that leadership has been placed at the very start of the continuum, with reference to the notion that leaders must set effective frameworks, triggers and cues (Ucbasaran et al, 2010). Moving one step over from this, the dotted outer lines represent the permeable boundaries of the organisation, a reference to the need for an effective external focus (Carson et al, 2003) or looking outside of the immediate context (Amabile et al, 1996; McLean, 2009; Pullen et al, 2009). These boundaries expand and contract to indicate the need to expand horizons through divergent or lateral thinking before condensing effort to something of commercial relevance through convergent or vertical thinking (De Bono, 1970; Penaluna et al 2010).

The four dots in the centre of the model represent different individuals and the connections between them represent weak ties (Granovetter, 1973; Ruef, 2002). Lines emanating from these individuals again represent the need to look outside the immediate context in order to generate new ideas (Amabile et al, 1996; Carson et al, 2003; McLean, 2009; Pullen et al, 2009). To the right of this are factors which have been termed ‘provocative thinking’, ‘generative error’ and ‘flow’. These factors are further representations of the concepts highlighted

before the conceptual model was introduced and have been developed from the evidence presented in the literature. Entering the flow state (Csikszentmihalyi, 1990, 1997, 2000) has been highlighted as being particularly important for effective idea generation. Previous discussions demonstrated that job design and the construction of an environment conducive to the flow state are vital to the overall success of creative idea generation.

Further to the right of the conceptual model a reference to effective managerial control can be seen. Detailed discussions in this chapter highlighted that organisations must find an appropriate way to control or guide the creative process (Hitt et al, 1996; Leonard and Swap, 2005; Busco et al, 2012). It is known that unfettered creativity can be dangerous and that there is a fine line between being creative and unleashing chaos in an organisation (Burns, 2007). This again shows how vital it is to filter ideas and thinking to move from generating fantasies to exploring commercially applicable ideas. Effective control has been placed towards the right hand side of the diagram as ideas first need to be generated before they can be guided in any particular direction or shaped by an individual or group. It could be argued that effective control should be present at the very beginning of the idea generation process and this is captured to an extent within the 'frameworks' or 'triggers' that the leader(s) might provide. Fieldwork will need to ascertain exactly where control is, and perhaps more importantly, where it is not needed within the creative process.

At the foot of the diagram a reference to idea repositories (Johnson, 2010) can be seen. This has been placed to the right of the diagram for formatting reasons but it is important to state that some sort of idea storage system may

be utilised at any stage of the idea generation process. This concept is the final marker of an environment tending towards the production of creative ideas. **Figure 2.13** indicates that ideas and information can flow into and out of this repository, capturing the understanding that old ideas and hunches can be recycled back into the process of generating further ideas. This is a direct link to the evolutionary rather than revolutionary way in which ideas are thought to emerge (Staber, 2008; Johnson, 2010).

It is very important to restate that this model is purely a hypothetical interpretation of how the factors which impact on idea generation might interrelate. It is acknowledged that the literature surrounding idea generation in SMEs is incomplete, and, for this reason the research questions which now follow seek to build an understanding of how these factors are perceived in a variety of contexts. In addition to this core question the study is also interested in whether the factors can be assigned levels of importance based on their influence over the idea generation process.

2.10 Research Questions

Before formulating research questions this is an appropriate moment to reintroduce the overarching aim which the questions must address. The aim of this study is;

"To explore the various organisational factors external to the individual that encourage the production of creative ideas in SME environments; what is their importance in a variety of organisational contexts?"

It is very important to restate that the factors of interest to this study are external to the individual rather than internal (Dewett, 2004; Puccio and Grivas, 2009; Baker and Baker, 2012) feelings, predispositions or reactions to the idea generation process. This decision has been made to ensure that this study is tightly focused and in no way implies that the external factors which impact on idea generation are more important than internal factors.

As has been noted at various points of this chapter, literature surrounding idea generation is incomplete. There are conflicting understandings of the various factors which affect idea generation in SMEs, with an example of one such conflict concerning the notion of management control. Contentions in the literature exist between those suggesting that too much control leads to poor levels of idea generation (Hitt et al, 1996; Kirkman and Den Hartog, 2004) while others (Leonard and Swap, 2005) argue that too little monitoring can also lead to poor levels of innovation. Arguably organisations need to find an 'effective' level of control or monitoring but the literature does not provide an indication as to what this might be.

Due to the various debates, contentions and differences that exist within the current literature it would be unrealistic to approach primary research from a positivist (Howell, 2013) standpoint. Fieldwork must proceed in a relatively open way, guided, but not being constrained by the literature. Due to the overarching aim the research questions must attempt to find out if current understandings reflect real world practice and whether there are additional factors that need to be included in any final model or understanding. Questions

must also attempt to find out whether or not the various factors that affect idea generation can be assigned levels of importance and whether (or not) it is possible to reliably identify the factors affecting idea generation across a range of different SME contexts. With these points in mind the questions which this study will take forward are as follows;

1. Is it possible to verify the conceptual model ascertaining whether there are common understandings of the individual factors? In particular;
    a. Are there further key factors which exist in real world environments that have not been highlighted by the literature review?
    b. Are there significant similarities or differences in the ways in which the factors operate to influence idea generation in different SMEs?

This first group of related questions will allow for the interrogation of the conceptual model presented in **figure 2.13**. It is known that the literature surrounding idea generation in organisations is incomplete and therefore a key strand of primary research must be to assess the relevance and integrity of the conceptual model. There is a specific emphasis on building an understanding of the relationships between the factors and whether there are additional factors that need to be included in order for the model to be considered an accurate reflection of reality.

2. Does the reality of organisational life in SMEs based in South West England allow for the factors identified by this study to be placed into a robust framework, model or hierarchy?

This question is specifically targeted at answering the second part of the overall aim. By assessing the reality of organisational life across a range of different SMEs this study will be able to produce a significantly more robust framework, model or hierarchy, developing current understandings of idea generation in SME contexts.

3. Is there a specific form of leadership that best enables idea generation in SME environments? How does this form or style of leadership interact with the other factors that have been identified as being important to idea generation?

Leadership has been highlighted as a key factor affecting idea generation in SMEs. Despite this, the literature review has identified that there are competing views as to which style, form or model of leadership best enables idea generation. This question will encourage detailed exploration of leadership, assessing how it interacts with the other factors in the conceptual model.

4. Is it possible to reliably identify the factors affecting idea generation across a range of different SMEs?

This final question seeks to assess the extent to which any conceptual model or understanding of the factors that affect idea generation can be generalised across different SMEs. It will potentially lead to the formation of a 'toolkit' that can be used to enhance idea generation within these environments.

2.11 Chapter Summary

The purpose of this chapter was to review existing literature surrounding factors external to the individual that affect idea generation. Discussions have examined a wide range of sources, both academic and practitioner in nature, culminating in the formation of a conceptual model (**figure 2.13**). This review has found that there are often conflicting understandings within the existing literature, an example of this being studies surrounding managerial control (Hitt et al, 1996; Leonard and Swap, 2005; Busco et al, 2012) and the type or style of leadership which can maximise idea generation (Taffinder, 1995; Politis, 2005; Sendjaya and Pekerti, 2010; Ucbasaran et al, 2010). Despite differences within the literature discussions have converged towards one conceptual understanding, an understanding that now needs to be explored through primary research.

Chapter three will explore and assess relevant methodological considerations. These discussions will examine the nature of the knowledge present within this study as well as various research approaches and techniques that may be relevant to this inquiry. It has already been suggested that the territory of creative idea generation is full of personal perceptions and views, with this as a backdrop can a robust, reliable methodology be created? It is this fundamental question that must now be addressed.

3.0 Methodology

Generating a robust, reliable methodology will enable this study to produce coherent answers to the research questions posed towards the end of the literature review. At this stage it is vital that epistemological and ontological issues are discussed alongside possible research designs and techniques. Further important issues attended to within this chapter include sampling and data analysis along with the position of the researcher. Qualitative research requires a much closer relationship between researchers and the objects of their study and therefore it is vital to understand how the position taken by the researcher influences data gathering.

Questions related to the nature of the 'idea' and discussions surrounding how idea generation differs from the broader processes of creativity and innovation were covered during the introduction (**section 1.2.1**) and will not be repeated here. With this understanding as a background, and to begin the process of formulating an appropriate methodology, attention needs to be directed firstly to understanding the nature of the knowledge present in this study.

3.1 The Nature of the Knowledge

Research tasks must take account of both ontological and epistemological considerations if they are going to add to existing knowledge bases (Creswell, 2007; Bryman and Bell, 2007). In broad terms ontological issues revolve around the nature of reality and ask when something can be considered to be 'real' (Creswell, 2007). Theorists argue that something can be considered to be

real when it is constructed in the minds of the actors involved in the situation (Guba and Lincoln, 1988). Based on this understanding it can therefore be suggested that reality is a product of the minds of 'actors' themselves rather than something which exists separately. This view is very much considered to be part of the 'relativist' school of thought, which is discussed in detail alongside the competing ontological positions of 'representationalism' and 'nominalism' (Easterby-Smith et al, 2008, p62).

Representationalists are said to believe that whether phenomena are concrete or not, it is only possible for researchers to gather indirect evidence of what might be going on in certain processes or systems (Putnam, 1987). As a result of this, 'truth' within research studies requires the verification of predictions; while facts might be concrete, representationalists believe they cannot be directly accessed. Relativists, given the information in the previous paragraph, argue that 'facts' will depend on the viewpoint of the observer while 'truth' is determined by finding a consensus between different viewpoints. This is due to the underlying belief that reality is essentially a product of the mind (Easterby-Smith et al, 2008). Nominalists attack both representationalists and relativists (Cooper, 1992) by arguing that it is actually the labels and names that individuals attach to experiences and events which are crucial. Nominalists therefore suggest that "what counts for the truth can vary from place to place and from time to time" (Collins, 1983, p88). Nominalists essentially believe that facts are human creations and that 'truth' in any given situation will depend on who establishes them.

Given previous discussions (**section 1.2.1**) regarding the nature of the idea, the ontological position of this study sits somewhere between the relativist and nominalist schools of thought. Ideas were said to be 'objects of the mind', or 'vague mental reconstructions of perceptions' (Magee, 2001). This means that ideas and the conditions which lead to their production may only be accessed indirectly, hence the belief that 'truth' may only be determined by aggregating various viewpoints and that what counts for truth may well vary from place to place and from time to time (Collins, 1983). During the literature review it was highlighted that there are many different understandings of creative idea generation and therefore the 'facts' within this study are likely to be both human creations and dependent on the viewpoint of the observer. Furthermore, the research questions themselves refer to 'common understandings' and the 'reality of organisational life', it can therefore be argued that 'truth' in this study will be determined through the aggregation of various different viewpoints. With all of these issues in mind there is evidence to support the view that ontologically speaking, the position of this study is somewhere between the relativist and nominalist schools of thought. Alongside ontological considerations management research literature highlights that epistemological issues are also of crucial importance.

Epistemological issues concern the question of what is (or should be) regarded as acceptable knowledge in a discipline (Easterby-Smith et al, 2008). At a basic level the literature review and the research questions that were ultimately developed from it, demonstrate that this study is concerned with qualitative rather than quantitative information. Qualitative research generally revolves around 'words' and 'meanings' while quantitative research generally focuses on

‘numbers’ and the focused analysis of data as set down within the principals of the natural sciences (Bryman and Bell, 2007).

Building from the above, preliminary studies (i.e. the exploratory study) discovered that every individual has a different interpretation of creativity. This finding was supported in the literature review where it was found that there are two wide schools of thought regarding creative idea generation. It can be argued that the subject matter surrounding this field is abstract, socially formed and full of personal constructs, as demonstrated by the plethora of meanings and understandings (see, for example, Amabile et al, 1996; Chaharbaghi and Cripps, 2007; Johnson, 2010; Klijn and Tomic, 2010; Penaluna et al, 2010) covered in the last chapter. It is crucial to understand that there are fundamental differences between knowledge in the natural and social sciences (Bryman and Bell, 2007). There is a debate regarding whether or not the social world can and should be studied with the same principles, procedures and ethos of the natural sciences (Easterby-Smith et al, 2008). Indeed, knowledge in the social sciences has meaning for human beings and therefore human action is meaningful (Bryman and Bell, 2007), lending credence to the understanding that scientific methods may well not be suitable for social research.

Knowledge in this study can arguably be defined according to the principles set down by Castells (2000). Knowledge in the information age is not an ‘object’ but is instead a series of networks and flows. It is a process not a product, and is produced not in the minds of individuals but in the interactions between people (Castells, 2000). This view resonates with the findings of the literature

review where many different interpretations of the various factors in the conceptual model were discussed. Based on this judgement it can be argued that knowledge in the domain of creative idea generation is socially constructed, abstract and interspersed with personal understandings. With this important point in mind, the role of the social scientist is to gain access to individual's 'common sense thinking' and hence interpret their actions and the social world from their point of view (Bryman and Bell, 2007). This discussion again reinforces the belief that the ontological position of this study is somewhere between the relativist and nominalist schools of thought.

Having constructed this understanding management research literature (Bryman and Bell, 2007; Creswell, 2007; Easterby-Smith et al, 2008; Howell, 2013) also details various understandings of research philosophies. These now need to be examined in some detail.

3.2 Research Philosophy

Essentially two broad traditions dominate the views of how social science research should be conducted; positivism and social constructionism (Easterby-Smith et al, 2008). Positivism is based on two underlying assumptions. The first of these assumptions is ontological and states that reality is external and objective. The second, epistemological assumption is that knowledge is only significant if it is based on observations of this external reality (Comte, 1853). It can be argued that given discussions in this thesis so far, this worldview sits uneasily with the subject matter of this study. The positivist philosophy implies that research should only be concerned with external, 'measurable' evidence

when the reality is that cultures, beliefs and intangible meanings will likely form the core of this study.

Social constructionism on the other hand suggests that ‘reality’ is not objective and exterior, but is socially constructed and given meaning by people (Easterby-Smith et al, 2008). Its basic principles were developed by authors including Berger and Luckman (1966) and Shotter (1993) and even from this brief introduction it arguably seems more compatible with the subject matter of this study, linking more closely with the nature of knowledge as defined by Castells (2000). Social constructionism focuses on how individuals make sense of the world through the sharing of experiences (Easterby-Smith et al, 2008). It must be noted that other terms exist in the management research literature such as ‘interpretivism’ (Bryman and Bell, 2007), but for consistency this thesis will refer to “social constructionism” only. Yet another term, ‘phenomenology’ exists in the management research literature (Bryman and Bell, 2007). This is thought to be a philosophy that is concerned with how individuals make sense of the world around them and so is subtly different to social constructionism. It is suggested that phenomenological approaches require researchers to bracket out their preconceptions of the world being studied. Philosophical considerations from this theory could be utilised within the final research framework of this study alongside those of social constructionism.

From this brief discussion it is apparent that an approach leaning towards the philosophy of social constructionism may be beneficial for this study. This conclusion is valid because it is thought that socially constructed concepts and

personal understandings are at the core of the knowledge which this study is seeking to uncover. Ideas, which are at the centre of this study, have been argued to be "tangible thoughts or suggestions which may or may not be expressed verbally but nevertheless add to, transform or manipulate current information, shared understandings or views in some substantial way" (**section 1.2.1**). These discussions noted that idea generation is an internal mental process and therefore it can be argued that the reality which this study is seeking to uncover is indeed socially constructed and given meaning by people. After all, without people there can be no ideas. Ideas do not exist externally of an individual; they are a product of the mind (Locke, 1690; Steiner, 1988; Magee, 2001). Further evidence to support this view surrounds the notion that knowledge in the information age is not an 'object' but is instead a series of networks and flows (Castells, 2000). It can therefore be argued that a study following positivistic traditions will not capture relevant information and data due to its focus on the observation of 'external reality'.

A colourful description of qualitative research is provided by Creswell (2007, p35). He proposes that qualitative research can be seen as;

"An intricate fabric composed of minute threads, many colours, different textures, and various blends of material. Like the loom on which the fabric is woven, general worldviews and perspectives hold qualitative research together."

Building on the understandings surrounding ontological and epistemological considerations and the underlying philosophies of management research, it is now an appropriate moment to explore various approaches which this study could adopt.

3.3 Research Approaches

It is known that there are two broad approaches which can be adopted within management research; deduction and induction (Hyde, 2000). The deductive approach clearly links with positivistic research philosophies (Guba and Lincoln, 1994; Hyde, 2000), with it being highlighted that it is the most commonly held view about the relationship between theory and research (Bryman and Bell, 2007). **Figure 3.1** shows a generally accepted view of the deductive research process.

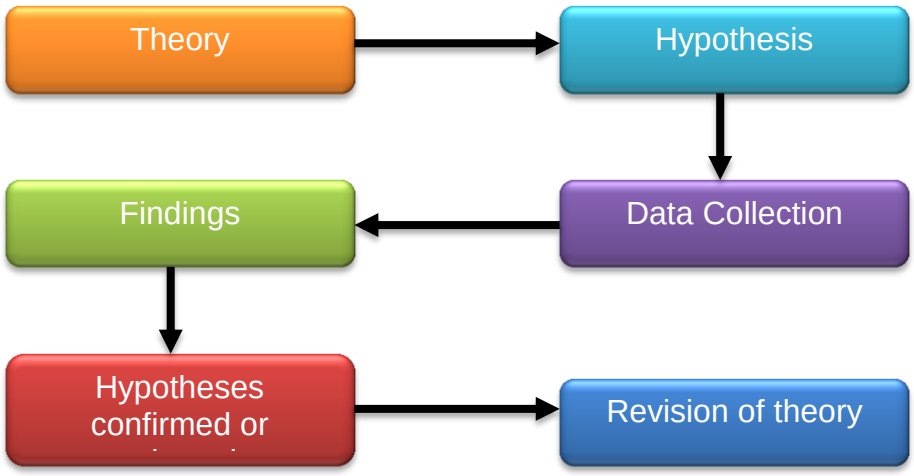


Figure 3.1: The Process of Deduction

Source: Bryman and Bell (2007) p14-15

Within the deductive approach, hypotheses are formed from existing theory with researchers looking to test existing beliefs and use collected data to either confirm or rebuff these theories (Hyde, 2000). As with positivistic philosophies, deductive approaches rely on researchers being detached from their 'experiment' so that they cannot personally influence the results. Further

literature suggests that within the deductive approach, researchers develop hypotheses based on what is known about a subject area and then either confirm or reject these frameworks through empirical research (Saunders et al, 2009).

An advantage of the deductive approach is that it can lend a level of validity and reliability to any results obtained as the methods adopted can be repeated; hence it can be argued that conclusions are generalisable to other situations (Guba and Lincoln, 1994). A potential disadvantage to the deductive approach, however, is that certain intrinsic aspects of a research topic might be overlooked (Bryman and Bell, 2007). A good example of this could be a researcher finding that a high rate of absence is being caused by particular work practices but missing an important element of organisational culture which is reinforcing those practices.

The alternative to deduction is induction. Induction is generally shown as the opposite of deduction with thought patterns moving from specific observations to broader theories and generalisations (Locke, 2007). This is shown in **figure 3.2**.

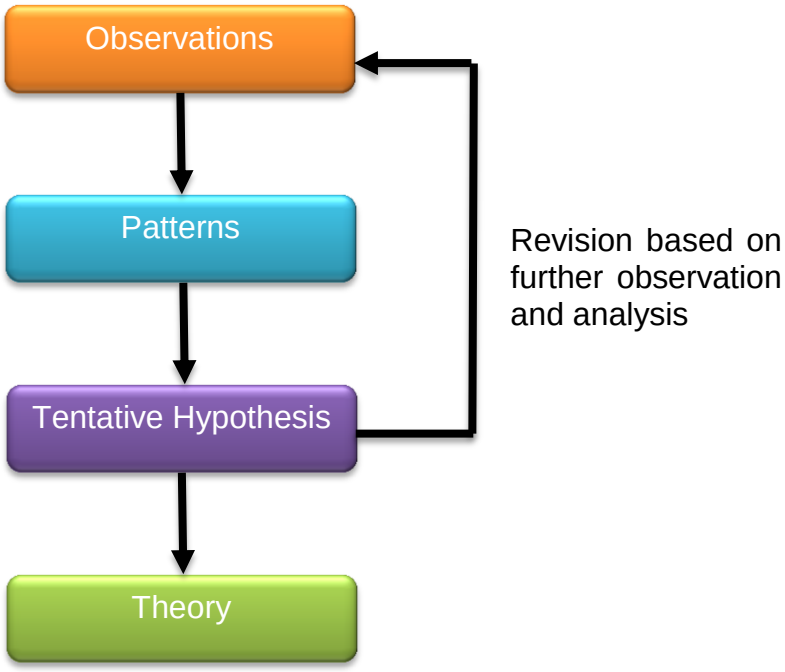


Figure 3.2: The Inductive Research Process

Source: Adapted from Locke (2007)

Figure 3.2 demonstrates that on paper the inductive research process does appear to work in the opposite direction to the generally accepted view of deduction. As a result of this difference, it is argued that induction is a relevant approach to complex issues where context is an important factor as these studies can then take place in an iterative manner (Hyde, 2000; Locke, 2007). Building up a conclusion in this fashion requires significant time to be taken within analysis processes, constantly exploring the gathered data and building new findings into a web of knowledge before arriving at a final conclusion. This theory links to ideas about the qualitative research process (Creswell, 2007) where it is stated that "like the loom on which the fabric is woven, general worldviews and perspectives hold qualitative research together" (Creswell, 2007, p35).

Theorists argue that theory building within the social sciences should follow the inductive model, i.e. broad generalisations and theory emerging from primary data (Locke, 2007). Three examples of successful inductive theory building are used to support these claims; Beck's theory, Bandura's social-cognitive theory and goal setting theory (Locke, 2007). As the territory surrounding creative idea generation is an emerging field it can be argued that from the evidence presented so far, an inductive approach would fit with this particular study.

In order for a research project to be successful, elements of both deduction and induction should be applied where they are relevant (Bryman and Bell, 2007). While the deductive approach is often said to be more predictable in terms of time and method it is clear that the contextual nature of the inductive approach could perhaps turn up unexpected findings. Within this study elements of both the deductive and inductive approaches could be appropriate. A deductive approach has already been used to some extent to take findings from exploratory work, compare these to the current literature and develop the conceptual model seen in **figure 2.13**. Applying elements of the inductive approach will ensure that the final research framework is 'open' and can capture relevant contextual information and data during the primary research process.

3.4 Research Design

Research designs explore the various structures that guide the execution of academic research (Bryman and Bell, 2007). It is vital to recognise that there are differences between research design and method, the former looking holistically at the framework of a study, while the latter is concerned with the

physical collection of data (Bryman and Bell, 2007; Saunders et al, 2009). Chosen research designs must fundamentally flow from underlying research philosophies (Easterby-Smith et al, 2008). Without this connection it is thought that data will not be tied to overarching research questions and therefore the credibility of any study will be undermined. Because of the assumptions made in previous sections of this chapter, this section will concentrate on research designs that are consistent with qualitative data. As noted previously, the material and data this study will collect is likely to be almost completely qualitative in nature therefore it would be inappropriate to spend time assessing quantitative research designs.

Before relevant research designs are introduced the concepts of reliability and validity must be considered. Measuring reliability essentially asks if the results of a study are repeatable while validity has two dimensions; internal and external (Quinton and Smallbone, 2006). Internal validity looks to see if the conclusions drawn follow the same train of thought as the analysis; in other words if any causal relationship between variables stands up to scrutiny. External validity, on the other hand, is concerned with the degree to which generalisations can be made beyond the specific context of a study (Bryman and Bell, 2007). The choice of research design will impact on the reliability of a given study as well as both its internal and external validity.

Research designs connected with qualitative data are discussed within several management research texts (see, for example, Creswell, 2007; Easterby-Smith et al; 2008; Saunders et al, 2009). Easterby-Smith et al (2008) suggest that constructionist research designs can include;

- Action research
- Ethnography
- Narrative methods

More broad based approaches are thought to include case studies and grounded theory. Creswell (2007) identifies five distinct qualitative research designs which are similar to those proposed by Easterby-Smith et al (2008);

- Narrative
- Phenomenological
- Grounded theory
- Ethnography
- Case study

Creswell (2007) provides brief notes about each design in the form of a table; an extract from this has been reproduced in **table 3.1** which appears on the next page.

Characteristic	Narrative Research	Phenomenology	Grounded Theory	Ethnography	Case Study
Focus	Exploring the life of an individual	Understanding the essence of the experience	Developing a theory grounded in data from the field	Describing and interpreting a culture-sharing group	Developing an in-depth description and analysis of a case or multiple cases
Type of Problem Best Suited for Design	Needing to tell stories of individual experiences	Needing to describe the essence of a lived phenomenon	Grounding a theory in the views of participants	Describing and interpreting the shared patterns of culture of a group	Providing an in-depth understanding of a case or cases
Unit of Analysis	Studying one or more individuals	Studying several individuals that have shared the experience	Studying a process, action or interaction involving many individuals	Studying a group that shares the same culture	Studying an event, a program, an activity, more than one individual
Data Collection Forms	Using primarily interviews and documents	Using primarily interviews with individuals, although documents, observations, and art may also be considered	Using primarily interviews with 20 – 60 individuals	Using primarily observations and interviews, but perhaps collecting other sources during extended time in field	Using multiple sources, such as interviews, observations, documents, artefacts
Data Analysis Strategies	Analysing data for stories, "restorying" stories, developing themes, often using a chronology	Analysing data for significant statements, meaning units, textual and structural description, description of the "essence"	Analysing data through open coding, axial coding, selective coding	Analysing data through description of the culture-sharing group; themes about the group	Analysing data through description of the case and themes of the case as well as cross-case themes

Table 3.1: Contrasting Characteristics of Five Qualitative Research Designs

Adapted from: Creswell (2007) p78-79

Table 3.1 demonstrates that each of the research designs has a different focus, unit of analysis and that they are best suited to different types of qualitative

research inquiries. It can be argued that the approaches best suited to this study are grounded theory, narrative research and case study.

Phenomenological designs have been discounted at this stage due to the fact that the study is not seeking to understand the 'essence of a lived phenomenon'. While it will be important to capture and assess key perceptions of the elements which underpin the generation of creative ideas inside organisations, this study is solely concerned with factors which are external to the individual. For this reason the phenomenological approach is unlikely to be rewarding.

Turning to the next design, grounded theory, this may be used in many different ways (Easterby-Smith et al, 2008); the key task within this design being to develop theory through comparative methods. The concept of grounded theory was first discussed by Glaser and Strauss (1967) who suggest that its key strength is that it allows for an event or process to be studied in a number of different settings. Both Glaser and Strauss have different interpretations of how grounded theory should be conducted. The former argues that theory and ideas should be allowed to emerge from data (Glaser, 1978), while the latter recommends that previous research and concepts are consulted and evaluated before data collection begins (Strauss, 1987). Despite these differences it is important to recognise that the use of grounded theory designs in organisational research may require compromises to be made in terms of timing, topic selection and the use of data (Easterby-Smith et al, 2008). This study will certainly need to be 'open' to new findings within the research process. It can

be argued that a design which is too static and focused may mean that any final conclusions lack generalisability.

Narrative research revolves around an understanding of spoken or written text giving an account of an event/action or series of events/actions which are chronologically connected (Czarniawska, 2004). Narrative research should have a specific contextual focus and given the information in **table 3.1**, this research design appears as if it could be relevant to this study. The validity of this conclusion is reinforced because the creative idea generation field is awash with personal perceptions of different factors. As a result of this, this study must attempt to capture these individual thoughts about wider, external issues.

Two general analytical strategies can be used in conjunction with narrative research (Creswell, 2007). The first approach collects descriptions of events or happenings and then fits these into a story using a plot line. The second strategy involves the development of paradigmatic 'reasons' which may be used within narrative research frameworks (Chase, 2005). These reasons are connected with how individuals are enabled or constrained by social resources, how they are socially situated in interactive performances and how narrators develop interpretations.

Generally speaking, narrative techniques are useful when researchers are looking to uncover personal meanings or understandings of events (Creswell, 2007). It can therefore be argued that the technique is very relevant to this particular study. In order to conduct narrative analysis, 'stories' surrounding an event must be collected and then re-ordered or re-told inside a general

framework which allows for cross comparability. This research design is not without its challenges however; particularly that it can be difficult to identify critical factors or events within source material (Edel, 1984). There are also questions regarding which version of a 'story' is convincing, what happens when different interpretations arise and how stories relate to the studied communities as a whole (Pinnegar and Daynes, 2006).

Organisational ethnography, by contrast, implies intense researcher involvement (Bryman and Bell, 2007). It is argued that in order to understand phenomena from an insider's stance, significant time must be spent in each study environment in order to understand relevant realities and cultures. Studying the information in **table 3.1**, it is clear that an ethnographic approach is relevant when it is necessary to describe and interpret patterns which reside in organisational culture and other intangible phenomena. Having said this, it is vital to understand that 'outsiders' inevitably encounter things inside organisations that they do not understand (Easterby-Smith et al, 2008). Immersion in the organisational environment is thought to allow researchers to become part of the research setting and therefore understand the meanings and significances that people give to their behaviour and that of others.

While some of the guiding principles of ethnography may be useful to this study, namely describing and interpreting the shared patterns and cultures of different environments, an approach which sits firmly in the ethnographic school is unlikely to be ideally suited to this research. This is because the research questions highlight the need to reliably identify the factors affecting idea generation across a range of SMEs. It can be argued that in this particular

study there is insufficient scope to engage in intense researcher involvement across a large range of organisations. A time estimate suggested that this may require in the order of thirty (30 months) to complete. As a result of this the final design, case study, might be more appropriate in this instance.

Case study designs go into great detail in order to establish the underlying variables in operation in a given situation (Saunders et al, 2009). This design is concerned with complexity and can enable the construction of a rich picture of events (Stake, 1995). This statement would seem to satisfy the needs of the research questions which clearly call for in-depth analysis of individual cases to enable wider comparisons to be made. Despite highlighting this point, an issue with the case study design is its external validity (Stake, 1995). This issue arises because of the design's focus on individual cases and means that it is unlikely that results can be generalised far beyond the boundaries of a study. It is also important to note that there are several different ways in which the case study design can be operationalised. In this particular instance where comparisons between different situations and environments are called for, a revelatory approach (Stake, 1995) is most relevant, allowing phenomena to be studied in an inductive fashion, linking findings back to the literature and forming broader understandings in an iterative way.

Bringing these discussions to a conclusion, it can be suggested that a research design which draws from the general principles of grounded theory, narrative analysis and case study designs will be relevant to this study. The phenomenological design has been discounted as the study is not seeking to understand the 'essence of a lived phenomenon', while time and resource

constraints rule the ethnographic design out. Despite not making use of the ethnographic design, this study will need to ensure that it captures perceptions of the factors that influence the generation of creative ideas although this will be arrived at through narrative methods.

Grounded theory is particularly relevant to this study because ideas must be allowed to emerge from the field. It has been acknowledged that the literature surrounding creative idea generation is not complete and as a result this study must be open to new ideas emerging during the research process. The narrative design will add to this, perhaps by capturing stories through interview sessions where personal views of events and/or factors can be captured and assessed against the conceptual model. Finally it will be important that this study can generate intricate organisational case studies from which comparisons can be made. Although questions remain about the external validity of the case study design (Stake, 1995), the broad range of settings which this study will explore should allow for detailed comparisons to be made and eventually theory to emerge. A key question which remains unanswered by discussions here relates to the position of the researcher, this will be the focus of **section 3.5**.

3.5 The Position of the Researcher

By its very nature qualitative research involves a more direct relationship between researchers and the objects of their study. Qualitative research is ‘messy’ and often deviates from original plans as researchers become aware of the 'political and ethical perils' of actually carrying out their inquiries (Irvine and

Gaffikin, 2006). Qualitative research has been the focus of much debate as it is often seen as being less reliable than quantitative research (Hannabuss, 2000). The case for validity becomes harder to make when research programmes set out to capture and analyse evidence based on a small number of closely examined cases, or evidence which seeks to represent the rich and idiosyncratic texture of a unique context, workplace or team (Hannabuss, 2000).

This particular study is seeking to cover the ground which both Hannabuss (2000) and Irvine and Gaffikin (2006) refer to. The primary goal is to explore the factors external to the individual that affect idea generation in SME environments. These factors are inevitably deeply embedded in organisations and therefore the position of the researcher is of crucial importance. Qualitative research of this nature often results in the generation of rich portions of prose which explore complex human and cultural dynamics (Bryman and Bell, 2007; Easterby-Smith et al, 2008). In order to generate theory, researchers are actively engaged in the data gathering process and therefore must be aware of how personal values, beliefs and worldviews impact on their overall perception of events.

This study is very much based on elements of grounded theory (Glaser and Strauss, 1967), narrative methods and case study research designs. Intricate research techniques revolving around the in-depth study of specific events are central parts of these designs and involve an attempt, on the part of a researcher, to understand what certain situations are like for individuals (Sanday, 1979). Ryan et al (2002) reinforce this point by stating that;

“Social systems are not natural phenomena, they cannot be understood independently of human beings and the researcher cannot be regarded as a neutral independent observer. The social reality must be interpreted by the researcher and, thus, case studies represent interpretations of the social reality.”

Source: Ryan et al (2002) p159

This quote states that researchers cannot be seen as independent observers and demonstrates that as a result of this, positivistic research designs are inappropriate within this type of qualitative research. The results which are obtained from the research methods used in this study are likely to be personal interpretations of situations seen through the researcher's beliefs and values. Building on this point it is important to recognise that qualitative research revolves around the 'value-laden nature of inquiry', which seeks answers to questions that stress the meaning of social experience. This clearly contrasts with the quantitative approach which emphasises measurement and analysis within a framework which is supposedly 'value-free' (Irvine and Gaffikin, 2006).

Because of the subject matter at hand, this study will involve active researcher involvement at all stages including literature reviewing, the development of research questions, collecting data and the subsequent analysis of that information. It is through this process that the ‘reality behind the reality’ may be discovered and underlying social processes in which creative idea generation is thought to reside may be analysed. Qualitative research depends on the nature of the problem to be investigated, the desire to gain a fresh perspective on a field and the commitment to give intricate details of phenomena that are difficult to convey with quantitative methods (Strauss and Corbin, 1990). Qualitative researchers therefore need to have a high tolerance of ambiguity and have

sufficient time to invest in research, which demands a continual interaction between reading, reflection and data gathering (Strauss and Corbin, 1990). The research process is therefore thought to be cyclical rather than linear and this clearly resonates with the inductive approach (Locke, 2007) presented in **figure 3.2**.

This study is very much concerned with how the 'cultural whole' is depicted. In order to form any concluding model, framework or understanding it will need to remain open to unexpected observations in the field. It is perhaps through active researcher involvement that these phenomena may be observed with participants becoming accustomed to the presence of an outsider, allowing entry into their personal spheres. Ryan et al (2002) provide an instructive quote to illustrate this point;

"If a researcher acknowledges that social systems are socially constructed and therefore can be changed by the activities of individuals located within a specific social context, then the researcher must also see himself or herself as "the instrument of their own research."

Source: Ryan et al (2002) p126

It can therefore be argued that those involved with qualitative research of this nature need to step beyond the production of narratives about the individuals being studied to include insights into the way these narratives come to be formed, i.e. through the thought processes and worldview of the relevant researcher. It is also important to note that qualitative research is a reflexive process since the researcher becomes part of the world that he or she is studying and therefore cannot avoid being affected by it. Researchers must

therefore find the right distance between themselves and the setting being studied; this is not an absolute science and involves on-going conscious effort (Irvine and Gaffikin, 2006).

Having recognised that there is a more direct relationship between researchers and the objects of their study within qualitative methodologies, how exactly has this relationship influenced this specific thesis? Initially it can be argued that the focus on idea generation as opposed to the wider creative process has been driven by the researcher's own interest in the topic. Although this decision has been defended it can subsequently be proposed that the factors identified in the conceptual model (**figure 2.13**) are interpretations of the literature seen through the researcher's own eyes, values and unconscious biases. Again, this issue is mitigated by triangulation between sources but the broader narrative thread, as in any study, has been developed by the researcher. Within the data collection phase itself qualitative techniques such as semi or unstructured interviewing (Bryman and Bell, 2007) have the potential to become conversations about subjects of personal interest to the researcher rather than seeking to uncover the 'truth' of any given setting. Specific data collection techniques will be covered in **section 3.7** but it is necessary to highlight the importance of developing robust data collection tools to moderate the influence that the researcher has. Finally, patterns uncovered during data analysis may occur as a result of the researcher overlaying personal values onto the data, implying connections where in fact none exist. While this may be a consequence of the value laden nature of qualitative inquiry (Irvine and Gaffikin, 2006), structured methods of data coding and analysis should minimise any inaccuracies, with the

principles of grounded theory (Glaser and Strauss, 1967) being particularly instructive.

3.5.1 How Have the Researcher's Own Values Impacted This Research?

Discussions over the past few pages have noted that qualitative researchers have a much more direct relationship with the objects of their study (Ryan et al, 2002; Irvine and Gaffikin, 2006). What is perhaps less well understood is the impact that personal values (on the part of the researcher) have on the way that concepts are seen and how, as a result, understandings are formed.

One way of eliciting personal values is through Neuro-Linguistic Programming (Grinder and Bandler, 1983). Having taken time to go through just such a 'values elicitation' session it became apparent that the researcher's own values include;

1. Making a meaningful contribution
2. Hard work
3. Completing things
4. Confidence
5. Helping organisations / others
6. Having value and being useful
7. Satisfaction (personal)
8. Being part of a community
9. Relaxation
10. Making a difference

A key point of interest emerging from this list of values is the sense that “being part of a community” is important to the researcher. It may well be that this particular value has implications for the significance attached to networks and the notion of ‘collective creativity’ during this research. Subconscious emphasis may have been placed on this area of literature and bias introduced into the study as a result. This is mitigated to a degree due to the fact that there is a significant and developing literature surrounding collective creativity (Hargadon and Bechky, 2006; Chaharbaghi and Cripps, 2007; Sarmiento and Stahl, 2008; Parjanen et al, 2012). As a result it is valid to include this concept in this study.

Several values in the list above revolve around the notion of working hard, finishing things and making some kind of ‘contribution’. These are strong values in the case of this particular researcher, being ranked at, or close to, the top of the list. The strength of these values means that the researcher will form stronger bonds and ties with individuals who share these values, again introducing a possible bias into the study. There is, of course, an argument that those in smaller organisations naturally have to work very hard to keep their businesses going (Burns, 2007), which is perhaps a reason for the researcher’s initial interest in that specific part of the business landscape. It is nonetheless vital to recognise that due to the close relationship between qualitative researchers and the objects of their study (Ryan et al, 2002; Irvine and Gaffikin, 2006), and the social constructionist design used by this thesis, values on the part of the researcher have a significant ability to unconsciously influence the research process. By eliciting these values a more robust defence can be

made of the methods and choices made within this thesis, decisions that have ultimately shaped the final output.

It is important to note that other studies connected to the fields of idea generation and creativity have made use of similar methodological approaches. Case study designs and grounded theory analysis techniques are utilised by studies such as Banks et al (2002) and Hortho and Champion (2011). These studies are published in peer-reviewed journals and referred to by other researchers in the field. Qualitative designs following social-constructionist or interpretative methods are utilised by Powell and Dodd (2007), Kempster and Cope (2010) and McAdam and Keogh (2004), the latter stating that there is an emerging preference for social constructionist approaches to small firm studies. Again these studies are published in respected journals, adding weight to the methodological approach utilised by this particular piece of research. This study is not alone in applying social constructionist methods, utilising case studies, grounded theory and various other elements from methodological approaches such as narrative methods. Previous studies have made use of similar methodologies, lending credibility to approach chosen here.

3.6 Sampling and Access Considerations

Selecting and gaining access into appropriate and relevant research sites is fundamental to the success of any study (Bryman and Bell, 2007; Thorpe and Holt, 2008). Various strategies exist, the relevance of each being determined by the underlying nature of knowledge and the selected research design (Easterby-Smith et al, 2008). Due to the fact that this study is exploratory in

nature, guided by elements of grounded theory, narrative analysis and the case study design it is necessary that the strategy chosen here allows for variation and difference to enter the sample. Sampling within qualitative research has been discussed by many contributors; **table 3.2** adapted from Miles and Huberman (1994) shows a number of different strategies that this study may wish to consider.

Type of Sampling	**Purpose**
Maximum Variation	Documents diverse variations and identifies important common patterns.
Homogenous	Focuses, reduces, simplifies, and facilitates group interviewing.
Critical Case	Permits logical generalisation and maximum application of information to other cases.
Extreme or Deviant Case	Learn from highly unusual manifestations of the phenomenon of interest.
Opportunistic	Follow new leads; taking advantage of the unexpected.
Combined or mixed	Triangulation, flexibility; meets multiple interests and needs.
Convenience	Saves time, money, and effort, but at the expense of information and credibility.

Table 3.2: Typology of Sampling Strategies in Qualitative Research

Adapted from: Miles and Huberman (1994) Page 28.

Due to the nature of this study it is highly likely that a sampling strategy leaning towards maximum variation and/or the extreme or deviant case method (Miles and Huberman, 1994) will be appropriate. In this specific instance homogenous sampling is likely to be ineffective because there is a need to capture broad

understandings rather than focusing on one or two factors that affect idea generation in SMEs. A further strategy that this study may wish to consider is ‘purposeful’ sampling (Patton, 1990; Creswell, 2007). A purposeful approach to sampling seeks to examine specific cases which illuminate the questions under study (Patton, 1990). Alongside this point it can be argued that data collected for this study in settings which are too similar will not allow for generalisations to be made outside of a particular community or business sector. A purposeful sample which contains different types of organisations and settings will enable broader conclusions to be reached which may subsequently permit the development of theory.

A further consideration which must be taken into account is the unit of analysis, is this at the individual, group, organisational or sector level (Creswell, 2007)? Given the aim of this study and its reference to 'SME environments’ and ‘organisational contexts’, it is logical to allocate the ‘organisation’ as the unit of analysis. This means that comparisons and inferences will be drawn by comparing organisations as a whole rather than examining and comparing individual events or situations across contexts. This will have implications for the number of organisations that need to participate in this study in order that the data set can be considered to be sufficiently detailed and broad in its scope.

At this stage it is very important to reiterate that different research designs call for different sampling strategies (Creswell, 2007). Pure narrative studies might focus on only one or two individuals while grounded theory designs may call for participants who can contribute to the development of theory. Ethnographic approaches to research call for sites with a specific cultural group to be studied

while case study approaches call for ‘unusual cases’ which permit maximum variation in the sample. This evidence again leads to the understanding that a purposeful (Patton, 1990) approach to sampling, seeking difference, and perhaps ‘unusual’ cases may well be most rewarding in this specific situation. Research settings will therefore be purposefully chosen depending on their relative levels of difference, the perceived ability of the environment to contribute to the development of formal theory and the accessibility of individuals who can engage in this type of research.

Two important sampling considerations revolve around the various sizes and sectors of the study organisations. Recent data published for the Office of National Statistics (ONS) (Wetherill, 2010) indicates that the economies of Devon and Cornwall rely on a broad spectrum of industries and organisations although there are higher percentages of agriculture, tourism and creative businesses than the national average. Due to this spread of organisations and the fact that this study is seeking ‘difference’ within the sample, it would be inadvisable to target specific sectors of the economy (e.g. tourism) because any differences in findings may simply be related to those specific sectors of the economy (Thorpe and Holt, 2008). Such a strategy may well inhibit the generalisability of any findings.

While reviewing the literature it was highlighted that SMEs are incredibly diverse (Burns, 2007). This perhaps complicates the sampling situation as a representative sample would need to be very large indeed. Due to the selected research design calling for in-depth research in each setting this is not appropriate for this study. Instead this study will need to look for convergence

or divergence within the sample, in other words do the same issues occur in all organisations or is it the case that the factors affecting idea generation are different in different SMEs. With all of these issues in mind one way to approach sampling is to split the study organisations into the various SME categories, i.e. 'micro', 'small' and 'medium'. For the purposes of this research a 'micro' organisation employs up to 10 individuals, a 'small' organisation is an organisation employing between 11 and 50 individuals while a 'medium' organisation will employ more than 51 but less than 250 individuals.

Given the information above it is important to state that this study is not built on the assumption that size influences idea generation in SMEs but splitting organisations into these categories will enable comparisons to be made between similar organisational environments (in terms of size) and across the spectrum of SMEs. This strategy will enable the verification (or otherwise) of the conceptual model and an understanding as to whether or not it is possible to reliably identify the factors affecting idea generation across a range of SMEs.

Alongside theoretical sampling issues research studies must also take access considerations into account. Researchers have noted that it is incredibly difficult to gain access into SMEs (Alcadipani and Hodgson, 2009; Altinay and Wang, 2009) due to the fact that these organisations are often very busy and have limited time and resources to devote to academic research. With this in mind it is therefore important to exploit any available professional or institutional network and/or contact list which might help in the construction of a relevant sample (Reveley et al, 2004).

With potential access issues present it is necessary to ensure that the feasibility of this study is thought through effectively (Buchanan et al, 1988; Thorpe and Holt, 2008). Research instruments (discussed in **section 3.7**) will need to capture necessary information whilst being as unobtrusive as possible, offering some information of value to the various organisations as an incentive to participate wherever this is possible. It will be necessary to locate organisational gatekeepers (Thorpe and Holt, 2008) and to emphasise the positive nature of the research study. Previous texts note that access requests associated with the investigation of organisational 'failure' or 'non-achievement' are quickly rebuffed (Saunders et al, 2003). Taking considerations surrounding sampling and access into account, the completed sampling grid is shown in **table 3.3**.

Sample Classification	Organisation (size in f/t equivalent employees)
Medium	A Healthcare (150) B Arts (130) C Marine / Manufacturing (55)
Small	D Social Enterprise (45) E Public Sector (32) F Leisure (15) G Retail / Tourism (11)
Micro	H Community Interest Company (4) I Software Design (4) J Consultancy (3)

Table 3.3: The Sampling Grid

Theoretical discussions have pointed to a need for maximum variation (Miles and Huberman, 1994) and a potential requirement for a purposeful (Patton, 1990) approach to sampling within this study. Organisations highlighted in the sampling grid arguably meet these needs, each being noticeably different from the others. Care has been taken to capture a variety of industries, not to ensure representativeness, but to add variation (Miles and Huberman, 1994) to the

fieldwork. As with most research studies there is an element of convenience within the sample, with organisations approached due to their relative proximity to the researcher and, equally, their willingness to engage with this study (Alcadipani and Hodgson, 2009; Altinay and Wang, 2009). Further information about each organisation in the sample including its location and notes about operations and/or goals can be found in **Appendix A**.

Arguments could be raised about a possible bias within this sample in terms of an organisations 'interest' in creative idea generation. Organisations with some sort of vested interest in creativity at work may have been more open to participating in this study while others with little interest may have automatically turned down approaches. This focus on subjects of interest is arguably an inevitable result of SMEs having limited time and resources (Alcadipani and Hodgson, 2009; Altinay and Wang, 2009). This possible bias in the sample may mean that these specific organisations are not representative of wider reality. This concern is mitigated however due to the use of a variety of networks through which organisations were approached (Reveley et al, 2004). Utilising links formed by various institutions and networks, this study has been able to access a wider range of organisations than would otherwise have been possible, including businesses that are not necessarily 'creative' organisations such as a leisure organisation (F), a marine/manufacturing setting (C), a retail/tourism establishment (G) and a consultancy firm (J). Diversity in this sample helps to reject claims of bias, with variation (Miles and Huberman, 1994; Creswell, 2007) arguably providing a strong platform from which this thesis can make a sound contribution to knowledge.

Sampling issues within this study encompass not only the study as a whole but also the selection of participants within each setting (Thorpe and Holt, 2008). If interviews, for example, are to be conducted then while it may be possible to cover every individual in a micro organisation, the same is unlikely to be true in a larger organisation, of perhaps twenty (20) or more. Two core principles underlie effective sample selection, 'representativeness' and 'precision' (Easterby-Smith et al, 2008). The former concerns the extent to which a sample is consistent with a broader population, while the latter relates to how credible a sample is. There are various methods of choosing a sample (Easterby-Smith et al, 2008);

- Simple random sampling
- Stratified random sampling
- Systematic random sampling
- Cluster sampling
- Multi-stage sampling

While random sampling may simply be too random for this particular study, and other techniques, such as cluster and multi-stage sampling may be too complex, a stratified random approach may well be appropriate (Bryman and Bell, 2007). If, for instance a target organisation has 5 senior managers, 10 middle managers and 20 operational employees then it makes sense to interview a proportion of each, selected at random. In other words, 2 senior managers, 4 middle managers and 8 operational employees could be seen. The sample would then take a 'slice' through the hierarchy, capturing perceptions and views at each level. Participants would need to be selected at

random, with one potential method being to list employees alphabetically and select the 1st, 5th, 10th, 15th and so on until the desired number of participants has been reached.

Having now thought through sampling and access considerations attention turns to the selection and design of research techniques.

3.7 Research Techniques and Methods

Business research literature (for example Bryman and Bell, 2007; Creswell, 2007; Easterby-Smith et al, 2008; Saunders et al, 2009) provides details of many different research techniques. Although terminology varies throughout, many different sources suggest that the following basic techniques are useful within qualitative research studies;

- Structured, semi-structured or unstructured interviewing
- Participant observation
- Focus groups
- Analysis of documentation and/or visual metaphors
- Surveys

All of the techniques noted above could potentially be useful at various points of this study. Discussions here will consider the types of data and types of 'truth' that each method is likely to provide and assess their applicability in the light of this information and other practical considerations.

Key discussions in this chapter (**section 3.1**), and the introduction regarding the nature of the idea highlighted that ideas are formed through mental processes which occur within individuals in response to some form of stimulus. Many of the sources highlighted in the literature review (for example, Staber, 2008; Johnson, 2010; Klijn and Tomic, 2010; Sailer, 2011) also indicate that evidence of the factors which affect idea generation resides in social processes and interactions. As a result it is arguable that relevant data will not be captured through techniques such as positivistic surveys and structured interviewing. In addition, this chapter has asserted that the ontological position of this study is somewhere between the relativist and nominalist schools of thought and therefore "what counts for truth may vary from place to place and from time to time" (Collins; 1983, p88).

Before specific research methods are considered the concept of 'truth' must be explored in some detail. Different research methods will provide different types of truth (Howell, 2013) and therefore relevant philosophical considerations must be attended to here. '***Correspondence***' theories of truth state that true beliefs and true statements correspond to the actual state of affairs (Prior, 1969). In other words, 'true' statements accurately define observed phenomena or artefacts (Prior, 1969). In contrast, '***coherence***' theories of truth (White, 1969) imply something more than logical consistency. For these theorists 'truth' requires that elements fit together within a system. Elements of a system can only be held up as 'true' if there is coherence with the whole (White, 1969). '***Constructivist***' theories of truth maintain that truth is constructed by social processes and is historically and culturally specific (May, 1993). These theories also maintain that power struggles within a community or group will also shape

its ‘truth’. Within this school of thought perceptions of truth are thought to be contingent on conventions, perceptions and experiences. Moving on, the ‘***consensus***’ theory of truth (Habermas and Shapiro, 1972) suggests that truth is whatever is agreed upon by a specific group.

There is compatibility between constructivist and consensus theories of truth although consensus theories tend to marginalise historical and cultural issues (Howell, 2013). ‘***Pragmatic***’ theories of truth are the final main group that must be considered here. Pragmatic theorists believe that truth can only be verified by the results of putting concepts into practice (Peirce, 1902). An alternate concept ‘***negative pragmatism***’ holds that “we never are definitely right, we can only be sure we are wrong” (Feynman; 1994, p152). This statement highlights issues with the perceived relationship between the physical observations of phenomena and underlying truths. These theories will be referred back to as an assessment is made about the applicability of each research technique.

Generally speaking, new forms of qualitative information and different methods of accessing this data emerge continuously over time (Creswell, 2007, p129). Having said this, all qualitative data can be grouped into the following four basic categories;

- **Observations** (ranging from non-participant to participant)
- **Interviews** (ranging from closed to open-ended)
- **Documents** (ranging from private to public)
- **Audiovisual** (including photographs, CDs and videos)

Data can be both synchronous (real-time) or asynchronous (non-real-time) (Creswell, 2007). It is also suggested that within qualitative research studies individuals must consider the use of 'living stories' and metaphorical narratives. Although researchers might have their own preferred data collection methods, these must not be seen as rigid guidelines (Creswell, 2007).

3.7.1 Interviewing in Qualitative Research

Interviewing in qualitative research can be structured, semi-structured or unstructured (Bryman and Bell, 2007), each being appropriate in different contexts (Jones, 1985). No research exists without some form of presupposition on the part of the researcher however, as data is collected, general worldviews and ideas are likely to change as concepts emerge and new areas of interest are uncovered (Jones, 1985). Different methods of interviewing provide different types of truth (Easterby-Smith et al, 2008). Structured interviewing where participants typically answer closed questions might have high levels of internal validity but will not allow for the 'reality behind the reality' to be directly accessed. Open-ended interview structures and questions can provide more detailed and situation specific information, but these interviews are likely to be less comparable (Creswell, 2007). Structured interviewing is likely to provide data consistent with the correspondence theories of truth (Prior, 1969). Piloting is essential if interviewing methods are to be effective because only then can researchers assess relative levels of observer bias, the effectiveness of particular questions and the design of the research instrument as a whole (Sampson, 2004).

In contrast to structured interviewing, the 'type of truth' emerging from a semi-structured interview process is likely to be a mix of correspondence (Prior, 1969) and coherence theories (White, 1969). From discussions considered within this chapter it can be proposed that the semi-structured interview might provide data which can be used to answer the research questions. While the literature review has provided a guide to the factors external to the individual that might affect the idea generation process it is acknowledged that there are gaps within the field. As a result of this, a research instrument seeking to assess factors emerging from the present literature in a closed manner will not allow new concepts or understandings to emerge. In order to fully explore the research questions in a variety of settings, the interview process must provide flexibility so that it can capture information which can be used to expand current understandings. When designing the interview 'guide' it is essential that appropriate language is used, researcher bias is considered, equipment and access issues are attended to and the process helps to build trust between the parties (Creswell, 2007; Easterby-Smith, 2008). The design of interview questions is a crucial variable in any qualitative study and the following set of principles provides useful guidance (Easterby-Smith et al, 2008).

- Each item or question must express only one idea
- Jargon and/or colloquialisms must be avoided
- Questions must be expressed in simple, straightforward language
- Researchers should avoid the use of negatives (i.e. adding 'no' or 'not' to a verb in order to give it the opposite meaning)
- Questions should not lead participants toward a certain answer

As stated earlier in this section, in order to gain information which will address the research questions this study must approach fieldwork in an open manner. This means that closed questions such as “does your environment enable you to produce ideas?” will probably not gather the information required to answer the research questions. Asking closed questions is likely to lead to yes/no responses and will not encourage interviewees to divulge information which perhaps sits deeper within their consciousness. Asking questions in an open way, examples would be, “can you tell me what idea generation means to you?” or “in what ways do you think leaders and managers can support the idea generation process?” will help the study to uncover more detailed aspects of the factors affecting creative idea generation.

Piloting of interview questions and guides is essential if fieldwork is to be successful (Sampson, 2004; Bryman and Bell, 2007). This process allows for researchers to test out specific lines of questioning to ensure that they are both understandable, and provide information that is relevant to answering the research questions. With this in mind, sample interview questions (see **Appendix B**) were piloted within two (2) small organisations in Cornwall, chosen due to ease of access and the detailed feedback that could be gathered about the suitability of questions in each setting. These organisations contained a mixture of professional, skilled and unskilled workers thus allowing for any issues with potential interview questions to be spotted early on. The final interview guide which could be used within this study is contained in **Appendix C**.

3.7.2 Participant Observation

Many sources discuss the use of participant observation in qualitative research (Bryman and Bell, 2007; Easterby-Smith et al, 2008; Saunders et al, 2009). There are a number of strategies that could potentially be adopted including complete participation, interrupted involvement, observation alone and semi-concealed research (Saunders et al, 2009). It must be stated that ethical issues surround the use of covert or semi-concealed research techniques and a further line of inquiry should assess how organisations 'guard' their idea generation processes and systems, as for some these may form part of their competitive advantage. Building on this particular point, the exploratory study found that micro organisations were keen to discuss their processes in detail however it cannot be assumed that larger organisations will be as willing. This issue will be assessed in greater detail when investigating the access available in target organisations during preliminary meetings with owners and/or managers.

Due to time constraints and the breadth of coverage needed to address the overall aim (i.e. examining a range of different organisational contexts), this study may only be able to engage in 'interrupted involvement' (Easterby-Smith et al, 2008). This process allows for periods of observation rather than true participation and could arguably occur alongside other techniques such as semi-structured interviewing. A number of issues present themselves when considering interrupted involvement, such as the researcher being seen as 'snooping' which can lead to a loss of trust and therefore an inaccurate view of the reality being studied (Easterby-Smith et al, 2008). As per the constructivist

theories of truth though, participant observation could allow for truth which is contingent on group conventions, perceptions and experiences to be revealed.

Arguably participant observation will likely be most useful in adding a further degree of rigour to this study. In other words it could potentially be used to confirm whether reality, as seen through the eyes of the researcher, matches with the data gathered through other techniques such as interviewing or surveying. It is important to state that the observations will be seen through the eyes of the researcher (Saunders et al, 2009), and that the mere presence of an outsider alone may alter the dynamics of any given setting (Easterby-Smith et al, 2008). However, using this technique in tandem with other data collection methods should allow for triangulation within the data set and any researcher bias to be identified and accounted for.

3.7.3 Focus Groups

A data collection technique which might encourage truth which is based on group conventions, perceptions and experiences to emerge is the focus group. Management research literature indicates that focus groups should be loosely structured but never without structure (Stokes and Bergin, 2006) and that these meetings should not be seen as many simultaneous individual interviews (Walker, 1985). It is said that the focus group environment must permit individuals to explore a concept, responding to the views and ideas of those around them in an ‘unthreatening’ environment (Krueger and Casey, 2009).

Focus groups could enable pictures depicting how various groups of individuals interpret the factors which affect the environment for idea generation to be built up. It is important to note that the presence of an outsider in any such setting may make individual participants more aware of the subject matter of this study. As a result of this, the dynamics and environment of the group may change and this in turn may result in inaccurate data being collected. Despite this point focus groups, properly framed and moderated, can be powerful research techniques (Bryman and Bell, 2007).

When developing questions and structures for focus groups, researchers confront many of the same issues as they face when designing interview guides/frameworks (Bryman and Bell, 2007). It can be argued that in this instance an approach which utilises a general framework built on the identified factors (from the literature review) that affect idea generation would allow for guided discussions whilst ensuring that individuals can bring forward points which perhaps have not been covered within the literature. Again, closed questioning such as “is this environment creative?” is less likely to spark a discussion than open questioning such as “can you describe your perception of the work environment within this organisation?” It would be important to ensure that the focus group stays concentrated on factors external to the individual rather than internal personal characteristics and qualities which might affect idea generation. If discussions stray then a guidance document must be used to enable the group to return to the main subject at hand. Group discussions must be set up and introduced effectively (Krueger and Casey, 2009). They suggest that effective focus groups keep the following points in mind;

- Getting individuals to introduce themselves to the researcher or facilitator
- Outlining the time commitment of the meeting or discussion
- Checking that participants are happy for the discussion to be recorded
- Highlighting that the discussion will remain confidential and that any text used within the final output of the study will be anonymous
- Clearly explaining the purpose of the focus group and allowing time for questions

Despite the advantages of focus groups as a data collection method, there are various disadvantages meaning that this technique may not be best suited to this particular study. Literature notes that focus groups can be influenced by dominant individuals and that the results can be 'trivial' when the goal is not strictly defined (Krueger and Casey, 2009; Saunders et al, 2009). This thesis has already argued that there are many different understandings of creative idea generation and for this reason it is important to be able to delve into *individual* understandings and views. This is not what focus groups are about (Krueger and Casey, 2009), hence their relevance to this particular study is questionable.

3.7.4 Analysing Documentation

Organisational documents can be incredibly useful sources of data (Bryman and Bell, 2007). Documentation in this sense may take the form of personal diaries and letters, publically available statistics, organisational charts and visual objects. Arguably this study might glean a wealth of information from organisational documents such as;

- Company newsletters
- Internal memos and minutes of meetings
- Organisational charts
- Operations or induction manuals
- Formal policy statements

Documentation might provide tangible clues about the factors that influence idea generation inside the various study organisations. It can be suggested that this information might provide a form of pragmatic truth (Peirce, 1902) about the reality which exists inside organisations. Further to this it can also be argued that organisational documentation may provide evidence to support a conceptual model of an environment. Alongside other information this may allow for a coherence 'truth' (White, 1969) to emerge from the research process with documentation supporting theories about the operation of the organisational system as a whole. Different levels of access will be available in different environments (Bryman and Bell, 2007). For this reason it is not possible to state with certainty that this study will be able to access a complete set of information from all of the study sites. Levels of access will need to be investigated during initial meetings with owners and/or managers with the intention being to seek information which falls under each of the five bullet points above.

3.7.5 Surveys

A number of different survey designs can be used within qualitative studies; factual, inferential and exploratory (Easterby-Smith et al, 2008). It can be argued that although a conceptual model has already been established from the literature, an exploratory design may be most beneficial for this study. It has already been acknowledged that the literature territory surrounding creative idea generation is incomplete and therefore it would be inappropriate to investigate the variables with a closed, factual survey. Using an exploratory survey together with other data collection techniques is likely to ensure that accurate information is captured about the various factors whilst ensuring that the research process is open to new input.

Under the correspondence theories of truth (Prior, 1969) it is argued that true statements correspond to the actual state of affairs. With this point in mind survey design is a crucial variable which must be attended to before data collection begins. Surveys are attractive to researchers because they are cheaper and faster to administer and can collect more information than a series of interviews (Bryman and Bell, 2007). This said, surveying is not without its problems. Survey responses cannot be probed and surveys cannot ask a series of what might be termed ‘difficult’ questions (Bryman and Bell, 2007; Saunders et al, 2009). With these points in mind it is clear that a survey within this study would need to ask clear, simple questions related to the factors identified through the literature review to ensure that answers reflect the ‘true state of affairs’.

Based on the understanding above it can be argued that asking individuals about concepts such as the 'strength of weak ties' or 'generative error' is unlikely to be effective. As the literature review has shown, individuals might have different understandings of these concepts or they may not understand them at all. Asking complex questions would arguably lead to unreliable data being collected because individuals may interpret questions or issues in different ways. In order to collect information relevant to the research questions, survey questions such as, "what is the general reaction you receive when something (i.e. a project or a task) does not go to plan?" and "how important do you think it is for people to be able to speak to many different individuals when trying to come up with new ideas?" should be included in any survey. These questions are related to the factors identified in the literature and use simple, commonly understood language. Questions such as these may benefit from being answered through free text fields rather than other formats such as yes/no tick boxes or likert scales (Bryman and Bell, 2007). Although this will add complexity to the analysis process, it will ensure that any survey follows the exploratory route of this study and is open to new variables and issues which may arise.

In addition to the issues outlined above, any survey template will also need to capture relevant contextual information (such as gender and age) and provide space for individuals to provide further data if they wish. By using surveys this study would collect information which correspondence theorists (Prior, 1969) believe would accurately identify the physical nature of reality. A survey template which could be used to capture data during this study appears in **Appendix D**; as before this template has been piloted in two separate

organisations and revisions made from the feedback received. While this survey will not, in itself, provide conclusive answers to the research questions it may well be a useful tool to begin to shed light onto various contexts. Developing effective and appropriate data collection instruments is vital to the overall success of this study. Discussions here have identified a number of relevant research techniques that could be employed, these will now be woven into a coherent plan.

3.8 The Research Plan

Combining the various research methods and techniques into a coherent plan is arguably the most important part of this study. Without an effective research strategy that utilises an appropriate range of data collection methods it will be impossible to reliably answer the research questions posed at the end of the literature review. This chapter has suggested that different research techniques will provide different types of 'truth' and the research plan must also take into account the socially constructed nature of reality which is at the core of this study.

Data collection for this particular study is likely to be complicated as the current literature surrounding the factors affecting idea generation in SMEs is incomplete. Yes, there are suggestions that specific factors can affect idea generation but there appears to be relatively little consensus towards any overarching framework, model or understanding. It is by providing this that this study will add to the current body of knowledge. Arguably the first key step that must be taken within this study is to obtain information about the basic

frameworks, structures and feelings about idea generation in the target organisations. Research literature suggests that this sort of information can be captured through an exploratory survey where relatively open questions are asked around some form of hypothetical model such as **figure 2.13** (Easterby-Smith et al, 2008).

Once the survey results have been analysed a basic picture of idea generation within the target organisations should have emerged. This picture will be broad and hazy but the survey data will point to particularly important areas. For instance 'effective control' may be a particularly important issue in 'Organisation A', while the ability to think broadly may be a key issue in 'Organisation B' and so on. In order to focus the pictures emerging from the various surveys the study then needs to employ a research technique to probe and explore specific issues, asking more complex questions which cannot be properly addressed through an anonymous survey. This is where semi-structured interviews may well be useful to this study (Bryman and Bell, 2007; Creswell, 2007). This form of interview will allow concepts and ideas to be discussed in a relatively open way whilst ensuring a degree of comparability between participants and organisational settings.

Section 3.7.1 suggested that interviewing participants in a very structured way is incompatible with the incomplete nature of the literature surrounding idea generation. Based on evidence presented earlier in this chapter it is clear that semi-structured interviews will enable different issues to be discussed in different organisations whilst ensuring that there is a degree of comparability in the data set as a whole. By using a series of semi structured interviews

alongside organisation wide surveys the research phase will gather detailed pictures of idea generation in the target organisations. Comparability will be ensured through the use of the standard template contained in **Appendix C** although the semi-structured nature of the interview will allow for flexibility in the data collection process. A further data collection technique that may well prove valuable within this study is participant observation.

Participant observation can help to capture truth based on group conventions, perceptions and experiences (Saunders et al, 2009). Although time, cost and access reasons may mean that this study can only engage with 'interrupted involvement', this data collection technique may well be able to allow for confirmation of findings from the survey and interview processes. In other words, it will allow the researcher to understand whether surveys and interviews have accurately described the reality of the organisation or whether differences in understanding exist. This will add to the rich picture of factors that affect idea generation in the various study environments. While observation may be a valid research technique, there still remains a question as to whether an individual who is external to an organisation will capture the same perceptions as members of any particular group inside that setting (Saunders et al, 2009). This is why it would be inadvisable to use participant observation alone, using the technique only in tandem with interviews and surveys to capture additional detail from each study site.

Bringing all of these techniques and thoughts together the final research plan is summarised in **figure 3.3**. This diagram shows the order in which the research

techniques will be deployed starting with organisation wide surveys and ending with a final observation session within each environment.

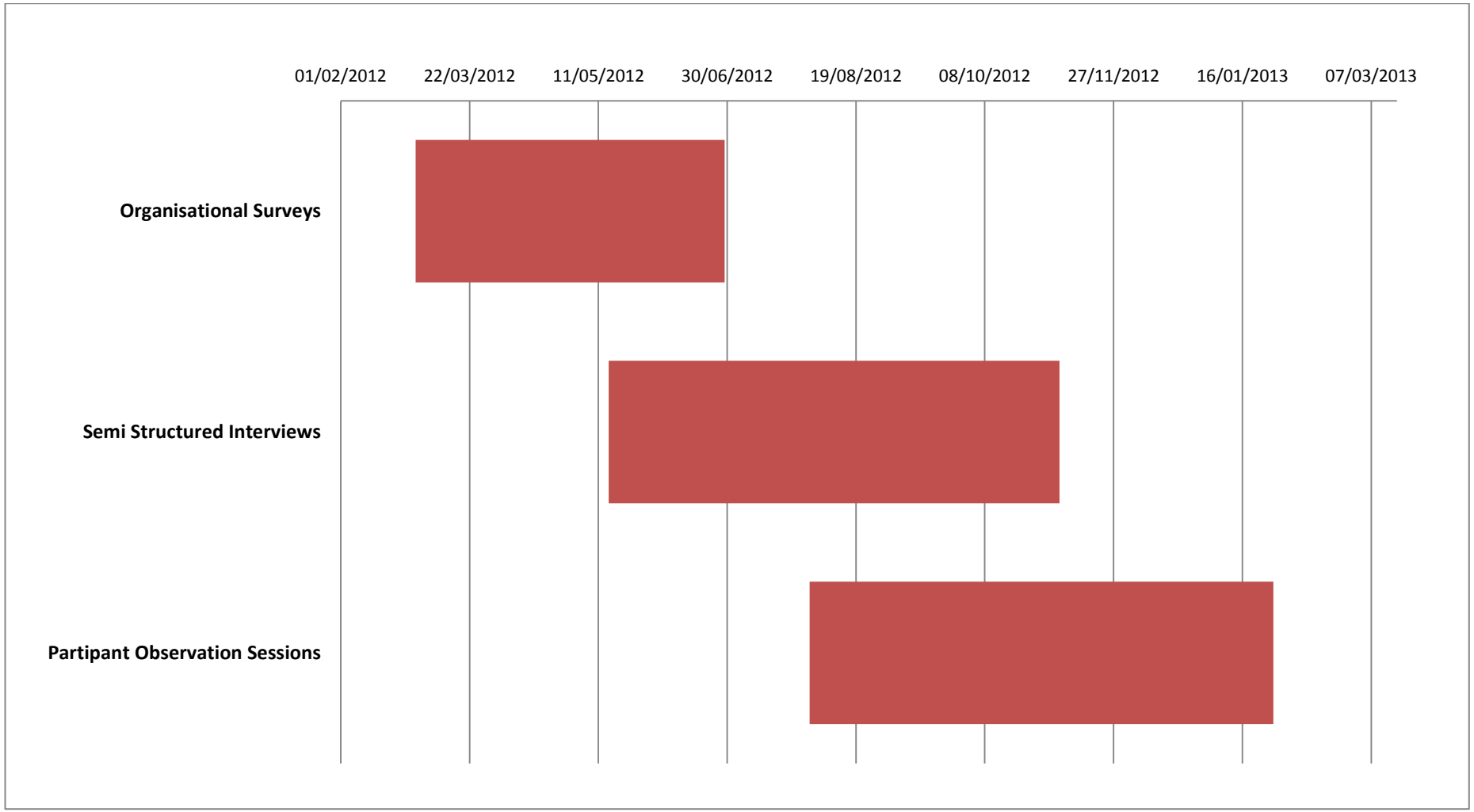


Figure 3.3 Primary Research Plan

Before this chapter goes further it is important to discuss one particular issue with the identified plan, the indicated overlap between methods. The plan indicates that semi-structured interviews may take place at the same time as surveys and that subsequent observation sessions may overlap with the end of the interview phase. These periods of overlap will be possible because fieldwork within organisations will likely begin at different times. As a result it will be possible to begin interviews with certain organisations while still gathering survey data from others and so on. It is important to recognise that this research plan will need to be fluid and adaptable, depending on the requirements and constraints of the study organisations. Due to the fact that SMEs have limited time and resources to engage with academic research (Alcadipani and Hodgson, 2009; Altinay and Wang, 2009) flexibility within this study will be crucial to its success.

To summarise, data collection within this thesis will comprise the following steps/stages;

- An initial meeting with company owner/managers to outline the study and investigate access
- Roll out and analysis of exploratory surveys, building a broad picture of each environment
- Conducting semi-structured interviews with a representative sample of employees from each setting
- Scheduling a series of observation sessions with agreement of owner/managers

- Formal de-brief with company owner/managers, relaying key findings and outlining how this relates to literature / other organisations.

Up to this point the chapter has covered a number of crucial issues from philosophical considerations to sampling and access and the design and deployment of data collection methods. Two key issues have yet to be discussed, data analysis and ethical issues. It is to these that attention must now turn, beginning with an overview of how data within this study will be analysed.

3.9 Data Analysis

While there are many ways of analysing qualitative data, it is important to choose a method that is consistent with the philosophical and methodological assumptions made during the research design (Easterby-Smith et al, 2008). Without this underpinning connection, the analysis process will not return information which can be used to address the research questions.

Likely outputs from the research methods selected for this study are detailed recordings and transcripts from interviews, completed surveys and notes developed from observations of the various organisational contexts. Broadly speaking there are two different ways to analyse transcripts and other written documentation; content analysis and grounded analysis (Easterby-Smith et al, 2008). The fundamental differences between these two methods are captured in **table 3.4**.

Content Analysis	Grounded Analysis
Searching for content (prior hypotheses)	Understanding of context and time
Causally linked variables	Holistic associations
Objective Subjective	Faithful to views of respondents
More deductive	More inductive
Aims for clarity and unity	Preserves ambiguity and contradiction

Table 3.4: Content Analysis vs. Grounded Analysis

Source: Easterby-Smith et al (2008) Page 173.

Given the nature of discussions up to this point of the chapter it is clear that the grounded approach to analysis is potentially more applicable to this study. This study is using an inductive approach with previous discussions noting the importance of holistic associations between the identified factors. In addition to this, truth within this study may vary from place to place and from time to time therefore an approach to analysis which remains faithful to the views of individual respondents is likely to be appropriate.

A further broad technique which is likely to be applicable here is narrative analysis. Stories arguably provide access to and appreciation for context (Tsoukas and Hatch, 1997) and this will be vital in order to develop rich, contextually appropriate case studies from which broader comparisons can be made. Narrative methods can be applied across a range of data (Easterby-Smith et al, 2008) and can assist in the interpretation of organisational 'stories'.

Although surveys have been designed for use within this study it is important to state that quantitative analysis of the results will likely be limited. While this

study is interested in relative rates of dispersion (Bryman and Bell, 2007), complex analytical techniques are unlikely to add to the general picture emerging from each organisation. The reasoning behind this statement is multi-faceted. Firstly, as the study is concentrating on SME environments the small size of the overall sample from each setting could be a potential issue. This study will not be able to claim representativeness, but it will look for either convergence or divergence of views. In other words, do the same issues arise in different contexts, leading towards one final understanding, or is it the case that very different factors affect idea generation across different contexts. It is also important to state that different individuals may interpret questions in different ways; this is because every individual has their own interpretation of creative idea generation (Johnson, 2010; Penaluna et al, 2010). Because of these issues, survey data will be analysed qualitatively, with the aim being to spot trends in narratives and words that individuals use.

Following on from the points made so far in this section it is important to highlight the computer software which will be used to analyse data produced by this study. There are a variety of packages available including SPSS and NVivo. As SPSS is generally useful within quantitative research it will not be used during this study, NVivo being the logical choice. This software will be used to store and assess written transcripts from individual interviews, observation notes and copies of the qualitative survey. Microsoft Excel will be used to analyse patterns from any ranking questions within the qualitative survey. It has been decided to use this software purely because the overall sample size is likely to be relatively small. Connected to the choice of computer

software, literature notes that coding is likely to be a crucial issue within this study (Creswell, 2007); it is to this that attention must now turn.

Grounded theory analysis is essentially based on three forms of coding; open, axial and selective (Strauss and Corbin, 1998). Open coding is the first step in the analysis process and is relatively indiscriminate. It seeks to derive general objects of note from individual transcripts or pieces of data. Axial coding seeks to take the information created through open coding and put it together in new ways. The aim within axial coding is to make connections between categories and sub-categories, understanding the 'core phenomenon' which can then be taken back to the raw data and other categories created around it. Finally, selective coding assists in the systematic formation of categories, validating any perceived relationships and encouraging a broader story to emerge that describes the interrelationships between the factors or variables (Creswell, 2007). NVivo will be used throughout this coding process, enabling the construction of various codes and the running of searches and queries within the data set.

The 'data analysis spiral' (seen in **figure 3.4**) (Creswell, 2007) is thought to capture the key stages of qualitative data analysis and describes the iterative nature of the coding process which this study will use.

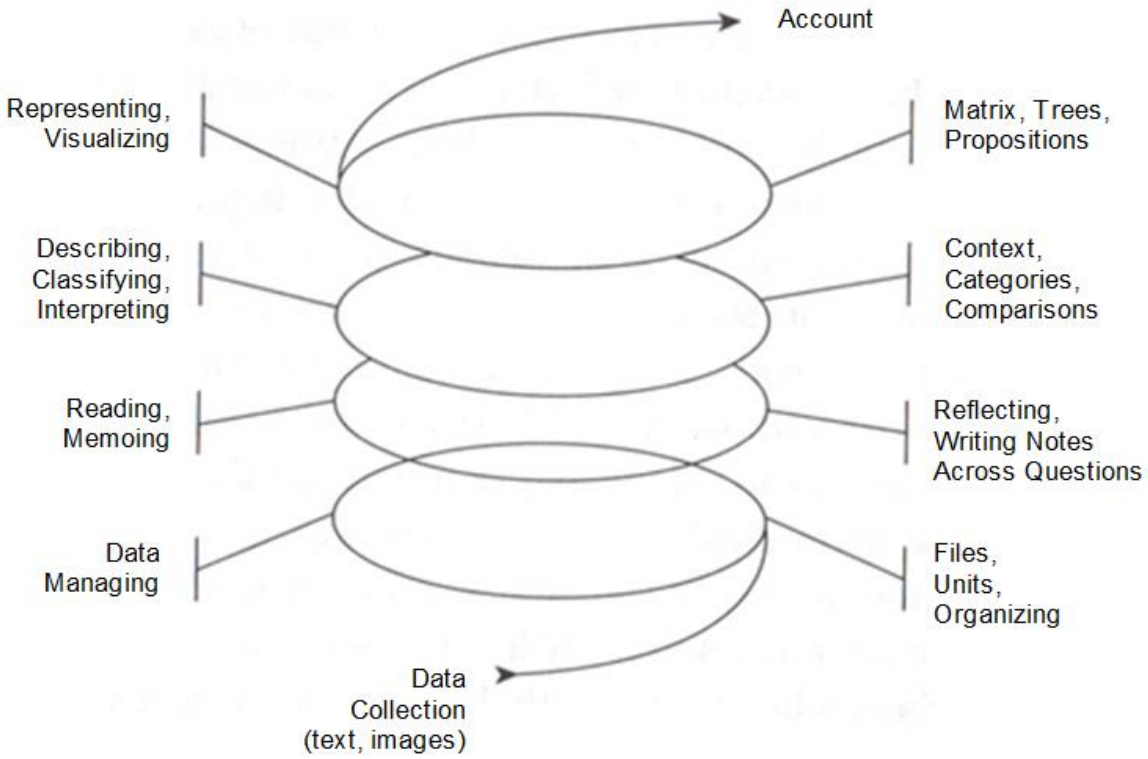


Figure 3.4: Data Analysis Spiral

Source: Creswell (2007) Page 151.

Qualitative analysis is an iterative process and this study will begin the analysis process as soon as data collection begins. The research plan (**section 3.8**) identified that exploratory surveys will initially be used to capture a broad view of each environment and interview questions may need to be tailored in each setting in order to investigate key issues. It is recognised that analysis of qualitative data is not straightforward (Bryman and Bell, 2007) and that constant comparison between collected information and the wider literature is vital if this study is to arrive at a useful contribution to the field. The practicalities of data analysis will be discussed in further detail during **sections 4.0** and **4.1**. A final key issue which must be considered here is data security. In keeping with the requirements of the Data Protection Act 1998 (Bryman and Bell, 2007, p143) this study must ensure that data is;

- Processed fairly and lawfully
- Obtained only for one or more specified and lawful purpose(s) and not processed further in any manner incompatible with that purpose or those purposes
- Not kept for longer than is necessary
- Not excessive in relation to the purpose or purposes for which they are processed

In addition to the points in the list above appropriate measures such as password protection, encryption and secure storage areas must be used where appropriate to prevent unauthorised access of the collected data (Bryman and Bell, 2007). This study will adhere to the requirements of the Data Protection Act 1998 and will ensure that all practical measures to ensure data security are taken.

3.10 Research Ethics

Researchers must be sensitive to ethical issues which may occur within research processes (Saunders et al, 2009). During discussions regarding the specific research techniques which will be used during this study, ethical considerations pertaining to participant observation were noted however these are only part of the picture.

Ethical considerations begin from the very start of fieldwork when access is negotiated into the research setting (Creswell, 2007). It is understood that

researchers must not misrepresent their studies and that good research studies seek to provide something of value to participants (Creswell, 2007). In this study, data regarding the environment within the organisation could be shared with research participants although care must be taken to ensure individuals cannot be identified from the information provided. Research studies must be sensitive to the potential of the research to disturb the study site (Hatch, 2002). Exit strategies must be considered before negotiating access into organisations (Hatch, 2002), with it being likely that the most appropriate strategy for this study will be a process of slow withdrawal, likely involving a final debrief with the owner/manager. This debrief session will allow relevant data to be fed back to the owner/manager and for an orderly, planned close to research activities.

A number of theoretical stances on research ethics exist, ranging from a universalist perspective which sees ethical precepts as things which should never be broken to a perspective where more or less 'anything' goes (Bryman and Bell, 2007). It can be argued that a universalist perspective is most appropriate for this study as it is only through the development of trusting relationships that this study will uncover the 'reality behind the reality'. During data collection and analysis phases the privacy of participants will be protected through the removal of names and specific pieces of information which could lead to individuals being identified. During the data collection phase itself interview questions will be omitted if participants make it clear that they do not want to provide certain pieces of information. Participants will also be informed that they can withdraw at any time if they wish. In order to draw attention to the purpose and requirements of this study all interview participants will be required to complete a 'participant consent form' (Anderson, 2009). This form will alert

individuals to the information that is being requested, how that information will be kept confidential and what they can do if they wish to withdraw from the study at any point. A copy of this form is contained in **appendix E**.

By ensuring that the points made within this section are kept in mind, this study will make certain that data is collected in an open manner which respects the dignity of participants.

3.11 Chapter Summary

This chapter has discussed methodological considerations specific to this particular study. Text concerned with ontological issues argued that the position of this study sits somewhere between the relativist and nominalist schools of thought. This judgement flows from the finding that ideas are 'objects of the mind' and 'vague mental reconstructions of perception'. It was also suggested that because individuals may attach different labels to phenomena what counts for truth is likely to vary from place to place and from time to time (Collins, 1983).

From an epistemological perspective this study is very much located within the realm of qualitative research, indeed as Castells (2000) argues, knowledge in the information age is not an 'object' but is instead a series of networks and flows. From discussions in **section 3.1** it was held that knowledge within the field of idea generation is socially constructed, abstract and interspersed with personal understandings. Building on this, discussions surrounding relevant research philosophies concluded that an approach which leans towards the

philosophy of social constructionism may be beneficial to this study. It was argued that this stance has validity because it is thought that socially constructed concepts and personal understandings are at the core of the knowledge which this study is seeking to uncover.

When considering research approaches and designs it was suggested that an inductive approach may benefit this study. This conclusion was reached due to the understanding that the literature surrounding creative idea generation is incomplete, and that primary research needs to remain open to new understandings and findings from the field as a result. Several research designs including narrative research, phenomenology, grounded theory, ethnography and case studies were considered. The positives and negatives of each design were discussed in detail and it was suggested that a design drawing from the general principles of grounded theory, narrative analysis and the case study method may be relevant to this study.

Following this, it was noted that the position of the researcher is a crucial variable within qualitative research. This form of inquiry can be ‘messy’ and often deviates from original plans as researchers become aware of the 'political and ethical perils' of actually carrying out their research (Irvine and Gaffikin, 2006). The nature of the research approaches requires the researcher to be an active participant during data collection. It is therefore important to highlight that the results which are obtained are likely to be personal interpretations of situations seen through the researcher's own beliefs and values. The choice of research design will affect the relevance of different sampling strategies (Creswell, 2007). It was said that this study must find relevant organisational

settings which can contribute to the development of theory while also allowing ‘difference’ to enter the research process. It is only by examining ‘unusual’ cases that maximum variation will be captured within this study.

There are many different research techniques that qualitative studies can employ including interviews, surveys, participant observation and the use of focus groups (Bryman and Bell, 2007; Creswell, 2007; Easterby-Smith et al, 2008). Discussions highlighted that each research method might uncover a different type of ‘truth’. The final research plan was discussed and justified in **section 3.8**, while the two subsequent sections covered data analysis and ethical considerations. When exploring data analysis techniques it was argued that a grounded approach will enable holistic associations to be made whilst preserving the ambiguity and contradictions which will inevitably be present within the data. Ethical considerations essentially revolve around not representing the study as something which it is not and ensuring that care is taken when entering and exiting the various research environments. Data confidentiality and security were also highlighted as important issues alongside the fact that participants must be free to withdraw from the study at any time and for any reason.

The following chapter will discuss findings from this research study, analysing key trends and patterns within the data that has been collected.

4.0 Findings and Analysis

The most fundamental word in the overall aim of this study is “explore”. Previous chapters have highlighted the vast scale of the creativity literature and pointed out that despite there being a number of useful contributions (including Amabile et al, 1996; Martins and Terblanche, 2003; Chaharbaghi and Cripps, 2007; Klijn and Tomic, 2010; Penaluna et al, 2010) there are still significant gaps in our understanding. Previous work (see Woodman et al, 1993; Amabile et al, 1996; Andriopoulos, 2001) has attempted to model the factors that affect an organisation’s ability to generate ideas although discussions within the introduction and literature review highlighted the dispersed and fragmented nature of the current territory. This research exercise set out to identify and understand the various gaps in the field, aiming to produce a model or framework of some kind which could ultimately assist in the identification of the factors affecting idea generation across a range of different SMEs.

Before embarking on analysis it is crucial to set out the structure of this chapter. Many research studies will, rightly, list findings from each individual setting, relate these directly to research questions and present information in a very structured way (Bryman and Bell, 2007; Easterby-Smith et al, 2008). Due to the inductive nature of this particular study (Locke, 2007), where knowledge is not an ‘object’ but is instead a series of networks and flows (Castells, 2000), it can be argued that a chapter seeking to fit data into a formal structure is likely to lose touch with the original context from which findings were drawn. Within the methodology it was highlighted that holistic associations between the identified factors are likely to be of crucial importance and that this research study will not

arrive at informative conclusions unless analysis is able to locate these factors within a larger, unified whole (Tsoukas and Hatch, 1997).

Keeping the thoughts above in mind, this chapter is divided into five different sections, each with a defined purpose and goal. **Section 4.1** will provide an overview of the data collected during the fieldwork phase, highlighting the steps that have been taken to ensure that views presented within this analysis are typical and balanced. Discussions in **section 4.2** will guide readers through a journey interrogating the factors contained within the initial conceptual model presented at the end of the literature review. This discussion will provide a foundation for answering the first research question which asked whether or not it was possible to verify the conceptual model and if there were additional factors affecting idea generation that were not captured by the initial literature review. Moving on, **section 4.3** will identify factors affecting idea generation that were not captured by the initial literature review. In keeping with the exploratory nature of this study the methodology was purposely designed to be open to ensure that 'new' findings emerging from the field could be incorporated into any final understanding and/or model produced by this research. Finally, **sections 4.4** and **4.5** concentrate on 'leadership'. It has been decided to analyse leadership separately from the other factors affecting idea generation simply because of the large amount of data (and literature) that has been collected about this subject. This decision in no way implies that leadership should be seen as being detached from the other factors affecting idea generation, indeed, this chapter will discuss these relationships in considerable detail.

4.1 The Data

While methodological considerations were discussed in detail during the last chapter it is important to understand the depth of the data collected before analysis begins. In keeping with the principles of grounded theory (Glaser and Strauss, 1967; Glaser, 1978; Strauss, 1987) data collection methods were adapted to suit individual contexts, allowing key topics and concepts to emerge naturally during the fieldwork phase. **Table 4.1** provides an overview of the data that has informed this analysis while **table 4.2** provides extra detail surrounding the semi structured interviews. Examples of completed surveys, interview transcripts and observational notes can be found in **appendix F**. Detailed statistics regarding the qualitative survey are presented in **appendix G**, this includes information about the pilot study, the covering note and, where appropriate, includes quantifiable responses to the questions asked.

Organisation	Approximate Size (number of full-time employees)	Sector	Data Gathered		
			Surveys	Interviews	Observational Visits
A	150	Healthcare	15	8	3
B	130	Arts	25	12	4
C	55	Marine / Manufacturing	15	10	3
D	45	Social Enterprise	19	4	2
E	32	Public Sector	6	5	2
F	15	Leisure	10	7	2
G	11	Retail / Tourism	4	3	3
H	4	Community Interest Company	4	2	2
I	4	Software Design	3	3	3
J	3	Consultancy	3	3	2
		TOTALS	**104**	**57**	**26**

Table 4.1: Data Overview

Organisation	Size (number of f/t employees)	Total Interviews	Senior Managers	Middle Managers*	Junior Managers*	Professional / Craftsperson	Administrative / Manual
A	150	8	1	2	1	2	2
B	130	12	2	2	3	3	2
C	55	10	2	2	0	3	3
D	45	4	1	1	0	2	0
E	32	5	1	1	0	2	1
F	15	7	2	2	0	2	1
G	11	3	1	0	0	1	1
H	4	2	1	0	0	1	0
I	3	3	2	0	0	1	0
J	3	3	1	0	0	2	0
TOTALS		**57**	**14**	**10**	**4**	**19**	**10**

Table 4.2: Interview Summary

**Please note that not all organisations participating in this study were large enough to employ 'middle' and/or 'junior' managers.*

The data highlighted above was collated, analysed and then used to produce case studies. These case studies sought to tell the 'story of idea generation' in each setting, allowing for access to and appreciation of context (Tsoukas and Hatch, 1997). Copies of these case studies may be found in **Appendix H**.

A key issue facing researchers, particularly those collecting and analysing qualitative data, revolves around the presentation of findings. It is understood that in order to arrive at credible conclusions views from research participants must be typical and balanced (Creswell, 2007). Studies must not simply seek out information and contributions which support initial hypotheses or, in this case, conceptual frameworks. Issues surrounding the writing of qualitative studies have been widely discussed (Glesne and Peshkin, 1992; Stake, 1995; Gilgun, 2005) and the previous chapter acknowledged that active researcher

involvement in data collection requires an appreciation of how personal values, beliefs and worldviews impact on the perception of events. While there may be no fixed format for the reporting of case study research (Merriam, 1988) it is important to discuss the processes by which the information presented in this chapter was uncovered and explored.

In keeping with the exploratory nature of this study analysis was conducted according to the principles of grounded theory (Strauss and Corbin, 1990, 2008). Having collated and transcribed data, analysis focused on developing categories of information (open coding), interconnecting the categories (axial coding) and building a 'story' that connects the categories (selective coding) (Creswell, 2007, p160). During the initial phase data was examined in a relatively unstructured way with an emphasis on locating broad themes that appeared to run through the data set. Having uncovered these themes attention then switched to exploring them in considerable detail, returning to the data set to understand the dynamics of different situations and how the various themes operated across different contexts. Simultaneously these themes and/or categories were related to one another (axial coding) with the intent being to understand the various forces, variables and views across the sample. The case studies contained in **appendix H** represent the final output of the analysis phase. Broadly speaking analysis was conducted in an iterative way, relating findings to relevant literature as and where appropriate. The literature, while incomplete, provided a basic outline of the territory upon which new constructs were pinned and subsequently developed. An example of this process in action appears in **subsection 4.3.3** where it is suggested that organisational visions can be used to guide the production of new ideas.

Grounded theory analysis can be presented in a number of ways including hypotheses (Creswell and Brown, 1992) and visual models (Morrow and Smith, 1995). The intent within this particular chapter is to analyse key themes that are present in the data set rather than focusing religiously on the construction of a particular model or framework. This approach has been chosen to ensure that there is no fixation on arriving at a specific outcome; the emphasis is, instead, on exploring the data set and understanding the reality of organisational life.

4.2 Starting the Analysis: The Conceptual Model

Deciding upon a starting point for this analysis is arguably the most difficult task. Logically, the most sensible starting point is the model derived from the existing literature, a copy of which is presented in **figure 4.1**. This model captures the following concepts, arranging them into a framework which demonstrates how they *may* interact in order to influence the production of ideas in SME environments.

- Provocative thinking which explores new paths in a flexible, probabilistic way
- An environment which enables individuals to enter the 'flow' state
- Enabling frameworks, triggers and cues which are supplied from the leader(s)
- 'Fuzzy' permeable boundaries and structures which facilitate the formation of many diverse ties between individuals and groups
- Tolerance of generative error which is guided by appropriate managerial control mechanisms

- Repositories of old ideas and hunches

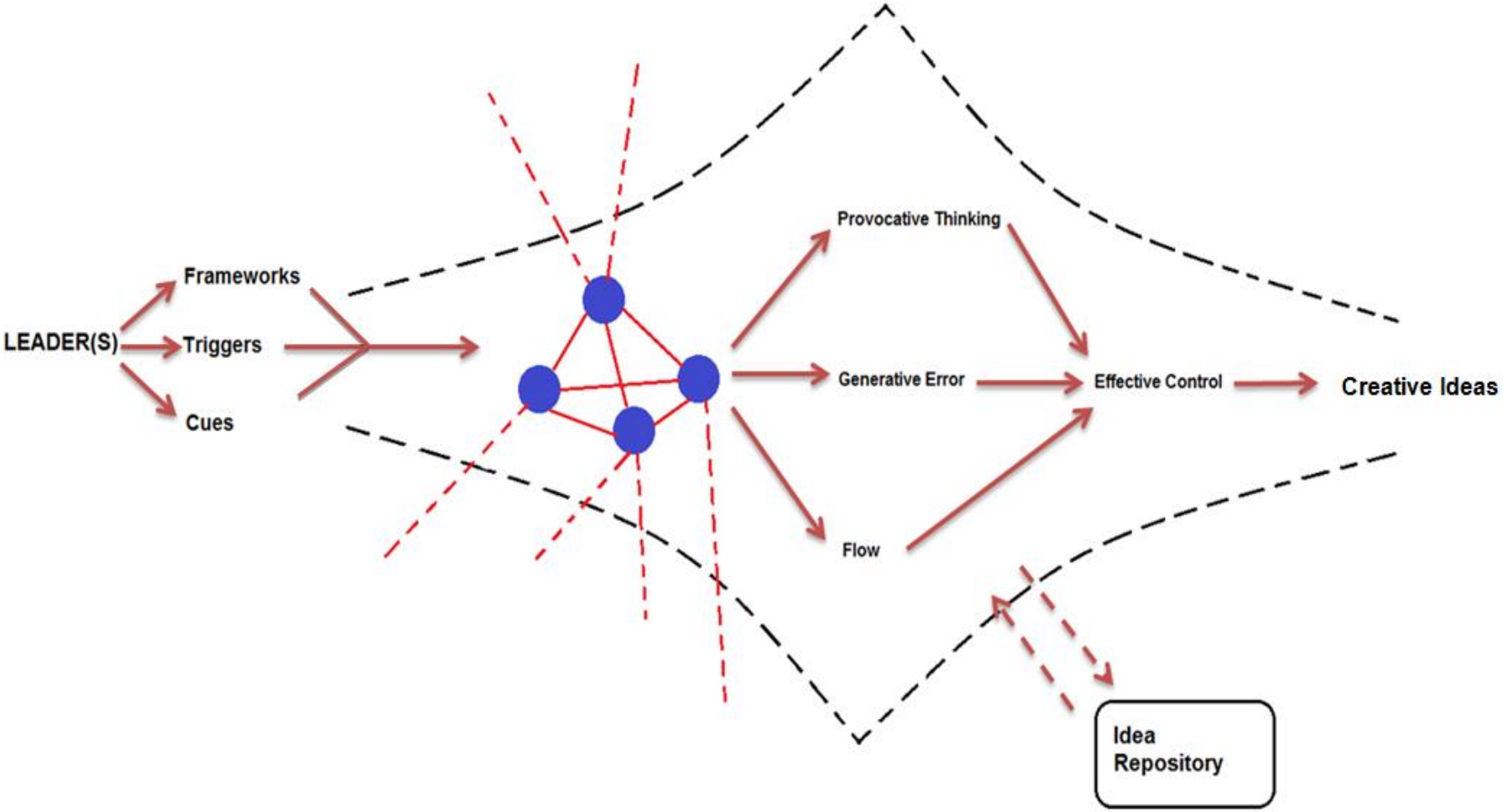


Figure 4.1: Conceptual Model Emerging from the Literature Review

Further detail surrounding the model presented in **figure 4.1** may be found in the literature review. In order to assess the relevance of this conceptual framework and answer the first research question it is necessary to explore each part of the model in detail, beginning with leadership.

4.2.1 Leadership

Current literature surrounding idea generation in organisations consistently refers to 'leadership' and, specifically, the role that the leader has in building an environment, culture and/or context that facilitates the production of new ideas (De Jong and Den Hartog, 2007; Kempster and Cope, 2010; Ucbasaran et al, 2010;). While the present literature is informative there are a number of debates such as those surrounding the level of control that leaders must exercise over idea generation (Leonard and Swap, 2005; Busco et al, 2012) and the ways in which leaders must adapt their role as their organisations change (Phelps et al, 2007). In short, the literature review highlighted the diversity of thought and opinion regarding leadership and a key aim of this study is to understand whether there is any one 'best' form of leadership for idea generation and how this interacts with other identified factors. As indicated in the introduction to this chapter, leadership is such an extensive topic within this study that it will not be discussed in full detail here. The purpose of this subsection is to capture broad points, relevant to the original conceptual model presented in **figure 4.1**, before a more detailed picture is developed within **section 4.4**.

Individuals in all organisational settings talked at length about the importance of leadership to idea generation. Leadership as a theme is repeated across the case studies (**appendix H**), with particularly strong references occurring at organisations C, D, E and I. A ranking question contained within initial qualitative surveys placed leadership as the second most important factor (of the given set; these can be seen on the survey template in **appendix D**) affecting idea generation, surpassed only by 'speaking to or bouncing ideas off other people inside the organisation'. Presenting this information in a graphical form (**figure 4.2**) shows an intriguing pattern, leadership is apparently less important to encouraging idea generation within larger SMEs. These organisations, grouped towards the bottom of the chart consistently rate 'leadership' as being less important to idea generation than all other organisations in the sample.

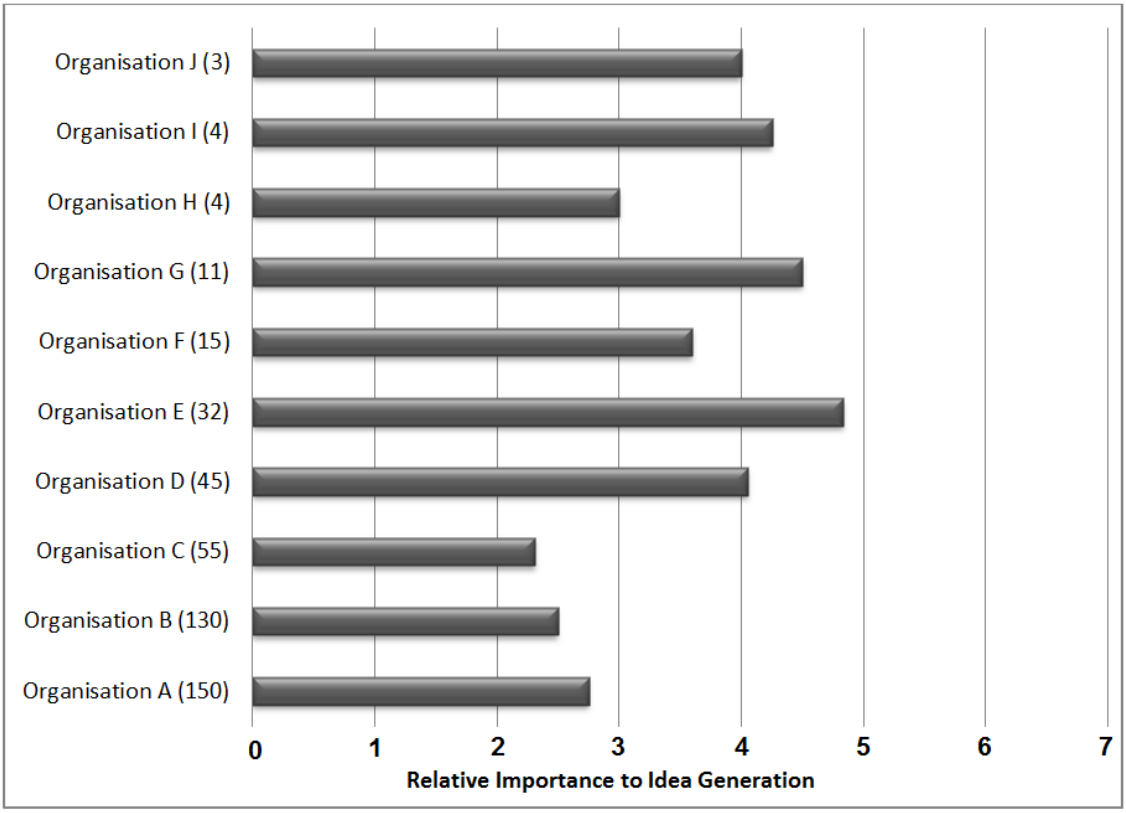


Figure 4.2: The Relative Importance of Leadership to Idea Generation

As an explanatory note, all graphs presented in this analysis are derived from the ranking question (question three) presented in the survey. Detailed information regarding the survey can be found in **appendix G**. During the analysis process the scale used within the survey was inverted to aid reader comprehension, in other words to ensure that factors perceived to be more important to idea generation were always represented by bigger bars on the various charts. Details of this 'inversion' are shown in **table 4.3**.

Original value stated by participant	**Inverted value used to create graph**
1 (most important to idea generation)	7 (most important to idea generation)
2	6
3	5
4	4
5	3
6	2
7 (least important to idea generation)	1(least important to idea generation)

Table 4.3: Values used to create graphs in analysis chapter

The pattern highlighted by **figure 4.2** is striking but it is perhaps not unexpected. The organisations towards the bottom of the graph contain more individuals (between 55 and 150) and more levels of management, i.e. line managers, middle managers and a senior management team as well as the leader themselves. Leadership in these contexts may therefore be distributed amongst individuals (Spillane and Diamond; 2007; Ancona and Backman, 2010) or dispersed (Politis, 2005) and due to the sheer number of "leaders" it may be that employees in these settings have simply become accustomed to it "being there". In common with most micro and small organisations smaller organisations participating in this study (Organisations D,E,F,G,H,I,J) typically

have one leader (Kempster and Cope, 2010). It is arguable that employees will therefore be more aware of the overt contribution made by this single source of leadership to the idea generation process, hence the higher rankings seen in **figure 4.2**. Indeed at the individual level leadership is often seen as one of the most important facilitators of entrepreneurial activity (Timmons, 2007).

Moving away from the relative importance of leadership, this study has uncovered several key qualities that leaders need to display if they are to support idea generation within their organisations, these are listed below. While individuals attached different labels to phenomena (Collins, 1983), broad consensus emerged from all organisations irrespective of their size, sector, ownership/management structure and broad purpose.

- Allowing a degree of freedom in the working day or 'tinkering time'
- Providing a compelling direction for the organisation and linking individuals into it
- Being seen to listen to ideas, take action on them and follow things through to a conclusion
- Encouraging openness and transparency, not micro-managing individuals

Previous empirical research exploring leadership and its effect on idea generation and innovation (Politis, 2005; Houghton and DiLiello, 2010; Ucbasaran et al, 2010) uncovered similar findings and, as explained earlier, this will be discussed in detail at a later point of this chapter. For now it suffices to say that fieldwork has confirmed leadership is an important factor affecting idea generation in SMEs.

4.2.2 Organisational Boundaries and the Development of Internal and External Ties

Literature on the development of weak ties (Ruef, 2002; Granovetter, 1973), structural holes in networks (Burt, 1992), openness to novel stimuli (Carson et al, 2003) and the effect of spatial positioning on creativity (Sailer, 2011) is well known. While current literature places great emphasis on individuals and organisations being open to stimuli originating outside their immediate settings (Staber, 2008; De Jong and Den Hartog, 2007) this study has found quite the opposite. Internal ties and contacts are thought to be more important to generating new ideas than their external equivalents. Evidence to support this assertion can be found in **figure 4.3**. This graph presents the relative importance of speaking to or bouncing ideas off others both *inside* and *outside* the organisation. The importance of internal contacts is shown by the solid bars while the importance of external contacts is indicated by the hatched bars.

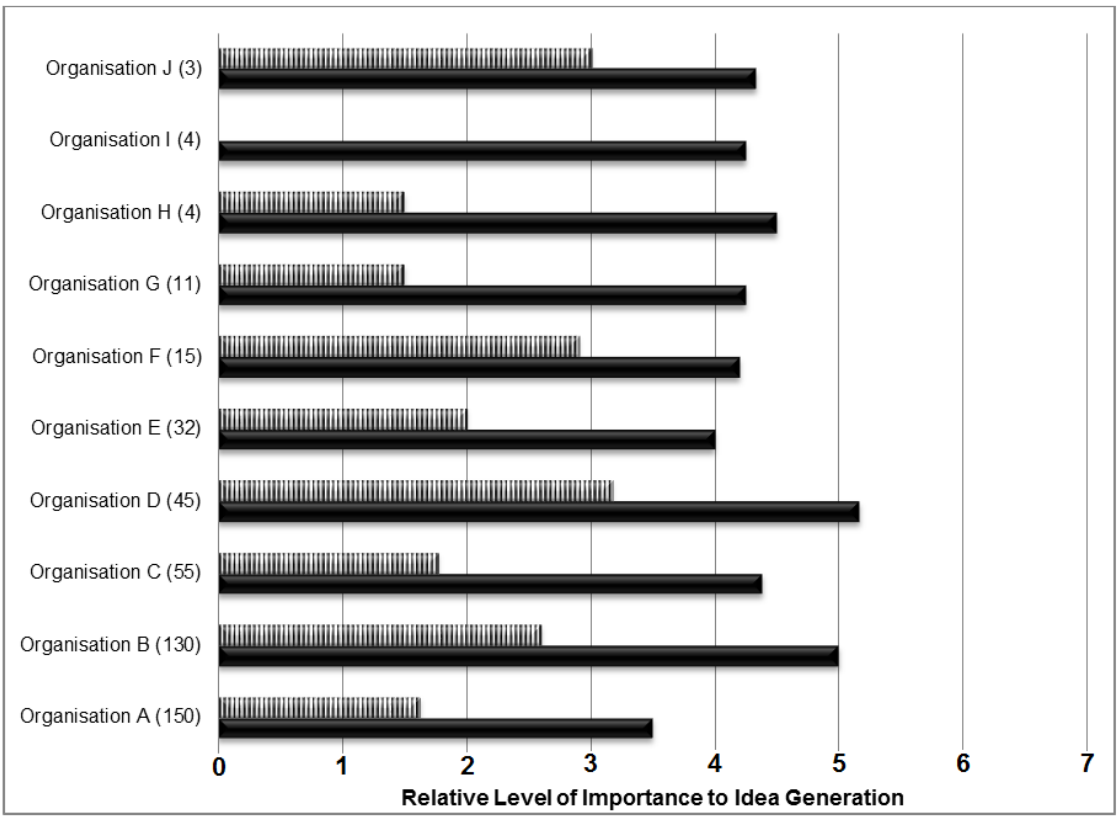


Figure 4.3: Speaking to or Bouncing Ideas off Others Inside and Outside the Organisation

Figure 4.3 certainly raises interesting discussion points. If present literature held true (e.g. Carson et al, 2003; Staber, 2008) within the defined boundaries of this study, one would expect the hatched bars representing external contacts to be higher than the solid bars (internal contacts). What is perhaps most striking is the level of difference in every organisation participating in this study, although the pattern appears not to have any link to the size of an organisation. Further evidence to support this finding emerged during semi-structured interviews. Individuals were asked whether internal and external contacts might support idea generation and while some external sources of information such as professional bodies (e.g. Chartered Institute of Personnel and Development) were mentioned, these discussions broadly centred on individuals and groups

inside the boundary of the organisation. Typical responses are illustrated by the following quotations.

"We will sit down and we will work things through and I constantly speak to the directors all the time going "ok, so what do you think of this?" and they will come to me and go "well, I've been thinking about that…" we constantly kind of bash things around until they are into some kind of shape."

Professional Employee, Organisation D

"We always have morning meetings anyway just to discuss where we are at and people can give ideas then… door is always open to come and give an idea. So if we are doing something… I won't just come up with the idea myself I will ask people, I'll speak to maybe the senior engineer or one of the other senior electricians and get their input."

Middle Manager, Organisation C

The most striking point contained in the quotes above is that both individuals default to talking about people *inside* the organisation when describing the process of idea generation. This however does not mean that there is no external influence; it simply reinforces the finding from the surveys that internal contacts are believed to be more important to idea generation than external contacts.

Literature centred on the concept of collective creativity (Chaharbaghi and Cripps, 2007; Catmull, 2008; Akehurst, 2009) indicates that new ideas often emerge out of group discussions, projects or tasks. The number (and quality) of network connections possessed by an individual is thought to correlate to the number of ideas they generate (Ruef, 2002; Johnson, 2010). Empirical research into this territory affirms the view that the 'cross fertilisation' of ideas leads to improved creative output (Granovetter, 1973). Despite the findings

presented thus far, and the current literature, it is incorrect to assume that individuals only generate ideas when they are engaged in discussions with and/or linked to other individuals or groups.

The following quote is typical of the response gathered in organisations which are believed to generate lots of ideas. This individual was asked which type of environment (i.e. group or individual work) led to the production of most ideas.

"I'd say it's where I'm working… with other people but I think it is kind of in the middle if that makes sense. Where I can sit down and talk about an idea (with my colleagues) and then I can say "well, let me just nip off and prototype it" and then I can sit there working on my own for half an hour and then come back to others with some results and go "well, this worked, that didn't etc. etc." and then we can work from there and create new ideas."

Professional Employee, Organisation I

Evidence presented here demonstrates that for this individual there needs to be a balance between collaborative and individual working. It is by balancing periods of individual work with collective discussion (Chaharbaghi and Cripps, 2007) that this individual believes ideas are generated. More detail about this particular issue can be found in the relevant case study (Organisation I) in **appendix H**. This view was not confined to this particular organisation, remarkably similar views were captured in other settings, as shown by the quotes below.

"I guess it is (i.e. most ideas are generated) within group situations that then break down into some individual time. Probably some prior thought beforehand on a personal level but group sessions are not necessarily formal meetings, it may just be walking to work with someone."

Professional Employee, Organisation H

"I work mostly in isolation initially for ideas but then I have contact with advocates, associates, members, sponsors etc. and obviously I see people in and around the building… That balance helps idea generation as you actually get stuff done."

Middle Manager, Organisation B

Both of these individuals make the same point that there is a balance between individual thought and collective discussion. This is similar to the views discussed by Catmull (2008) and Johnson (2010) but it is important to point out that neither of these particular writers has engaged in rigorous, empirical research. The findings of this study, however, lend support to their arguments.

While it cannot be statistically proven from the data collected for this study it does appear that idea generation is enhanced where organisational environments strike a balance between collective and individual work. Comparisons between the case studies, in particular organisations D and I (stronger idea generation) versus organisations G and J (weaker idea generation) tend to support this view. Fieldwork conducted in organisations which generated comparatively fewer ideas did not uncover evidence of the pattern discussed above with many individuals simply stating that they concentrated on their own work/tasks. It can therefore be proposed that organisations must develop environments which balance the "individual" and the "collective" if they are to generate significant numbers of new ideas.

A final issue worthy of discussion here is the extent to which diversity in organisational environments either supports or hinders the production of new ideas. Existing literature covering this subject suggests that a balance needs to

be struck between diversity and cohesiveness (Williams and O'Reilly, 1998; Webber and Donahue, 2001; Richard and Shelor, 2002) and fieldwork included a line of questioning which sought to understand the extent to which individuals felt diversity supported idea generation. As with views surrounding the balance between 'collective' and 'individual' work, a marked split was found between environments perceived to generate many ideas and settings in which few new ideas were produced. The first quote presented below is from the former while the second is representative of the latter.

"I feel mixed groups work well as people will come up with suggestions you may not have thought of if working with others with similar experiences, they may also challenge ideas you take for granted."

Junior Manager, Organisation B

"It depends on what you are trying to achieve. Working with the like-minded can enable things to happen more quickly and to flow better."

Senior Manager, Organisation J

While it is certainly *not* the case that there is a 'right' or 'wrong' answer, this pattern is intriguing nonetheless. Within Organisation J there was a focus on working with the "like-minded" while the junior manager from Organisation B believed that difference could bring a positive challenge to discussions. It is known that cohesion is vital to the effectiveness of work teams or groups (Williams and O'Reilly, 1998; Webber and Donahue, 2001; Richard and Shelor, 2002) and that diversity of views, skills and experiences has a positive effect on creative problem solving (Chaharbaghi and Cripps, 2007). Literature aside it cannot be overlooked that employees believed there to be more ideas generated in Organisation B than in Organisation J. Exploring the views

captured within other organisations lends further weight to this point. The first quote below comes from an organisation where relatively few ideas are produced while the second comes from what is perceived to be a very creative environment.

"It is easier to be involved with similar people, things get done and there is less debate."

Senior Manager, Organisation G

"(I) Definitely (think) environments with a variety of skills (supports idea generation). All together the group is stronger and richer for its diversity, people will challenge you. Working with people with different skills means that you can work to your strengths."

Middle Manager, Organisation D

In these very different organisations the same pattern can be seen. Similarity is believed to be a better strategy for "getting things done" in Organisation G while diversity is thought to be a factor contributing to success within Organisation D. It is vital to recognise that the latter is believed, by employees, to generate more ideas than the former. This lends further weight to the view that there is likely to be a positive link between diversity and the relative level of idea production.

4.2.3 Generative Error and Managerial Control

Producing ideas entails a degree of risk, both for individuals and organisations (Amabile et al, 1996; Burns, 2008; Catmull, 2008). Leaders must therefore accept that 'error' is an inevitable part of the idea generation process and literature suggests that there should be a focus on building the capacity to

recover when failure occurs rather than preventing mistakes (Roffe, 1999; Amabile and Khaire, 2008; Catmull, 2008). Cultures which seek to apportion blame when things go wrong will inevitably suppress creative output (Roffe, 1999; Klijn and Tomic, 2010). Fieldwork revealed that both 'learning' and 'blame' cultures exist in organisations and confirmed that the former supports idea generation while the latter inhibits it. The following quotes provide examples of these two reactions to error and their subsequent impact on idea generation.

"It's really a case of what's wrong and how long until we can fix it… It is a case of "alright, well, it's gone wrong, nothing we can do about that now. How can we get it working again?" [Interviewer: Does that help you with idea generation?] Yes, I think it does. There is less fear of failure and with any ideas eventually you are going to run across something that just doesn't work."

Professional Employee, Organisation I

"So basically the negative response to what was a joint mistake I suppose in some respects was very damaging. You know we all make mistakes from time to time but it had a long term damaging effect on my desire to put things forward and to make changes and try and improve things."

Senior Manager, Organisation C

A key point emerging from this research is that it is not the mistake itself that has an impact on idea generation but the reaction from colleagues and managers. Where this reaction is constructive, idea generation appears to be enhanced while negative, 'blame' cultures suppress idea generation. In addition to survey and interview responses, observational visits provided further evidence to support this finding. Pressurised situations, such as tight deadlines within Organisation G (explored within the relevant case study in **appendix H**),

appeared to influence the reaction to error, causing it to become a search for blame rather than learning.

Moving on from generative error, polarised views were gathered when the topic of managerial 'control' was brought up for discussion. Despite the polarisation of discussions, from some individuals believing that idea generation must be as "free as possible", to others stating that tight structures had to be imposed in order to arrive at useful outputs, a realisation emerged that a link exists between idea generation and the presence of control mechanisms. Evidence supporting this statement can be found in **table 4.4**.

Organisation	**I think that my organisation does effectively guide or steer the idea generation process (number of responses)**			**Does this organisation generate lots of ideas (aggregate response from interviews)**
	Disagree	**Neutral**	**Agree**	
A	1	2	7	YES
B	3	6	7	YES
C	4	7	2	NO
D	0	1	18	YES
E	3	2	0	NO
F	3	3	3	NEUTRAL
G	0	3	0	NO
H	0	1	2	YES
I	0	0	3	YES
J	2	1	0	NO

Table 4.4: The Link between Control Mechanisms and Idea Generation

While the aggregate response presented in the right hand column of the table is not a quantitative measure of the number of ideas produced in each setting, the picture painted is intriguing nevertheless. Inside the firms in which individuals believe lots of ideas are produced (i.e. organisations A, B, D, H and I) there is a shared judgement that that firm guides or steers the idea generation process in

an effective way. This finding appears to support the view that some form of structure or guidance is helpful to idea generation and confirms the thoughts of those arguing that an *appropriate* amount of control is important for the production of new ideas (Leonard and Swap, 2005; Busco et al, 2012).

When asked for views about the term control and its importance to idea generation the following views were elicited, these appeared to paint a picture that too much structure can constrain idea generation.

"…there needs to be a structure in terms of the company's aim and ambition and then if people's ideas sit within what we want to try and get done then it can work."

Senior Manager, Organisation H

"I think there has to be a certain level of control with regards to that (idea generation) to kind of keep people on track as it were but not so much that you are going to stifle idea generation. So you know not being given too narrow a parameter to focus on for example."

Professional Employee, Organisation J

The general consensus emerging from fieldwork was that control needs to keep people 'on track' and provide a broad structure but that micro-management (Avramidis, 2008) has a negative impact on the relative level of idea generation. This finding confirms previous research into this area (Hitt et al, 1996). Alongside confirming the outcome of previous research (Hitt et al, 1996) fieldwork adds to this base by suggesting that the control or guidance of idea generation might take the form of broad frames which channel but do not inhibit new thinking. This theme will be discussed in more detail during **section 4.3.3**.

4.2.4 Flow

Methodological difficulties mean that capturing evidence of the flow state (Csikszentmihalyi, 1990; 1997; 2000) could have been problematic. It is vital to understand that while the flow state itself is *internal* (to an individual) and therefore outside the remit of this particular study, the conditions that cause it to arise are influenced by variables that are *external* to the individual (Csikszentmihalyi, 1990; 1997; 2000). These include the level of challenge an individual is presented with and the extent to which timely feedback is provided by the task or a colleague / manager.

Qualitative surveys indicated that “having tasks which challenge you” was perceived to be a relatively less important factor affecting idea generation. Survey respondents indicated that a number of factors including leadership, being able to make a “mistake”, bouncing ideas between internal contacts and being able to talk about things that challenge the status quo had a greater influence over idea generation. This is not to say that the presence or absence of the flow state has no effect on the overall efficacy of the idea generation process simply that, on average, survey respondents indicated that other factors were relatively more important in their view. **Figure 4.4** indicates the diversity of views captured on this particular point. This graph highlights the relative level of importance that was ascribed to “having challenging tasks” from all organisations across the sample. Organisations have, as in previous graphs, been arranged from smallest (in numbers of full-time employees) at the top to largest at the bottom.

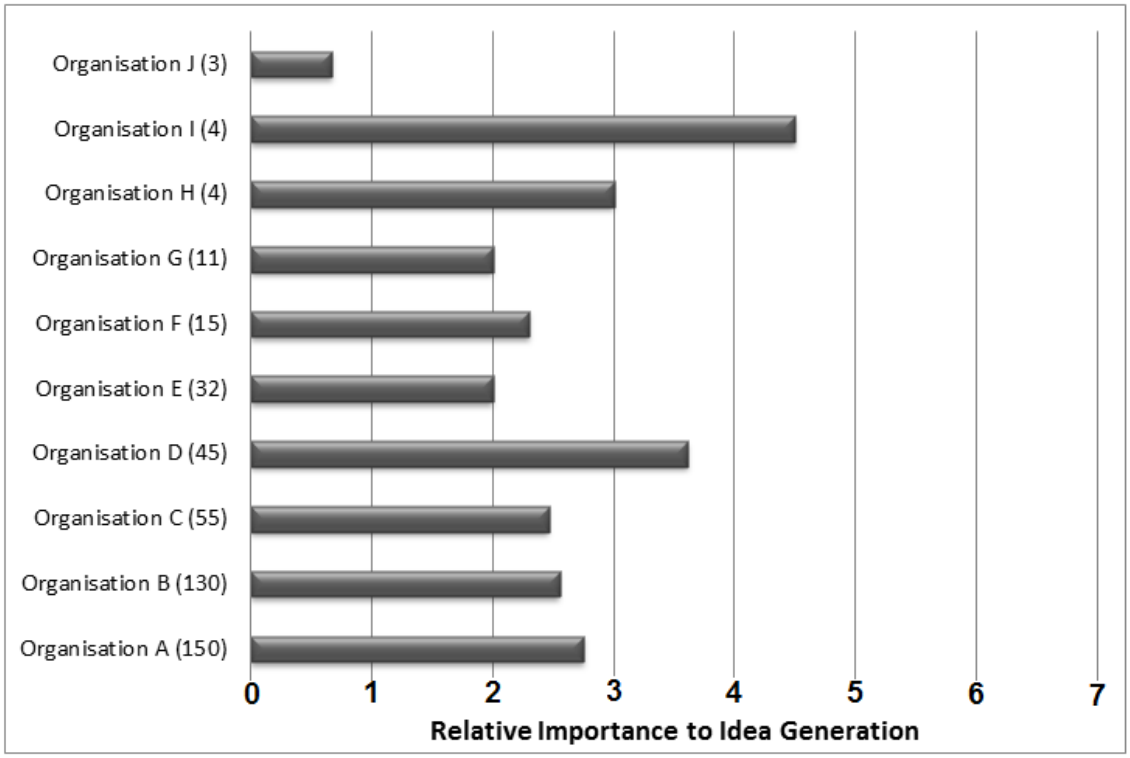


Figure 4.4: Challenging Tasks and their Average Importance to Idea Generation

Having said that the presence of challenging tasks is believed to be relatively less important to idea generation **figure 4.4** demonstrates an interesting correlation. **Table 4.2** presented earlier in this chapter indicated that individuals working for organisations D, H and I believed that their organisations generated lots of ideas. Within the graph it can be seen that the bars relating to these organisations are significantly larger, underscoring the point from the literature that more ideas are generated when individuals are faced with challenging tasks or problems (Csikszentmihalyi, 1990; 1997; 2000). It must be stated that this pattern is not consistent across all organisations in the sample, although the contrary findings from organisations A and B may be outliers.

Digging deeper into whether there is a connection between idea generation and organisations creating the conditions for flow to arise requires careful analysis

of interview and observational findings. The quotes below were taken from interviews where individuals said that they felt able to generate many ideas at work.

"I'd say I develop and use my skills pretty much all the time because I'm programming about three different (computer software) languages, doing all kinds of different things and it's refreshing to actually be able to go "well, we could do it this way" and get a response other than "no"."

Professional Employee, Organisation I

"It is not the stretching [of my skills that encourages idea generation] but it is the diversity because you are jumping across from different sectors and different problems and you can see something that works here could be re-appropriated and maybe work there."

Senior Manager, Organisation D

These quotes and further observations of these two individuals at work suggested that they were likely to be experiencing the flow state (Csikszentmihalyi, 1990; 1997; 2000). In both cases, and many others seen during fieldwork, it was believed by participants that more ideas were generated because there was a match between their role and their skill set. The second quote is typical of other views captured in this study where it was said that it is not so much the stretching of a skill set that is important but rather the diversity of challenge and opportunity; this is arguably what leaders need to develop if they are to encourage idea generation. Further views similar to these are evidenced in the quotes below.

"For me it [diversity of challenge] motivates me. I like to come in and bring forward new ideas and go and test them and talk to people… that excites me."

Senior Manager, Organisation A

"So actually I quite like shifting between these different roles and that actually keeps the whole thing quite enjoyable and probably the reason it has continued."

Senior Manager, Organisation H

Both participants again talk about diversity and the language used is informative. These individuals refer to "excitation" and "enjoyment" with the latter going as far as suggesting that without the diversity of challenges and opportunities to apply his skill set in new ways his business may well not have continued. The presence of challenging tasks was discussed at the beginning of this section but the following quotes add more detail to the argument built up so far, indicating the effect on idea generation when work *does not* provide these experiences.

"I mean if you are not challenged in any way why would you think differently? As this job doesn't change there isn't really any need to think about it to be honest. And I guess because I'm not thinking about it [my job] I don't really come up with many ideas."

Administrative / Manual Employee, Organisation G

"You are quite focussed on what is in front of you and to do and that can be… if that is over a prolonged period of time… that definitely has a negative impact on idea generation because you don't care anymore about anything other than getting today done."

Middle Manager, Organisation B

The views outlined above are intriguing. The commonality between the quotes is the need for challenge to ensure focus but the second quote suggests that there needs to be a longer term focus, i.e. that ideas are contributed to make

things somehow ‘better’ rather than solely dealing with day to day issues or ‘fire-fighting’. This view was echoed by a different individual working for the same organisation;

“Positive challenges are vital, I don’t like being sort of stagnant and I think when you are being challenged you enjoy your work far more because you feel that you are being stretched and also almost like you are needed and your role is valuable.”

Professional Employee, Organisation B

As with previous quotes explored in this section the word “enjoy” appears with this particular individual relating positive challenges at work to a feeling of being “needed” and “valuable”, this is perhaps the distinction between this individual and the previous two quotes where it was indicated that work did not provide positive challenges. Confirming this thought the final quote on this topic presented below comes from a different environment, one where it is believed that many ideas are generated on a daily basis.

“Work does provide me with positive challenges. I mean it’s strange because half the challenges come from (the manager) and half of them actually come from myself… (example provided by interviewee) …thus I kind of created my own challenge under his (the manager’s) guidance if that makes sense to enact this idea and it is what I am working on at the moment.”

Professional Employee, Organisation I

While there was no mention of the words “enjoy” or “excite” during this particular quote, observations in this setting did suggest that this employee approached his work with his ‘eyes shining’ (Zander and Zander, 2000). The leader in this particular setting allowed this individual to “create his own challenge” and this, alongside a match between the task and the individual’s skills, appears to have

contributed to the initiation of a flow experience. Deciphering signals about an internal state and relating these to external conditions is problematic. It cannot be said for certain based on this evidence that individuals were experiencing the flow state at work but the language used on many occasions provides clues as to what was going on under the surface. People expressing “excitement” and “enjoyment” during tasks appears to correlate with the understandings of flow (Csikszentmihalyi, 1990; 1997; 2000) and evidence presented suggests that idea generation is impeded in situations where positive challenge is lacking.

4.2.5 Provocative Thinking

It is widely thought that idea generation is enhanced where environments allow for, and even encourage a degree of irrationality (Majaro, 1992; Sawyer, 2006; Johnson, 2010). Seminal work by thinkers such as De Bono (1970) suggests that fluid, flexible thinking which is at times impulsive supports the generation of new ideas although this particular work is not related to specific empirical research in SME environments. To add to current understandings fieldwork sought to uncover evidence confirming or rejecting the notion that there is a relationship between idea generation and environments which allow, or even encourage individuals to think provocatively.

Discussions around the ‘mechanics’ of idea generation and the extent to which individuals felt able to challenge the status quo elicited detailed narratives describing particular events or, more commonly, day to day operations. The quote on the next page typifies responses gathered in organisations where levels of idea generation were believed (by employees) to be low.

"I do wonder sometimes… you know (the manager) has got clear ideas and I think sometimes if you come up with ideas that don't match with that then they are just discarded rather than looking a bit wider. Sometimes we have a great discussion and I feel that it has been a positive talk but then nothing happens because (the manager) doesn't want them to if you see what I mean."

Professional Employee, Organisation J

In the setting described above the common view was that the leader of this organisation had a particular view and set of ideas which could not be challenged. As the individual states, "positive" discussions occurred but nothing happened with ideas as certain things within this organisation were perhaps not up for discussion. A similar view was captured in another organisation where idea generation was again considered to be low.

"Ideas would be reasonably well supported to an extent but it would always have to be… I think you'd have to put up a very good argument for doing it and I think it would always be approached with caution."

Middle Manager, Organisation E

As with the previous example this individual indicates a feeling that there has to be substantial justification behind an idea, suggesting that new ideas are "approached with caution". This is arguably a key theme running through the case study from Organisation E (**appendix H**), where terms such as "static" and "inhibited" are used to describe the environment for idea generation. This feeling correlates well with current literature as it can be argued that both of these environments contain limited fluidity and flexibility, there is a low tolerance for risk and individuals are perhaps too quick to 'judge' ideas (De Bono, 1970; Majaro, 1992; Robinson, 2001). The following quotes help to contrast the

findings presented so far with responses captured in settings that were thought (by employees) to positively encourage the generation of new ideas.

"… Everything is in a continual loop, a continual discussion, it is a continual sort of challenge about "well, have you looked at it like that, have you considered this… then how does that impact on what we are doing or thinking about?"… that is about lots of sharing with colleagues and it [is] sometimes sharing with a colleague who knows nothing about it."

Professional Employee, Organisation D

"I personally find that people tend to clash. No matter how good friends they are, eventually people do clash, especially if they are together for a long time. But being able to kind of go, "I've got this idea," "I've got this idea", "well, I think mine is better," "well, I think mine is better." Let's go off and prove it and come back with facts and figures which you can't really get round and then be able to say "well, good sir, you got it right, I was wrong, never mind, let's do that."

Professional Employee, Organisation I

Discussions within both of these very different organisations uncovered similar themes. Both quotes make reference to continual discussions where individuals are not attacking one another but instead are searching for the best way forward. In many respects these quotes are indicative of the type of philosophy underpinning Pixar's Creative Brain Trust (Catmull. 2008), where a peer driven problem solving process fosters idea generation leading to improved creative output (Catmull, 2008; Pixar, 2012b). In the second quote, the interviewee recognises that individuals can "clash", particularly over new ideas. In this setting observations confirmed that employees quickly prototyped ideas and then made decisions based on the results of these tests. This focus on exploration and feeling out new ways of doing things was believed to act as a crucial foundation for further idea generation.

A very significant finding surrounds the linkage between provocative thinking and the acceptance of change in any given setting. Interview responses indicated that environments more accepting of change fostered an increased willingness to think laterally (De Bono, 1970; Rudkin et al, 2001). This in turn can be linked to the aggregate level of idea generation in any given setting as evidenced in **table 4.5**.

Organisation	Sector	Does this organisation generate lots of ideas? (aggregate response from interviews)	Is this organisation accepting of change? (aggregate response from interviews)
A	Healthcare	YES	NEUTRAL
B	Arts	YES	YES
C	Marine/Manufacturing	NO	NO
D	Social Enterprise	YES	YES
E	Public Sector	NO	NO
F	Leisure	NEUTRAL	NO
G	Retail/Tourism	NO	NO
H	Community Interest Company	YES	YES
I	Software Design	YES	YES
J	Consultancy	NO	NO

Table 4.5: Linking Aggregate Levels of Idea Generation and Acceptance of Change

While this is not a quantitative, statistically proven link, **table 4.5** indicates that there may be a connection between idea generation and organisations themselves being open to and accepting of change. Discussions surrounding the factors affecting idea generation often turned to the importance of organisational environments being accepting of change. Responses varied with some individuals highlighting that change “was not always appreciated” or that “people in the organisation do not want to change”. In organisations that generated a greater number of ideas, such as organisation D, discussions

about change were substantially different. While a little lengthy, the following quote clearly illuminates this organisation's understanding of change.

*"**Participant:** I think it is about engendering a culture of responsibility, so that people take responsibility for carrying out their work, making things successful and contributing to success but also being able to reflect and make change… So it is about engendering a culture of change and a positive attitude to change.*

***Interviewer:** Where you are kind of seeking it (change) out rather than being fearful of it?*

***Participant:** Absolutely. And people are always on a different stage of the journey and I think it is also being respectful of that, that for some people actually they need some of it to stay the same some of the time but I think it is also making sure that everybody is part of understanding why it is required and people being excited by it rather than fearful, so they know they are going to turn up to something different tomorrow and that is ok."*

Professional Employee, Organisation D

Being very much an 'ideas' company, this organisation is perhaps not typical of others in the sample, or indeed the wider economies of Devon and Cornwall (Wetherill, 2010) but the views highlighted are intriguing nonetheless. "Change" as a word appears repeatedly in the case study (organisation D, **appendix H**), with the attitude of being "respectful" that individuals can be at a different stage of the change "journey" being something that was not discussed within other settings. Observations confirmed that in this setting, leaders and managers take time to make the case for change, building excitement that things will be different in the future and in this setting that appeared to stimulate idea generation. This finding ties together existing contributions suggesting that leaders need to create a curiosity about the future (Godin, 2008), check with their staff before making changes (De Jong and Den Hartog, 2007), communicate the need for change (Goffee and Jones, 2006) and build overall

acceptance that the future will be different to the present (Martins and Terblanche, 2003).

4.2.6 Repositories of Old Ideas and Hunches

Idea generation is often an evolutionary rather than a revolutionary process (McAdam and McClelland, 2002; Johnson, 2010; Ucbasaran et al, 2010). Instead of being discarded, old ideas can often be kept until there are more appropriate circumstances for their application (Titus, 2000) or, alternatively, two or more 'old' ideas can be fused into a new, perhaps completely different idea (Johnson, 2010). The conceptual model emerging from the literature review argued that the presence of some form of repository where ideas could be stored would be a marker of an environment prone to idea generation. Despite making this point, the nature of this repository was not discussed, hence fieldwork attempted to find out whether organisations made use of any sort of mental, social, technological or physical idea store.

The graph presented in **figure 4.5** shows how organisations in the sample ranked the importance of "having a method of capturing your ideas for future reference". A larger bar indicates that this factor is believed to be relatively more important to idea generation. It is worth noting that out of the seven factors presented for individuals to rank in the survey this was considered to be the *least* important issue affecting idea generation overall.

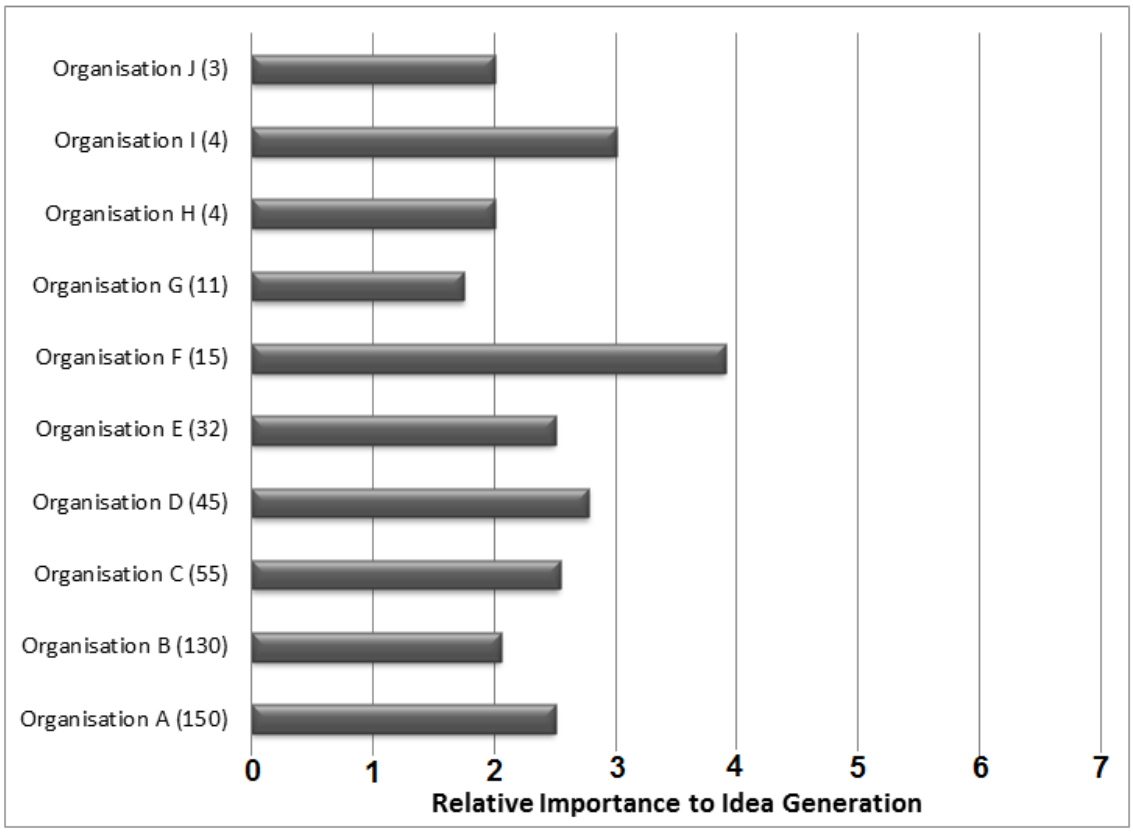


Figure 4.5: Having a Method of Capturing Your Ideas for Future Reference

Responses to this particular question were relatively similar across all organisations in the sample with most individuals ranking the importance of storing ideas at approximately the second *least* important factor affecting idea generation. One particular result, from Organisation F, merits further consideration. This organisation ranked the storage of ideas more strongly than others. During periods of observation and, most notably, individual interviews it became apparent that this organisation uses very little modern technology such as computers and the Internet. Filing and storage systems were paper based with the day-to-day manager responsible for archiving information. The following quote is typical of responses received to questions about the importance of storing ideas for future reference in this setting.

"In theory ideas are on the (meeting) minutes and they should be stored somewhere. But the trouble with that is that it just gets lost in a file and it doesn't ever get opened unless someone thinks "oh, I know, that was 2 years ago" type of thing. But I know what you mean… the ideas should be there highlighted and then if an idea is no good… (the attitude is) "all right, that's filed away but at least we considered it…" But also a link in case that idea is good in 5 years' time."

Middle Manager, Organisation F

In almost all cases individuals working in this environment felt that storing ideas was a useful exercise but when pressed for further details on their current system interviewees often said documents were "put in drawers and not looked at again". Individuals in this organisation recognise the importance of storing ideas for future reference (Titus, 2000) but their current paper-based system arguably does not allow for easy access, retrieval and searching hence it has little impact on the production of new ideas (McAdam and McClelland, 2002; Johnson, 2010). **Table 4.6** highlights links between idea storage systems and the perceived level of idea generation across other organisations in the sample.

Organisation	Sector	Does this organisation generate lots of ideas (aggregate response from interviews)	Idea storage systems present and utilised by employees?
A	Healthcare	YES	PARTIALLY
B	Arts	YES	YES
C	Marine/Manufacturing	NO	NO
D	Social Enterprise	YES	YES
E	Public Sector	NO	NO
F	Leisure	NEUTRAL	NO
G	Retail/Tourism	NO	NO
H	Community Interest Company	YES	YES
I	Software Design	YES	YES
J	Consultancy	NO	NO

Table 4.6: Link between Idea Generation and Idea Storage Systems

Information presented in **table 4.6** is intriguing, highlighting a possible link between relative levels of idea generation and the presence of idea storage systems. In order to understand the relationship between these variables it is necessary to explore the detailed narratives developed from semi-structured interviews. The first quote presented below comes from an organisation where idea storage systems are embedded in day-to-day operations while the second is from an organisation that does not currently make use of these tools.

"We've got a Wiki where we currently have documentation for what we are working on. But we also have a little kind of scratchpad ideas section in there. We've got the whiteboard and that has seen more use since I've turned up I think than it ever had before because it's just so handy! It is this massive surface that I can scrawl random equations on that no-one understands. (Interviewer: Does that support idea generation?) Yes, I definitely think it does."

Professional Employee, Organisation I

"I only store ideas in my head really. We don't have any way of capturing them in the organisation. (Interviewer: Would it be useful to have some sort of system?) I don't think it would be useful as we wouldn't have the time to write things down. What might be useful though it to have space and time to talk about ideas and share them. I think that is something that we could do reasonably easily."

Manual Employee, Organisation G

These quotes come from very different organisations, the first of which is perceived to generate a significant number of ideas while the latter generates comparatively few. Other responses to this line of questioning yielded similar results, broadly speaking the presence of idea storage systems appears to have a positive effect on the production of new ideas. Perhaps the most significant finding was that the nature of idea storage systems varied depending on the size, sector and purpose of each organisation in the sample. Existing literature discussing idea storage systems (McAdam and McClelland, 2002; Johnson,

2010) does not consider how such systems might vary between organisations but this study has found evidence to suggest that both context and personal preferences are important variables. Technological solutions, for instance, are used in Organisation I which itself is a technology-based company, employing individuals with a high degree of computer literacy. Contrast this to the position at Organisation H, an arts-based organisation where work dictates that individuals operate in a highly social, interconnected way. Ideas in this setting appear to be stored in the social ties between individuals. The key finding drawn from fieldwork is perhaps that idea stores need to fit with the context and purpose of an organisation, taking account of the different ways in which individuals work.

4.2.7 Section Summary

This first section of the analysis has reviewed elements of the conceptual model emerging from the existing literature and has highlighted a number of very important points. Evidence has been found to support all of the factors highlighted in the model although this is not the end of the story. Turning back to the research questions it can be argued that yes, there are common understandings of the various factors affecting idea generation. While individuals may attach different labels to certain phenomena (Collins, 1983; Cooper, 1992), participants across the diverse sample raised similar issues. Analysis in this section has indicated where the presence or absence (or indeed differing interpretations) of the factors correlate to differences in relative levels of idea generation. Examples of this include the discussions around diversity,

the storage of ideas and the extent to which provocative thinking is welcomed inside organisations.

Alongside the issues analysed and debated in this part of the chapter it is very important to highlight that fieldwork uncovered a range of other factors that are believed to impact the generation of ideas in SMEs. It is to these issues that attention now turns.

4.3 Further Factors Impacting Idea Generation in SMEs

Due to the exploratory nature of this study fieldwork was conducted in an open, evolutionary manner in order to encourage the discovery of novel findings perhaps not captured by the initial literature search. One-to-one interviews in particular were set up in a semi-structured way with questions purposely designed to provoke discussion (see **appendix C**). These encounters often drew out detailed narratives about various issues which, during the data analysis phase, were collapsed into the following broad areas;

- The need for feedback and action on ideas
- The role that organisational visions play in the guidance of idea generation
- Available mental capacity and freedom in the working day
- How physical distance between individuals affects the formation of ties
- The need for openness and transparency

This part of the chapter will explore each of these issues in turn beginning with the need for feedback and then action on ideas.

4.3.1 Feedback on Ideas

While feedback was not a topic directly covered by the initial literature review, fieldwork uncovered several instances where its presence or absence impacted idea generation. Although perhaps unimportant to the incubation of an initial creative thought, feedback on ideas is arguably vital to maintaining positive motivation or desire to put creative thoughts forward (Glassman, 1986; Deci and Ryan, 1987; Powell, 2008). It has also previously been shown that feedback, amongst other factors, is important for stimulating learning in work groups (Stewart, 2006; Lantz and Brav, 2007). The following quotes come from a professional employee and a senior manager at Organisation J. Both of these discussions centre on feedback although the individuals expressed very different views.

"Well, if I'm being perfectly honest [feedback is] not very good in that I feel sometimes I have raised ideas between myself and a colleague, we might have had discussions, come back with ideas from other places, talked things through and then raised them with [my manager] and then they don't go anywhere. So after a little while of that you do unfortunately kind of get into a mind-set of "well… there isn't really any kind of point in putting things forward because they are not taken on board, it goes nowhere."

Professional Employee, Organisation J

This particular quote (expanded upon in the relevant case study) expresses the view that ideas are given by this individual and a colleague to the manager but it is believed that there is an inadequate response to those ideas. It can be argued that this understanding reinforces the literature (Glassman, 1986; Deci and Ryan, 1987; Powell, 2008) in that feedback was not an important factor

affecting the production of ideas initially but was important to *sustaining* creative effort. Contrast this view with that of the senior manager in question.

"[Yes, you suppress idea generation] if you negatively respond to something that somebody has come up with and that is really quite difficult because you might think that their idea is fundamentally flawed and in a sense you don't want to give it breathing space because there is no point – it is not going to go anywhere. But that isn't a nice experience for someone on the receiving end if it is not handled well. So the environment you are trying to create [is one] where people can explore things and be open to things [but] you have got to have the ability to close things down without that being negative for the group."

Senior Manager, Organisation J

Although relatively lengthy, the quote provides an intriguing contrast to the thoughts of the professional employee. From a managerial perspective it is thought to be important to retain the ability to "close things down" if an idea is thought to be "fundamentally flawed". While there is logic to this point, and it is indeed vital that SMEs do not waste resources chasing down 'blind alleys' (McAdam and Keogh, 2004, Christensen, 2006), it can perhaps be suggested that this view has not been made clear to the professional employee. From the first quote it is apparent that feedback is 'missing', not that it is negative; from the employee's perspective feedback isn't given. Although the senior manager may well have sound, business-focused reasons for not wanting to pursue certain courses of action, this information is not fed back to the employee. Arguably then, this is a communication issue (Roffe, 1999; Sonnenburg, 2004; Goffee and Jones, 2006) rather than individuals not understanding the importance of feedback. Observations in this setting added further weight to this point as it was seen that relatively few conversations occurred during the working day with individuals typically working in a very quiet atmosphere.

While the points discussed so far in this section are important it must be highlighted that this is only the view from one organisation. How widely held is the view that feedback is important to idea generation? The following quotes come from very different firms and indicate again that a lack of feedback has a negative impact on idea generation.

"Feedback is not really given to be honest. I mean I could be more enthusiastic than I am… I do tell people when I think an idea is a good one but with [the other senior manager] you tell him something and then you don't hear back about it. There is definitely a lack of feedback, that stops new ideas for sure."

Senior Manager, Organisation G

"I don't think there's much going on to be honest in terms of ideas so that's a difficult question to answer. Perhaps it (feedback) is an area that needs to be looked at… not necessarily financial recognition, something more along the lines of positive (verbal) feedback might be reasonable and sensible… yes, perhaps that is something that I need to take more time to do in the future."

Senior Manager, Organisation E

Both of these quotes indicate that feedback in these settings is lacking. Interestingly enough, both senior managers are open about this point. Within the first quote it is thought that this individual "could be more enthusiastic" and that a lack of feedback "stops new ideas for sure". This response adds further support to the thoughts expressed earlier in this section. The final quote again expresses similar views and there is an understanding that feedback on ideas does not necessarily need to entail financial reward, positive encouragement is believed to be something that might support the production of an increased number of new ideas.

Having discovered that a lack of feedback can inhibit the production of new ideas, is the converse true? Is feedback present in environments that are perceived to generate many new ideas? The following quotes seem to indicate that this is indeed the case.

"Yes, if I have got something that I think the business needs and would benefit from he (my manager) is very good at being a sounding board. So you can say to him "look, I think this is good, that is why I would do it" and he would critique it. You can certainly talk it through with him and prepare him for discussions that you will have at senior management team (meetings). So he is great at saying "well hang on, why don't you think of it this way; have you thought about those little connotations?"

Senior Manager, Organisation B

"It is important, it is… and it comes in the same category in terms of encouraging people… If they have done something which is working and is good then positive feedback is a good thing."

Senior Manager, Organisation I

Something striking in the quotes above is that providing feedback is not thought to be about holding formal appraisal meetings or overtly stating "this is some feedback I would like you to have". Observations in both of these organisations revealed that discussions about work, projects and tasks were informal and continual. The case study from organisation B (**appendix H**) makes specific reference to feedback in that setting being "immediate, detailed and clear". Feedback delivered in an informal and continual way was believed, in the cases of organisations B and I, to support the production of new ideas. Relatively recent literature has made a connection between growth and fulfilment at work and the need for feedback (Garg and Rastogi, 2006) alongside feedback being an important extrinsic motivator affecting creativity at work (Hughes, 2003).

Feedback as a concept was mentioned in all organisations across the sample, this factor will therefore need to be reflected in any final model or understanding produced by this study.

4.3.2 Action on Ideas

While the notions of feedback and action on ideas are conceivably linked, for the purposes of this study the words indicate two distinct factors affecting idea generation. During fieldwork, discussions surrounding feedback concentrated on verbal signals sent between parties while action involved an individual physically putting an idea into practice or testing it out in some way. Previous literature indicates that taking symbolic action on ideas can act as a form of social control (Tushman and O'Reilly, 1997) and that organisations which are thought to be more 'creative' have a 'bias to action' (Peters and Waterman, 1982). Previous discussions indicate that entrepreneurial learning is primarily action orientated (Penaluna and Penaluna, 2009) and this leads to the understanding that there is likely to be a connection between action and idea generation. The following quotes, taken from surveys and interviews indicate the views that are held about the relative importance of taking action on ideas.

"No I'd say it (taking action) would be fairly important because if people are coming up with suggestions and they are just being filed off into a black hole and they are not getting anywhere then people are going to stop coming up with suggestions. If it was something that was completely inappropriate you'd need to say "that doesn't really sit where we are at at the moment for X, Y, Z reasons…"

Senior Manager, Organisation B

"It (taking action) is very important because you are like the rock and they have got to have belief that you are credible and if things don't happen that undermines it."

Senior Manager, Organisation A

"You have got to be seen to take action… I mean… how important is it to take action… from a business point of view it may be a good idea or not a good idea, from a personal point of view it is always important, yeah?"

Senior Manager, Organisation I

Irrespective of organisation size, sector or culture action on ideas was thought to be necessary to maintain enthusiasm and motivation for future idea generation. This view is captured well within the quotes above where it is said that without action people "stop coming up with ideas" and that action lends the leader credibility. The final quote comes from a slightly different stance by highlighting that while an idea may not be worthy of action from a business point of view, it always is from a personal point of view. In this case this view can perhaps be explained, at least in part, by the paternalistic style (Pellegrini and Scandura, 2008) adopted by this leader. While this discussion is useful it is very important to point out that the views captured so far are only those of senior managers in each setting. **Table 4.7** has been developed from survey responses, specifically a question asking whether action taken by a leader (or organisation as a whole) on ideas encourages the generation of more ideas. The perceived level of idea generation in each setting can be seen in the right hand column. As before, this measure of idea production has been derived by aggregating views from the various semi-structured interviews.

Organisation	Action taken by leader / organisation on ideas encourages further idea generation (number of responses)			Does this organisation generate lots of ideas (aggregate response from interviews)
	Negative	Neutral	Positive	
A	2	1	8	YES
B	3	2	10	YES
C	2	4	7	NO
D	0	0	19	YES
E	0	3	3	NO
F	2	2	6	NEUTRAL
G	0	0	3	NO
H	0	0	3	YES
I	0	2	2	YES
J	1	1	1	NO

Table 4.7: The Impact of Action on Idea Generation

The data presented above is intriguing; even in settings where it is felt that few ideas are produced it is believed that action taken on ideas will encourage the production of new ideas. Every organisation (with the exception of Organisation J) produces a strongly positive result for this question, thus confirming that action on ideas is arguably an important stimulator of further new ideas.

4.3.3 Organisational Visions and the Guidance of Idea Generation

Evidence presented in **section 4.2.3** suggested that broad frameworks are needed to guide the idea generation process. A point that was made on a number of occasions during data collection was that an organisation could make use of its vision to provide this broad outline, providing individuals with a 'target' for their ideas without imposing strict structures. Before going further it is vital to define 'vision'. The vision is often explained as the direction of an organisation, highlighting what it needs in order to reach its destination

(Spragins, 1992; Kilpatrick and Silverman, 2005; Gdanz, 2009). Leaders must be able to clearly convey the current situation and indicate where they want people to be headed (Kets de Vries and Florent-Treacy, 2002; Kets de Vries, 2003) and it has been argued that when it comes to sustaining success, vision matters more than strategy because it can become a guiding force for day-to-day behaviour (Lipton, 2002). This is arguably why connections form between visions and the guidance of idea generation but how does this proposition compare to the reality of organisational life in SMEs? Evidence gathered from one particular setting suggests that there is a link between vision and idea generation; the following quote expresses the importance of communicating a clear picture to all individuals employed by this firm.

"I think for us we are so behind with it (idea generation)… or so disjointed from doing it that actually it would be a stepped process and I think the primary and initial step would be to start communicating and giving the employees more of the bigger picture and more of an awareness of where things are at. Until that happens I don't think you could really take things much further forward because they're shooting at the wrong target."

Senior Manager, Organisation C

It is arguable that this passage is a reference to vision (Spragins, 1992; Kilpatrick and Silverman, 2005; Gdanz, 2009), indeed the word "vision" appears repeatedly within the relevant case study (**appendix H**). Key points of note include the fact that communicating this picture should be the "primary and initial step" in encouraging idea generation and that without it employees would be "shooting at the wrong target." Exploring present literature it can be argued that this view is similar to that advanced by Amabile and Khaire (2008) who specifically highlight that leaders must attempt to provide paths through the bureaucracy in order to encourage idea generation. Similar views about the

importance of vision to idea generation were made in several other settings, as evidenced by the following quotes.

"…Yes it (idea generation) would absolutely depend on how well the owner communicates what he wants to do with the organisation… I know there is a vision but it just seems somewhat distant from me and what I am doing. It is quite demoralising sometimes."

Middle Manager, Organisation G

"So, yeah, it is kind of like that [but] it is just not as overt as that I think, it is a bit more tacit, and it (the vision) is so ingrained in the history of the organisation that we don't have to go "this is the vision everybody!" It has developed over time… and helps people to judge where an idea has come from and how relevant it might be."

Senior Manager, Organisation D

Examining these views in detail lends support to the view that an organisation's vision can be seen as a type of framework for idea generation, providing some degree of broad direction and structure which people can subsequently 'hang' or 'pin' their ideas on. Language used by various individuals indicates that an appropriate vision provides "clarity" and "understanding" (Kets de Vries and Florent-Treacy, 2002) while the absence of vision is thought to lead to "distance" and individuals feeling "demoralised". A further theme present in the evidence above is that irrespective of any actual content leaders must take time to ensure that employees are linked into the vision. If this link is not made then individuals struggle to relate the vision to their day to day tasks and ideas (O'Gorman and Doran, 1999; Lipton, 2002).

4.3.4 Mental Capacity and Freedom

Although the conceptual model (**Figure 4.1**) noted that leaders must set the context for idea generation, this particular point was left relatively open. Even with a vision in place to channel effort in a particular direction, organisations still need to provide an appropriate stage upon which individuals can perform (Woodman et al, 1993; Amabile et al, 1996; Houghton and DiLiello, 2010).

Existing literature notes the need for "sufficient" resources and the broad notion of 'freedom' (Amabile et al, 1996; Desai, 2010). Also widely discussed is the motivating nature of appropriate rewards and respect (Politis, 2005; Houghton and DiLiello, 2010; Sendjaya and Pekerti, 2010), trust (Brown, 2008) and access to relevant technology (Garg and Rastogi, 2006). While these contributions are undoubtedly useful current literature lacks clarity around the interpretation of concepts such as freedom. Is this physical, temporal or mental freedom or a combination thereof? Fieldwork adds to the existing literature in two specific ways, understanding how freedom at work may positively impact idea generation and adding clarity to the related issue of having available 'mental capacity' for idea generation. The former will be discussed first.

Freedom was a word that arose frequently during surveys and interviews. A key benefit of using a semi-structured interview strategy (Bryman and Bell, 2007; Easterby-Smith et al, 2008) was that specific concepts could be probed in considerable detail. As a result, this study can draw conclusions about the nature of freedom and its role in the generation of new ideas. In settings where it was perceived that many new ideas were produced it was telling that

individuals felt that they were able to set their working day up in a way that suited them. The following quotes are taken from these sorts of settings.

"It is a complete mix, it depends what week it is really. I can be out on the road for several weeks driving in between meetings, spending most of my time in the car you know… I might choose to work at home for a couple of days but equally I might be in and out of the offices where everyone else is and that's fine."

Professional Employee, Organisation D

"I've been able to stop and start watching a TV programme or something for 20 minutes or the other thing is I'm a smoker and I can go out for a cigarette whenever I want; no questions asked… off I go and that kind of time… kind of cool down period where I am not visually apparently working I think a lot of employers might be like "you're not working, get back to work!" Meanwhile (my manager) I think realises that in that time… yes, I am not visibly apparently working but the cogs are still ticking, churning, trying to comprehend whatever it is that has frazzled me in the first place."

Professional Employee, Organisation I

The commonality between these two extracts is that individuals are free to make a choice about how and when they do their work, as stated earlier in this chapter this theme is clear within the case studies documented in **appendix H**. In the second situation, where observations confirmed that work involved periods of intense concentration and effort, the employee is free to watch TV at work to "cool down" when necessary. This is believed to contribute to the generation of new ideas. Given this information it can be argued that the type of freedom needed for best idea generation is simply the freedom from micro-management (Mumford, 2000; Avramidis, 2008; Pullen et al, 2009). Further evidence to support this view comes from an interview with a senior manager at Organisation I where it was said;

"I have got a clear idea of the overall goal and I think it is healthy… if you have a feature to make in the software I know what the input is and I know what output is required… It is healthy for the employee to understand what that input is, understand what the output is and then have the freedom to think "right, how am I going to get from there to there." The input to the output, you know?"

Senior Manager, Organisation I

The thoughts expressed above correlate well with the view expressed by the professional employee. In this setting goals are set out, outputs are discussed and then individuals are free to move from point A to point B in their own way with management acting as a safety net if problems arise. Contrast this view to the thoughts expressed in an environment where few ideas are generated.

"[You need] free rein in your job to be able to be standalone but then I am controlled very tightly in other aspects of my role. So as an employee I feel I am treated as a junior but then there is this expectation that I have to be standalone. (Interviewer: Does that contradiction negatively impact idea generation?) It does. My manager… at the end of the day this is his business so he's going to want to have that control but it's giving me that trust that I don't need to be controlled too tightly in some aspects if he's expecting me to be completely standalone in other respects."

Professional Employee, Organisation J

In this particular setting it is believed that there is tension between individuals needing to act in a standalone advisory capacity yet the leader of this organisation controlling employment aspects of the relationship very tightly, e.g. setting strict working hours. The employee suggested that there was an incompatibility between these two stances and that this had a negative effect on her ability to generate ideas. Links can be seen with elements of the existing literature where it is believed that a high degree of formalisation and lack of autonomy inhibits innovation (Arad et al, 1997; Martins and Terblanche, 2003). Based on this evidence it can be argued that organisational environments must

provide autonomy and allow individuals a choice in when and how they complete their tasks if idea generation is to be maximised.

Moving on from the issue of freedom, fieldwork uncovered evidence linking 'spare' mental capacity to an increase in idea generation. When asked about the factors that inhibited idea generation individuals from all organisations said it essentially came down to time. Pushing for further clarity on this point lead to the understanding that 'time' was actually 'mental capacity', in other words the most ideas were generated when individuals had time to mull thoughts over, think things through and debate possible courses of action. However, having spare mental capacity was not about having 'nothing' to do, as the following quote indicates.

"It is something to do with having enough to focus your mind but not totally absorb it. Slightly meditative in that sense, you know there is something going on that is just holding enough of an input but most of your brain is free to sort of you know… there is enough room on the desktop as it were to plant other applications."

Junior Manager, Organisation A

In this situation it was thought to be necessary to have something holding one's attention but not totally absorbing it. This then provides a focus upon which new ideas can be constructed. It is understood that learning in work groups is most effective when tasks are mentally stimulating (Lantz and Brav, 2007) and that creative thinking actually results from everyday mental processes rather than a sudden 'burst' of insight (Sawyer, 2006). Practitioner literature draws similar conclusions stating that "good ideas are not simply conjured out of thin air, they are built out of a collection of existing parts" (Johnson, 2010, p34-5).

Fieldwork suggests that there is a link between individuals generating ideas and having some form of superfluous mental capacity. Within this specific sample, individuals located in organisations that were perceived to generate relatively fewer ideas frequently reported that “the day to day overwhelms”, leaving little space for new thinking. The quote below is typical of the responses received in these settings.

“The day-to-day has definitely overwhelmed idea generation because when you are not learning new information… if you are not constantly trying to seek new information then idea generation can become quite staid I think.”

Administrator, Organisation E

This individual relates idea generation back to learning and seeking out new information. The particular view expressed here is that the overwhelming nature of day to day work has stopped this individual searching for new information which has consequently meant that idea generation has become “staid”. One can arguably depict the relationship between available mental capacity and idea generation as a bell curve (see **Figure 4.6**).

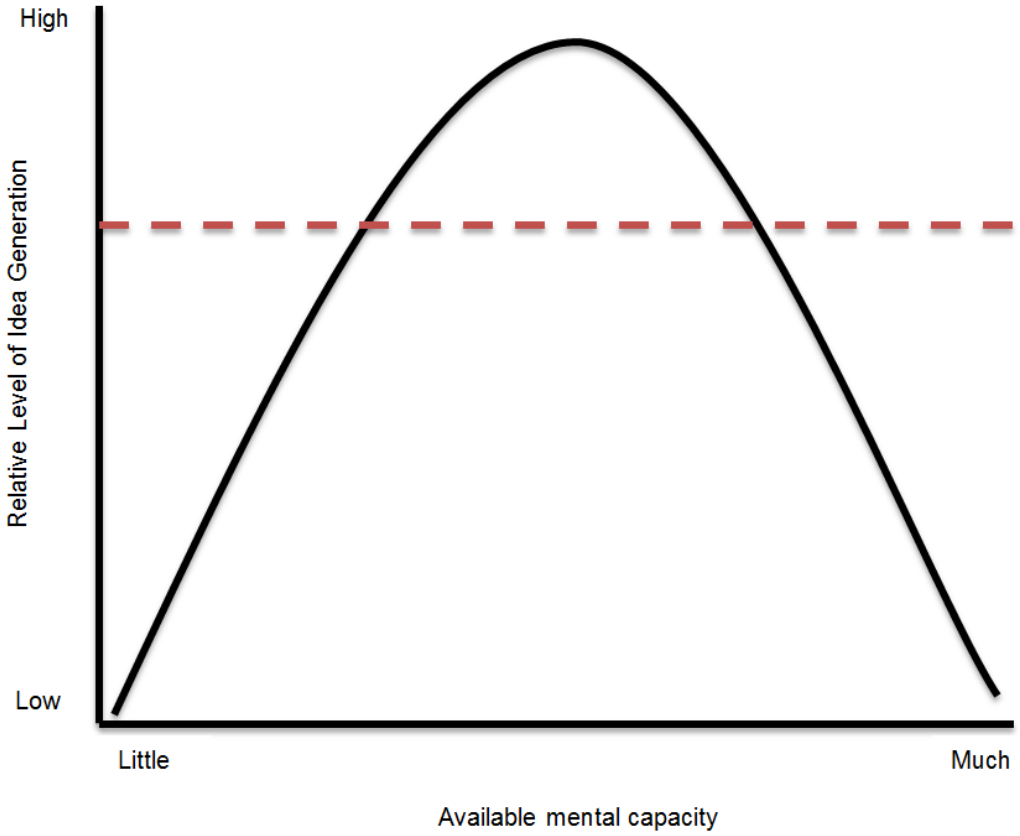


Figure 4.6: The Relationship between Mental Capacity and Idea Generation

Figure 4.6 underlines the basic point that where little mental capacity is available (i.e. work is undertaken at a frenetic pace) few ideas are believed to be generated. Conversely where individuals have little to do (i.e. most/all mental capacity is available) the level of idea generation is also thought to be poor, perhaps due to a lack of focus and direction (Powell, 2008; Mayfield, 2009; Johnson, 2010). In several organisations it was suggested that tasks need to "hold one's attention whilst leaving some room on the desktop for exploration." From evidence gathered by this study it can be said that an overwhelming workload, or job intensification (Zeytinoglu et al, 2007; Brown, 2012) can limit available mental capacity with the result believed, by employees, to be lower levels of idea generation at work. It can also be argued that there are links between the availability of mental capacity and organisational vision.

Previous discussions in this chapter (**section 4.3.3**) noted the role that visions play in the guidance of idea generation and it is plausible that a well-defined and directed vision may provide the necessary “space on the desktop” by enabling employees to focus their efforts and activities at work.

In addition to the points discussed above, organisations arguably need to balance the demands of the job if they are to encourage individuals to enter the zone above the dashed line highlighted in **figure 4.6** where most ideas are believed to be generated. As this study is focusing on factors external to the individual affecting idea generation, the notion of mental capacity will not be covered in more detail as discussions will inevitably drift onto psychological issues and other factors that are *internal* to the individual.

4.3.5 Physical Distance and the Development of Ties

Existing literature states that creative idea generation is enhanced when an individual can look outside of their immediate collective for information and stimuli (De Jong and Den Hartog, 2007; Staber, 2008). While this study has found that individuals within SMEs place more importance on contacts which are “internal” rather than “external” to the organisation when generating new ideas, these contacts may still be in located in different work teams, groups or even physical locations. It is understood that creative idea generation is driven, at least in part, by face-to-face interaction and debate (Scott, 2004), therefore the physical layout of the workplace is likely to have some sort of impact on the production of new ideas (Meusburger, 2009; Sailer, 2011). **Table 4.8** paints a picture of the physical layout of each organisation in the sample; more detail

about the structure and dynamics of each setting is captured at the start of each case study (**appendix H**).

Organisation / Sector	Number of Employees (f/t equivalents)	Number of Work Locations	Basic Description of Site(s)
A (Healthcare)	150	1	Large site with individuals located in different buildings depending on their role/function.
B (Arts)	130	2	1 large performance space / offices and 1 production facility. Offices in the former are for individuals / small teams while latter space is open plan.
C (Marine / Manufacturing)	55	1	Very large site comprising marina, engineering works and offices. Considerable distance between teams.
D (Social Enterprise)	45	3	Multiple sites although each is essentially an open plan office with attached breakout spaces/meeting rooms.
E (Pubic Sector)	32	1	A series of interconnected rooms in a town hall. Although based on one site, work requires individuals to move throughout the city.
F (Leisure)	15	1	Very large site comprising the organisation's main facility and a communal club house. Individuals are spread around the site depending on their role / responsibilities.
G (Retail / Tourism)	11	1	Restaurant, hotel and bar located in one building. Relatively small working spaces, individuals constantly "bumping into" one another.
H (Community Interest Company)	4	2	One main site and a small studio located 20 miles away. Main office is open plan; studio facility is set up for design/production work.
I (Software Design)	3	1	Single room within a larger business park. Access to communal facilities.
J (Consultancy)	3	1	Open plan office with attached meeting room located on a relatively remote, rural site.

Table 4.8: Physical Layout of the Study Organisations

Only two organisations in the sample (Organisations B and D) can be categorised as being truly multi-site because Organisation H only makes use of its studio facilities at specific times, with individuals generally working from the main office base. While separate work locations might plausibly have a negative effect on the development of ties between individuals and groups,

fieldwork found that the key factor was actually the *dispersion* of a site. Organisations operating from large sites (i.e. Organisations C and F) appeared less able to develop internal ties between individuals and groups, leading to employees identifying relatively strongly with their immediate work team but relatively less strongly with other parts of the organisation. The following view, outlined by an employee of Organisation C illustrates this issue.

"I don't need to know what goes on in the rest of the business but I do know just by virtue of the fact that I do go around the site a lot myself and so I do know the guys who work in the shipwrighting, painting and the engineering sides of the business. But really my role is marina based so you could spend all of your time down on the marina and not involve yourself in any other aspects of the business. People do that, there isn't a great deal of cross over really."

Manual/Administrative Employee, Organisation C

It is interesting to note that this individual suggests other employees simply sit within their roles, without there being a great deal of cross over. This individual went on to suggest that the lack of interaction negatively impacted idea generation and that a greater element of networking would be useful so that everyone could understand what was going on inside the organisation. It was felt that without this link, ideas, even if they were generated, would have little relevance to day-to-day operations. Creative idea generation is often described as a social process (Sayer and Walker, 1992; Davis and Scase, 2000) with there being a need for spatial proximity (Heßler, 2003) to stimulate communicative density (Sailer, 2011). Data gathered from fieldwork helps to build an argument that physical distance between individuals and teams has an impact on idea generation. The following quote adds further weight to this argument. This extract comes from an interview conducted within Organisation F which, like Organisation C, is based on a very large site.

"To be honest I don't have any interaction with other members of staff outside my team. I come in, do my job, have breaks in our warehouse and then go home… Probably isn't the best way to be but we're located right on the other side of the course, it takes a good 20 minutes to walk to the clubhouse so what's the point?"

Manual / Administrative Employee, Organisation F

Probing further on this line of questioning revealed that physical distance is thought (by the employee) to limit the relative level of idea generation. It is perhaps telling that both of these quotes come from individuals who undertake largely manual roles who have no need to access computers or any other form of communication aid during their day. They and their teams were observed to be almost 'families' at work, isolated from the main hub of the organisation. This physical separation appeared to encourage team members to be inward rather than outward looking, primarily due to the effort required to contact other individuals. While discussions so far have focused on 'distance' having a negative effect on the development of ties the passage of text below is typical of situations where individuals are in close proximity to one another.

"It is more about the place, the environment here is a very nice place to work. Everybody is very friendly and I know a lot of people say that in a lot of organisations but you are encouraged to talk to one another and obviously when you talk to people from different departments that is when you are able to exchange ideas because you are sharing knowledge about your departments."

Professional Employee, Organisation B

This particular organisation is believed to generate a large amount of ideas and within the text this individual suggests that employees are encouraged to talk to one another, sharing knowledge and ideas. Although this organisation has two

separate sites individuals did not feel “distant” from one another. As highlighted in the quote people are encouraged to communicate, sharing knowledge about their departments and this perhaps comes down to leadership in this setting (Powell and Dodd, 2007; Catmull, 2008). It is arguably the role of the leader and/or the management team to foster a sense of unity and collective purpose (Amabile and Khaire, 2008) in order to encourage the formation of networks (Staber, 2008) and ties (Granovetter, 1973; Ruef, 2002) which ultimately leads to improved idea generation.

4.3.6 Openness and Transparency

A final recurring factor that needs to be discussed is the need for ‘openness’ and ‘transparency’. Writers on creative idea generation argue that innovation thrives on openness (Morgan, 1997) and that openness and transparency inside organisations helps to build trust (Tanner, 1998). This trust, between leader and employee is believed to be a vital underpinning of idea generation. These links are seen in different parts of the literature (Ekvall, 1996; Moultrie and Young, 2009; Johnson, 2010) indicating that this is an issue worthy of further exploration. Existing models, such as the one produced by Ekvall (1996), copied in **figure 4.7** are informative but specifically consider the ‘creative climate’ rather than capturing the broader range of factors which might affect idea generation in organisations. Moreover studies undertaken by researchers including Moultrie and Young (2009) are based on the study of creativity in ‘creative’ organisations; one cannot presume that the same interpretation will hold true for what might be termed ‘non-creative’ organisations.

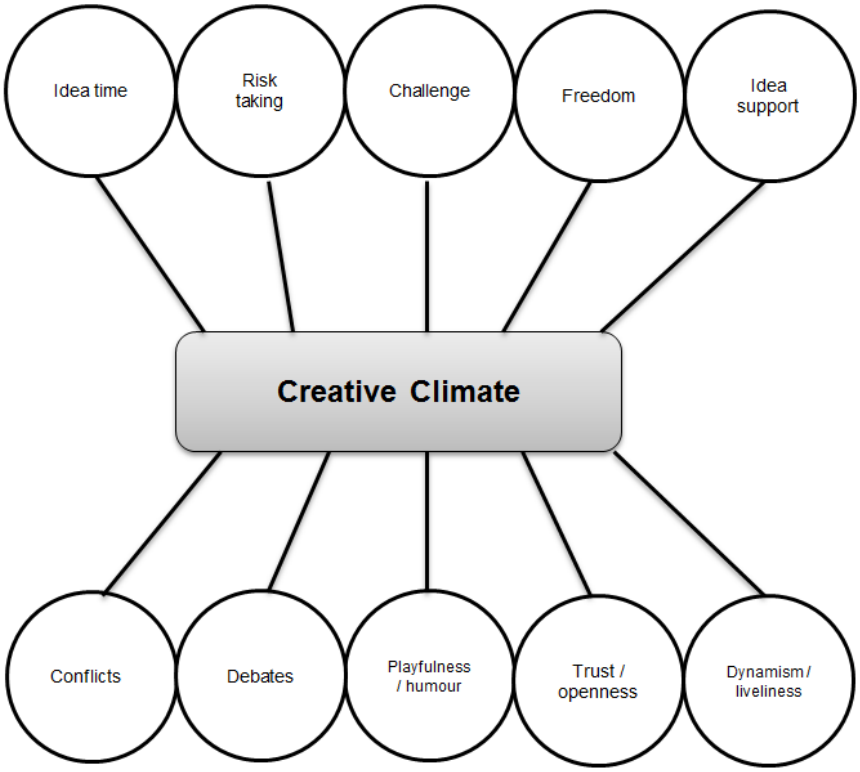


Figure 4.7: Ekvall's Model of Creative Climate

Source: Moultrie and Young (2009, p300)

While not specifically captured in the initial literature review, openness and transparency do appear to have influence over relative levels of idea generation. As a brief aside, the emergence of 'openness' and 'transparency' as factors affecting idea generation demonstrates the importance of adopting the principles of grounded theory (Glaser and Strauss, 1967; Glaser, 1978; Strauss, 1987) for this research. If fieldwork had not been approached in this way it is perhaps unlikely that findings such as these would have emerged.

Moving back to analysis of the issue at hand, it is important to first define what is meant by the words 'openness' and 'transparency' within the confines of this study. During fieldwork these words were associated with specific processes and mechanisms connected with idea generation, for instance, having an 'open'

and ‘transparent’ feedback system meant that the original idea generator understood where their idea had been sent and when they would hear further information about it. It is important to understand that these words were not connected to organisational culture (Schein, 1984; Furnham and Gunter, 1993; Purcell et al, 2003) or broader notions such as that; simply to processes, systems and mechanisms associated with idea generation.

With this point in mind a key finding was that this was very much an issue impacting the larger organisations in this study, in other words the medium sized firms. The following quotes illuminate key issues surrounding the perception that management and processes inside these organisations might be characterised as ‘closed’.

“I think it is kind of in a misty void in as much as I don’t really have much involvement (after I put an idea forward). I trust that my manager takes my ideas on board and I trust that she takes them further so it is not a case that I think she forgets about them necessarily. But I don’t really know how it is played out afterwards. It would definitely help if it was more open, It would be nice if there was a bit more structure and feedback from the further levels to say “this is where the idea is at now, this is where we are taking it to next or here is where we are going with it.”

Administrative Employee, Organisation B

“(My manager) is good really, she’s open but at higher levels no, I don’t really know what goes on there and things just seem to get lost… Why that is I don’t know, it might just be because people are busy or that it’s just generally a closed shop.”

Professional Employee, Organisation A

While these individuals work in very different organisations, the first of which could well be tagged with the word ‘creative’ and the second ‘non-creative’, they

both raise remarkably similar points. There is a feeling that first line management can be considered to be open but that there is little openness and transparency from higher levels of management. The first individual specifically highlights that more structure and transparency would help idea generation while the second suggests that issues may either be down to "busyness" or the top of the organisation being a 'closed shop'. The sense that openness and transparency relates positively to improved idea generation links with the current literature (Ekvall, 1996; Morgan, 1997; Moultrie and Young, 2009). This study also extends this literature by finding that these factors are equally important to organisations that one might term 'non-creative'.

Due to the smaller number of people, and fewer levels of management that exist in smaller organisations (O'Gorman and Doran, 1999; Burns, 2007) it is perhaps unsurprising that these firms are generally thought to be more open. During fieldwork there was often the sense that managers and employees had stronger connections and that this led to a greater flow of information between them. The quote below is typical of the response received in smaller organisations to questions about openness and transparency.

"I think there is an openness and honesty that needs to be there (between employer and employee) so that is another reciprocal relationship and I suppose trust forms a huge part of that development and ideas as well you know… there needs to be a trust if you are to encourage the sharing of lots of good ideas."

Senior Manager, Organisation H

Openness and fluidity are key themes emerging from the case study developed for Organisation H (**appendix H**). While the response above was typical there

were exceptions to this general view. The following example was drawn from a very small organisation indicating that even in a collective of three there can sometimes be a lack of openness and transparency.

"I do wonder sometimes… (my manager) has got clear ideas and I think sometimes if you come up with ideas that don't match with that then they are just discarded. Sometimes we have a great discussion and I feel that there has been a positive talk about things but then nothing happens because (my manager) doesn't want them to if you see what I mean because it's got to be fed through from him as the leader."

Professional Employee, Organisation J

Rather tellingly perhaps, this individual felt that her organisation didn't generate many ideas. The broad sentiment captured in this quote indicates that, as in larger organisations, ideas are put forward but nothing happens. The feeling that this setting lacks openness and transparency can be inferred from the language used by this interviewee. In the passage phrases such as "I do wonder sometimes," and "I feel that," build the perception that communication, systems and processes are not well defined. The interviewee is essentially guessing at the reasons why ideas are not taken forward rather than understanding the objective facts.

There is arguably a relationship between openness, transparency and the generation of ideas in SMEs, whether they are 'creative' or 'non-creative' in nature. It has been found that larger organisations struggle with these issues more than smaller organisations, perhaps because larger organisations contain many more management levels and more complex communication channels (Staber, 2008; Hotho and Champion, 2011). Despite making this point it has also been found that smaller organisations can struggle with these issues and

that this struggle to achieve openness and transparency can significantly impact idea generation.

4.3.7 Section Summary

Over the last few pages several key issues have been discussed which build on and extend the conceptual model presented in the literature review. These findings have shown how vital it was that this study adopted the principles of grounded theory (Glaser and Strauss, 1967; Glaser, 1978; Strauss, 1987); if an open, exploratory approach had not been taken it is unlikely that fieldwork would have uncovered this level of detail and depth. While discussions so far have outlined many key findings, one factor, arguably the most important factor affecting idea generation, has not yet been explored in detail. Leadership is mentioned consistently throughout the literatures surrounding idea generation, creativity and innovation. It is to this issue that attention now turns.

4.4 Leadership

Existing studies, both qualitative (De Jong and Den Hartog, 2007; Kempster and Cope, 2010) and quantitative (Parolini et al, 2009; Sendjaya and Pekerti, 2010), empirical (Politis, 2005; Ucbasaran et al, 2010) and theoretical (Martins and Terblanche, 2003; Dickson, 2010) in nature emphasise the importance of leadership to idea generation. A key question which this thesis set out to answer was whether there was any one specific form of leadership that best enables idea generation in SME environments and leadership was indeed a theme developed in detail within the case studies (**appendix H**). As well as

answering this question it is also important to understand how leadership influences the other factors that have been identified as being important to idea generation in SMEs.

While there is an incredible diversity of views and evidence within the leadership literature, this chapter, and study as a whole is not setting out to provide definitive quantitative data suggesting, beyond doubt, that one leadership style is definitely linked to improved idea generation in SME environments. Having said this, the rich contextual data (Stake, 1995; Hannabuss, 2000) gathered during fieldwork does allow for a broad picture to be developed, highlighting potentially significant findings which could both answer the research questions and form the foundation of future research.

The literature review discussed theories and models of leadership including trait theory (Stogdill, 1974), style theories (Lewin et al, 1939), situational and transformational leadership (Taffinder, 1995; Shin and Zhou, 2003; De Jong and Den Hartog, 2007), servant leadership (Sendjaya and Pekerti, 2010) and entrepreneurial leadership (Gupta et al, 2004). These discussions, and others, contain several interpretations of how leaders and leadership can influence idea generation (Yukl, 2002; Shin and Zhou, 2003; Catmull, 2008; Kempster and Cope, 2010; Ucbasaran et al, 2010), all making different but interconnected points and arguments. It is against this backdrop that fieldwork attempted to assess whether there was, in fact, any one specific form of leadership that best enabled idea generation in SME environments.

Perhaps the best starting point for this analysis is to attempt to match perceived levels of idea generation in each of the study sites with the broad view of "leadership" in that setting; this information is highlighted in **table 4.9**. The words and phrases that have been used to describe the "style" of leadership in each setting have been developed from analysis of the qualitative surveys and interviews as well as the field notes made at each organisation.

Organisation	Words and phrases that describe the style of leadership in this setting	Does this organisation generate lots of ideas (aggregate response from interviews)
A (Healthcare)	Knowledgeable, process orientated, encourages ownership of issues	YES
B (Arts)	Visionary, collaborative, encourages exploration, knowledgeable	YES
C (Marine / Manufacturing)	Autocratic, paternalistic, emotional, sedate	NO
D (Social Enterprise)	Collaborative, encourages risk taking, community, visionary	YES
E (Public Sector)	Formal, paternalistic, knowledgeable	NO
F (Leisure)	Indecisive, looking at today not tomorrow, risk averse, planned, lethargic	NEUTRAL
G (Retail / Tourism)	Autocratic, unplanned, visionary, emotional	NO
H (Community Interest Company)	Informal, group of friends, community, collaborative, exploration	YES
I (Software Design)	Paternalistic, encouraging exploration, safety net in times of crisis	YES
J (Consultancy)	Autocratic, planned, orderly, knowledgeable	NO

Table 4.9: Matching Idea Generation to Leader Styles

It is important to note at this stage that leadership within Organisation F comes from a management committee rather than a single individual; this is discussed in detail within the relevant case study (**appendix H**). The words and phrases in **table 4.9** have been deliberately chosen to avoid, wherever possible, existing leadership theories and models. These words and phrases describe both the leader themselves and their broader effect on the environment inside their

respective organisations. It is also important to understand that this assessment has been made through the eyes of the researcher rather than leaders being required to self-report by filling in a standard questionnaire. The position of the researcher was discussed during the methodology where it was understood that social reality would be interpreted by the researcher because social systems are not natural phenomena and cannot be understood independently of human beings (Ryan et al, 2002). Further discussions highlighted the intensely personal nature of qualitative research (Irvine and Gaffikin, 2006), again noting that qualitative inquiries require active researcher involvement in order to access the reality behind the reality (Bryman and Bell, 2007).

Further to the points above it was understood that self-reporting of leader styles, attitudes and behaviours would be unreliable (Brown and Reilly, 2009; Massingham et al, 2011) due to leaders reporting behaviours or styles that they thought were 'acceptable' or what the researcher 'would want to hear'. In addition to this, given that qualitative research has to contend with the "value laden nature of enquiry" (Irvine and Gaffikin, 2006) it is arguably beneficial that data is collected through one value framework (i.e. that of the researcher) rather than multiple different lenses which are inevitably influenced by worldviews, beliefs and experiences (Hannabuss, 2000).

A first key point of note from **table 4.9** has to do with the formality of leadership. Wherever the word "autocratic" or "formal" appears, that organisation is believed to generate relatively fewer ideas. This arguably correlates with the need for "freedom" in the working environment (Arad et al, 1997; Martins and

Terblanche, 2003; Desai, 2010). Where leaders provide this 'freedom', for example in organisations A, B, D, H and I, it has been reported that proportionately more ideas are generated. Another sentiment that appears to run throughout those organisations that are believed to generate many ideas is the sense that exploration is encouraged by the leader. In organisations B, D, H and I there is an overt reference to exploration and/or risk taking. This arguably relates to the theories of transformational leadership (Bass, 1990; Rosenar, 1990; Taffinder, 1995) where it is proposed that these leaders create strategic space for their organisations and initiate and encourage radical change. Data gathered for this particular study certainly leads to the suspicion that certain characteristics of transformational leadership may indeed be positively related to improvements in idea generation. Alongside this point there is also evidence that leaders need to encourage collaboration if they are to facilitate idea generation. Again, in those organisations that are believed to generate many new ideas words such as "collaborative", "participative" and "community" can be seen. This finding maps into existing, albeit not empirical, literature (Yukl, 2002; Catmull, 2008), adding empirical evidence to these points and therefore extending current understandings and knowledge.

A final theme which can be drawn from **table 4.9** is that the level of managerial control imposed by the leader on any organisation appears to have an influence on relative levels of idea generation. In settings where fewer ideas are generated words such as "planned" "micro-managed", and again, "autocratic" appear, while in organisations generating many ideas the language is typified by words such as "informal" "encouraging" and "safety net". As in previous discussions around generative error and managerial control it was found that

strict control processes do indeed limit idea generation (Hitt et al, 1996; Leonard and Swap, 2005; Busco et al, 2012). Evidence builds a picture that in SME environments levels of control are largely dictated by the leader, this is understandable given the fact that in SMEs the leader is often the only figure with managerial responsibilities (Burns, 2007).

Building on discussions above it is important to keep in mind that literature suggests that small firms can be characterised as an extension of the owner (Burns, 2007). The implication of this is that this individual arguably dominates idea generation because if he or she does not want something to happen, it will not. Evidence captured within Organisations G and J, evidenced by **table 4.9** reinforces this point, but it is vital to recognise that these organisations were not perceived, by employees, to generate many ideas. Smaller organisations generating significant numbers of ideas such as Organisations H and I did not appear to experience issues associated with the company being an extension of its owner. As stated previously these settings were characterised by "exploration" and "informality", suggesting that owners 'serve' rather than 'lead' the organisation (Parolini et al, 2009; Sendjaya and Pekerti, 2010).

Drawing these thoughts to a conclusion it can be argued that, based on the results of this study, a leadership style that best encourages idea generation is likely to include the following characteristics;

- Allowing employees a degree of latitude (i.e. freedom) at work
- Encouraging exploration of issues and problems
- Facilitating collaborative working and building a sense of community

- Avoiding strict controls and micro-management

The points captured above are phrased in a deliberately broad way so as to capture the diversity of evidence uncovered during fieldwork. There is certainly a possibility that transformational leaders (Bass, 1990; Rosenar, 1990; Taffinder, 1995) are best placed to encourage idea generation at work although it is vital that the word "facilitate" is not lost within this analysis. There is certainly evidence captured in **table 4.9** pointing to the need for leaders to act as servants to their organisations (Parolini et al, 2009; Sendjaya and Pekerti, 2010), particularly where words such as "encourages…" are used. Literature emphasises the link between servant leadership and autonomy (Graham, 1991), proposing that this can assist in developing what might be termed a 'creative' climate within organisations.

4.5 Leadership and the Factors that Affect Idea Generation in SME Environments

Discussions in this part of the chapter so far are notable for the lack of direct quotations. Leadership styles have been assessed from the point of view of the researcher so as to avoid conflicting worldviews, value sets and beliefs clouding the various issues at hand (Hannabuss, 2000; Irvine and Gaffikin, 2006). Now that discussions are turning towards the relationship between leadership as a variable and the other factors affecting idea generation that have been discussed in this chapter, it is appropriate to bring evidence in from interviews and surveys alongside observations made in the various environments.

Analysis will now focus on teasing out the links between leadership and the following factors:

- The development of internal and external ties
- Generative error and managerial control
- Flow
- Provocative thinking
- Repositories of old ideas and hunches
- Feedback and action on ideas
- Mental capacity and freedom
- Physical distance in the workplace
- Openness and transparency

Evidence relating to some of the points in the list above, such as managerial control, was discussed during the previous subsection so will only be briefly mentioned here.

4.5.1 Leadership and the Development of Internal and External Ties

Analysis (**section 4.2**) has already highlighted key trends such as contacts internal to the organisation being perceived to be relatively more important to idea generation than contacts external to the organisation. Alongside this point, fieldwork has also confirmed the findings of researchers such as Granovetter (1973), Ruef (2002) and Chaharbaghi and Cripps (2007) finding that a balance needs to be struck between individual and collective effort if the maximum number of ideas are to be produced in any given setting.

It is understood that leadership significantly affects the survival and growth of SMEs (Conger, 1998; James and Burgoyne, 2001; Gupta et al, 2004) and current literature suggests that small firms may be inhibited due to the lack of leadership training available to or accessible by entrepreneurs (Kempster and Cope, 2010). As captured in the literature review, the development of people management, delegation, team working and communication skills has a significant effect on the success of a small enterprise (Phelps et al, 2007). It can be proposed that these same skills may have an impact on the ways in which leaders develop ties within and around their organisations. The two quotes below are informative in this regard, the first having been captured within an organisation where many ideas are believed to be produced while the second comes from an organisation which is believed to have low levels of idea generation.

"Yes. I mean I purposely try to make it so that the boys spend some time together socialising you know, send them out for lunch and stuff like that. I believe that that plays an important part in idea generation and the business as a whole, get them to make friends with each other."

Senior Manager, Organisation I

"(Interviewer: Can you tell me how you encourage your team to build contacts either internal or external to the organisation?) I don't do enough. In some instances yes, like I would encourage individuals to take qualifications, talk to academics, talk to other people… give them lists of people to contact in terms of doing research. But in terms of giving them people who give them different perspectives… probably not sufficiently."

Senior Manager, Organisation J

There is recognition in both settings that encouraging and developing connections is important, this is reflected in and expanded upon within the relevant case studies (**appendix H**). The response from Organisation I correlates with their view that "isolation" is vital to idea generation in their context. This particular quote focuses on the encouragement of ties between employees with the leader definitively stating that this "plays an important part in idea generation". What is perhaps telling within the second quote is that this leader associates the building of ties with the giving of information. The leader recognises that not enough is currently done in this setting in this regard and one can perhaps relate this quote to the view that micro-management (Avramidis, 2008) is perhaps a factor impeding idea generation in this setting. Quotes used from this organisation throughout this chapter emphasise the relatively formal nature of the workplace and it can be argued that this centralised *control* is perhaps the overriding factor stifling idea generation. Evidence presented here, where the leader feels it is his place to give information rather than allowing employees to seek it out for themselves is arguably a further indication of this issue.

What is understood through both of these quotes, taken from very different organisations, is that the leader has a role to play in the development of ties, whether that is through encouraging socialisation (Allen, 1984; Kanter, 1996; Sailer, 2011), providing contact information possibly in the form of contact lists or a combination of both.

4.5.2 Leadership, Generative Error and Managerial Control

Literature, supported by fieldwork undertaken for this study states that creativity, specifically idea generation, is often sustained through a tolerance of generative error (Ryan, 1996; Tushman and O'Reilly, 1997; Roffe, 1999; Hughes, 2003). Furthermore it can be argued that the way in which leaders react to mistakes has a significant role to play in either facilitating or inhibiting learning and, consequently, the production of new ideas. Discussions towards the start of this chapter focused on the nature of this reaction and it can be argued that giving of feedback is a vital skill that leaders need to develop in order to build an environment that is conducive to the production of new ideas (Swinburne, 2001; Bárez-Brown, 2011). This point is emphasised by the quote below where it was felt that the reactions of the leader to 'mistakes' led to a reduction in idea generation.

"Well it's just that I think (the leader(s)) can be quite quick to criticise really. Really they want things done their own way, which I understand… but if something goes wrong at work it turns into a panic really quickly. In that situation you're focusing on fighting fires and there really isn't any emphasis on learning. It is just a case of "this is the job, do what I say… I guess that's really quite damaging to idea generation come to think about it"

Manual Employee, Organisation G

Language used by the interviewee is particularly intriguing. It is suggested that in this context mistakes quickly turn into a "panic" leading to a "this is the job, do what I say" response from the leader, documented in detail within the case study (**appendix H**). This reaction, as in previous discussions around the same topic, removes autonomy from the employee (Amabile, 1998; Powell, 2008), limiting idea generation as a result. It can therefore be argued that reactions to

mistakes and errors at work must be handled in a way that empowers employees. Without this empowerment and autonomy to continue to take risks (Dewett, 2004) an individual's desire to generate ideas will be dampened, if not extinguished entirely. Alongside the need to support generative error, leaders in SMEs also need to find an appropriate level of structure or *control* to focus and guide new ideas.

A significant finding from fieldwork surrounds the notion that organisational visions may well be useful in terms of providing a structure or guide for idea generation. Literature states that individuals with leadership responsibilities are generally the source of such statements (Gundy et al, 1994; Gdanz, 2009) although input from followers is generally thought useful in the construction of compelling visions (Powell and Dodd, 2007). Quotes highlighted earlier in this chapter noted that the development of such a vision needs to be the "primary and initial step" in order to ensure that there is an appropriate target for ideas. A suggestion can therefore be put forward that defining an appropriate and relevant vision is one of the very first tasks that a leader must undertake.

4.5.3 Leadership and Flow

Discussions in this chapter have highlighted the importance of the flow state to idea generation. These findings, supported by literature (Csikszentmihalyi, 1990, 1997, 2000; Jackson and Csikszentmihalyi; 2005; Marsh, 2005), have indicated that workplaces which provide challenging tasks and encourage individuals to develop and use their individual skills are positively associated with idea generation. Despite the flow state being *internal* rather than *external* it

has been found that work environments can, and do, have a significant effect on the *accessibility* of the flow state.

In order to assess if there is indeed any relationship between leadership and flow it is necessary to explore the language used by individuals within interviews. A common response to questions surrounding the flow experience was for individuals to relate this to their job or role rather than to the presence, absence and/or impact of a "leader". Evidence to support this point is contained in the quotes below.

"Well I'd like to think so, I think that possibly my role is traditional and has been carried along by lots and lots of people in the past in much the same sort of way but again we do have to think of how we can actually (use our own skills to) improve upon those situations."

Professional Employee, Organisation F

"I think so because I am… I guess I am quite lucky in that I do have a variety of different things that I can do, from project management to helping with some of the delivery of some of them. I look after volunteers, I kind of co-ordinate a volunteer group and I manage volunteers. So yeah it uses a variety of my skills I think."

Professional Employee, Organisation D

Evidence presented above paints a useful picture that an individual's own role plays a significant part in determining whether they are likely to access the flow state at work. Having presented this as evidence it is important to recognise that responses may be driven by the phrasing of the interview question itself. It is possible that asking an individual about 'work' immediately inferred that the interviewer was interested in hearing about 'their job'. Countering this point the

quote below occurred within a wider discussion about the issues that might influence the flow state. This individual again spoke specifically about 'her job'.

"The way we work here has changed hugely in the last few years. We are more of a freelance making place rather than part of the organisation I feel now. So we don't get to see what we make usually. We make a product and it goes to Wales or wherever. So it is quite different to being a little part of a big production which you work with your props department, scenery and you see it all come together in the end. That doesn't happen much now which does prevent it ("flow") I think."

Professional Employee, Organisation B

Again, discussions about flow immediately caused this individual to produce a narrative about how her role has changed over time and the impact this has had on being able to achieve the flow state at work. It can therefore be argued that leadership has an indirect impact on the extent to which an individual can or cannot access the flow state at work. Feedback delivered by the leader to an employee is likely to have a direct impact on that individual but in other aspects employees appear to look to their job rather than their leader when discussing the flow experience at work. The relationship between leadership and the flow experience is modelled in **Figure 4.8**.

Figure 4.8: Leadership and the Flow Experience

Existing literature, while not specifically discussing the flow experience, argues that idea generation is enhanced where jobs are designed to maximise the use

of an employee's skill set (Lantz and Brav, 2007) as well as providing a degree of autonomy (Hall and Heras, 2010) and feedback (De Jong and Den Hartog, 2007). Given the argued importance of job design to idea generation, and, by extension the flow experience, it is notable that leaders themselves report a lack of training (Kempster and Cope, 2010) which hinders their ability to manage people (Phelps et al, 2007). This is an interesting thought, and arguably a useful avenue for further research but as this point is strictly outside the remit of this present study it will not be further developed here. The core argument built within this part of the chapter is that leaders influence the flow experience in a mostly indirect way, largely through the design of roles within their organisations.

4.5.4 Leadership and Provocative Thinking

A key thought emerging from discussions surrounding provocative thinking centred on the level of fluidity and flexibility in different environments with the issue of change also being covered in some detail. It can be argued that within SME environments individuals with leadership responsibilities have a significant role to play in setting the stage for idea generation (Woodman et al, 1993; Amabile et al, 1996; Houghton and DiLiello, 2010), with the ability to think 'differently' being a key part of this (Majaro, 1992; Sawyer, 2006 Johnson, 2010). Indeed a key characteristic of transformational leaders is that they create strategic space for their organisations, initiating and encouraging *radical* change (Bass, 1990; Rosenar, 1990; Taffinder, 1995; Politis, 2005).

Based on the literature discussed above and the evidence presented within this chapter it can be asserted that a leader seeking to encourage idea generation must set the stage for, and positively encourage provocative thinking. The quotes below add further weight to this point, again emphasising the importance of being encouraged to think differently.

"I think leaders being authoritarian will limit idea generation… because I think as a leader if you are telling people what to do then you are just creating sheep aren't you. So that is definitely a bad thing in terms of coming up with new ideas."

Middle Manager, Organisation E

"Unless you are able to voice an idea, or even a fragment of one at work, you cannot know if you are taking the right path, or wasting time."

Professional Employee, Organisation G

A key sentiment running through the quotes above is arguably the extent to which individuals feel that they can voice their thoughts, ideas and proposals. It is known that environments which encourage knowledge sharing (Politis, 2002) are generally more creative and that facilitative leadership which encourages a dynamic interaction in supporting and energising diverse perspectives results in a greater number of ideas being exchanged (Ekvall, 1991; Parnes, 1992). It can therefore be argued that leaders have an important role to play in constructing an environment (Amabile et al, 1996; Houghton and DiLiello, 2010) where provocative thinking is not only allowed, but positively encouraged.

4.5.5 Leadership and the Storage of Ideas

Previous discussions suggest a link between relative levels of idea generation and the presence of some form of idea storage system. Organisations that had such systems are thought (by employees) to generate a greater number of ideas. In much the same way that leadership indirectly affects the flow experience it can be argued that leaders indirectly influence the storage of ideas. When asked about idea storage, individuals defaulted to talking about the physical system, or lack thereof, rather than the role of the leader in encouraging the use of such a system. While there was recognition that storing ideas in some way can assist the production of new ideas (Titus, 2000; McAdam and McClelland, 2002) it can be argued that the role of the leader in this process is limited to providing appropriate tools for the task at hand.

Further evidence to support this assertion is captured within the quotes below. It is notable that irrespective of setting, interview participants unanimously fail to mention any connection with 'the leader' when discussing idea storage.

"The meetings I have with my department that is all minuted and the meetings I have with (other managers) that's minuted. All the committee meetings are all minuted so it is all recorded but a lot of it is just put in a filing cabinet."

Middle Manager, Organisation F

"On the engineering side we make notes of different engine systems and so forth… We make reports on the computer system, what we've done if you like, we gather information on the project we've worked on so in the future if we need to go and work on that type of thing again we've got it there (the information) already."

Junior Manager, Organisation C

Both of the examples above emphasise operating processes which, while they may be defined by the leader initially, appear to operate independently of him/her. It is understood that leaders can play a crucial role in integrating knowledge stores (Ucbasaran et al, 2010) so there is perhaps an argument that a closer link needs to exist between the leader and the storage of ideas. Literature indicates that creativity is enhanced where there is greater resource sharing and information transfer between people (Christensen, 2006; Martinez and Aldrich, 2011) and it can be argued that idea storage systems help to facilitate this. In order to encourage idea generation in organisations leaders should invest time to encourage and facilitate the storage of ideas.

4.5.6 Leadership, Feedback and Action

Feedback from leaders on ideas is arguably less important in terms of the production of *initial* ideas although it is thought to be crucial to *sustaining* idea generation (Oldham and Cummings, 1996; Hughes, 2003; Garg and Rastogi, 2006). In a connected, but different vein, organisations which are believed to take action on ideas appear to generate more ideas than those that do not (Peters and Waterman, 1982; Glassman, 1986; Penaluna and Penaluna, 2006).

Most SMEs have less structure and flatter hierarchies than larger organisations (Burns, 2007) meaning that the role of the leader is substantially more important to encouraging idea generation (Amabile and Khaire, 2008). This is likely to be because processes including both feedback and action on ideas are largely driven by this sole leadership figure (Roffe, 1999; Hughes, 2003; Goffee and

Jones, 2006). Some evidence to support this assertion has already been presented in this chapter and the quotes below provide further clues as to the role of the leader in providing feedback and taking action on ideas.

"Yes, every time I have taken an idea to my leader and she has acted on it that has encouraged me to come up with more ideas."

Junior Manager, Organisation A

"Everything is in a continual loop, a continual discussion, it is a continual sort of challenge about "well, have you looked at it like that, have you considered this, have you considered the other… then how does that impact on what we are doing or what you are thinking about or how it looks or how it might or might not work?" That feedback from (the leader) is vital to coming up with relevant ideas."

Professional Employee, Organisation D

These quotes help to emphasise the relationship between leaders and both feedback and action on ideas. They have been gathered in very different settings, the former being a relatively process-driven organisation employing 150 individuals and the latter being a typically more 'creative' enterprise with 45 employees. Irrespective of context both quotes emphasise "feedback *from* my leader" and when "*she* has acted on it", indicating the direct relationship discussed above. Further evidence to support this assertion was captured in another, very different organisation.

"He (the leader) just acts like he isn't interested or that his ideas are the best and that kind of puts me off. At the end of the day it is his business and I get that but I do feel that he should be a bit more open to new things."

Senior Manager, Organisation G

In this particular setting a lack of interest from the leader is thought to have a significant impact on idea generation with this individual stating that this lack of action and/or feedback "puts her off". It is perhaps telling that this individual also believed few ideas were generated by this organisation. It can be argued that there is a direct link between leadership and action/feedback on ideas in SMEs because of the way that these organisations are typically structured. Having already noted that leaders in SMEs typically have little training (Kempster and Cope, 2010), particularly in terms of people management (Phelps et al, 2007) it is possible that a lack of appropriate feedback or action on ideas stems from communication-based issues (Andriopoulos, 2001; Gaspersz, 2005; Klijn and Tomic, 2010). It is known that innovative organisations have strong internal communication channels which extend, where necessary, across departmental lines, enabling the sharing of views, beliefs and plans (Angle, 1989; Koberg et al, 2003; Martinez and Aldrich, 2011). The quote from Organisation D where it was said that "everything is in a continual loop, a continual discussion, it is a continual sort of challenge*"* arguably provides evidence to support this, reinforcing the belief that strong communication channels can enable leaders to provide feedback and demonstrate action on ideas.

4.5.7 Leadership, Mental Capacity and Freedom

Issues associated with mental capacity and freedom have already been relatively well discussed in this chapter. It has been found that a lack of autonomy and too high a degree of formalisation at work can negatively impact

idea generation (Arad et al, 1997; Martins and Terblanche, 2003). This chapter has also noted that engaging in mentally stimulating tasks can provoke new ideas (Lantz and Brav, 2007) although jobs/tasks which are not taxing, causing a lack of focus can impair an individual's ability to produce ideas (Godin, 2008; Powell, 2008 Mayfield, 2009).

Linking back to a thought discussed in **subsection 4.5.3** it is arguable that leaders can support autonomy at work and allow for 'spare' mental capacity through job design (Williams, 2001; Ramamoorth et al, 2005; Hall and Heras, 2010). In this way it can be argued that leaders indirectly impact these factors by creating the 'stage' for idea generation (Woodman et al, 1993; Amabile et al, 1996; Houghton and DiLiello, 2010). If it is assumed that innovative behaviour is indeed grounded in the psychological contract (Ramamoorth et al, 2005; Klijn and Tomic, 2010), then the presence of autonomy, along with other factors such as procedural justice and equity will likely create a positive working climate which is conducive to idea generation.

While interesting, the argument above will not be developed further as this would be outside the remit of this study. What can be said, for the purposes of this thesis is that yes, leadership arguably has an indirect impact on issues associated with mental capacity and freedom at work through the mechanisms and processes of job design. In other words leaders must consider the processes associated with job design (Armstrong, 2006; Garg and Rastogi, 2006; Hall and Heras, 2010), structuring jobs in such a way that they provide autonomy (Powell, 2008) and an element of spare mental capacity if employees are to produce the maximum number of ideas.

4.5.8 Leadership and Physical Distance in the Workplace

A large part of this analysis has focused on the development of ties, both internal and external to the organisation. In this regard the physical layout of the workplace (Meusburger, 2009; Sailer, 2011) has been highlighted as a factor impacting idea generation. One can certainly suggest that a leader can significantly impact this factor through his or her choice of office location and layout. It is understood that creative ideas are driven, at least in part, by face to face interaction (Scott, 2004) and the evidence presented by this study has highlighted a relationship between physical distance in the workplace and the level of idea generation.

In settings where organisations operate from dispersed sites (e.g. Organisations C and F, see case studies in **appendix H** for further details) there is arguably a very significant role for the leader in terms of encouraging communication and links between these teams. A particularly interesting quote was uncovered within organisation F where the 'day to day' leader did appear to recognise this as being important to idea generation.

"In terms of the staff there is my assistant, 2 cleaners who work part time shifts, I see them every day apart from the weekends when I am not here. I talk to other senior managers every day. I tend to, even though I am not as such their line manager I do tend to go over (to other teams on the site) and see them if I can at least once a month to talk to them because you know… at the end of the day I am the face in here and I try to keep in contact with them all the time."

Senior Manager, Organisation F

From the quote above it can be argued that this individual recognises the importance of communication across the site. Observations revealed that while

this individual has the best of intentions regarding communication, he simply does not have enough time at work to fulfil these duties. This arguably contributes to levels of idea generation being lower in this organisation than other firms of a similar size which operate from smaller sites. Going back to evidence from Organisation D where it was said in a previous section that;

"Everything is in a continual loop, a continual discussion, it is a continual sort of challenge about "well, have you looked at it like that, have you considered this, have you considered the other…"

Professional Employee, Organisation D

It can be argued that the closeness of the team and workplace as a whole facilitates these continuous, informal conversations. Without this continuous feedback in this setting it is likely that fewer ideas would be generated. So, while leaders may not be able to affect all aspects of the physical work environment (Meusburger, 2009; Sailer, 2011) they certainly have a significant role in facilitating face to face interactions (Scott, 2004; Staber, 2008). Idea generation can be enhanced in situations where leaders take time to positively encourage the formation of ties between individuals and groups.

4.5.9 Leadership, Openness and Transparency

Innovation and idea generation thrives on openness and transparency (Ekvall, 1996; Morgan, 1997; Moultrie and Young, 2009). It is thought that SMEs are typically more "open" and "transparent" than larger organisations because they have fewer levels of management (O'Gorman and Doran, 1999; Burns, 2007). This study has already found that organisations which are generally more open

and transparent produce a greater number of ideas and these discussions highlighted the significant role played by the leader in “setting things up to be open”. It has, again, been suggested that developing clear and transparent communication channels (Staber, 2008; Hortho and Champion, 2011) plays a significant role in building an open and transparent environment. This is arguably very much driven from the leader, embedding a specific culture (Andriopoulos, 2001; Goffee and Jones, 2006; Godin, 2008) around these key themes.

Employees interviewed (and observed) within this study indicated that “honesty” “trust” and “structure” are thought to be important to developing an open and transparent environment. Where individuals believed that ideas were simply “lost in a misty void” or that an organisation was a “closed shop” their desire to continue producing new ideas diminished. Without openness and trust between a leader and his or her subordinates it is known that employee performance, both generally and in terms of idea generation, suffers (Tanner, 1998; Garg and Rastogi, 2006). Wedded to this is the need for leaders to develop clarity around ideas, not necessarily systems and processes, but instilling the belief in their employees that ideas are welcomed, listened to and then acted upon where appropriate (Ekvall, 1996; Staber, 2008; Moultrie and Young, 2009). Without this philosophy in place fieldwork has found, supported by literature, that the level of idea generation inside organisations is suppressed.

4.6 Relationships and Linkages between the Factors

While informative, discussions up to this point of the chapter have largely explored the factors in isolation of one another. In order to begin drawing this thesis toward a conclusion it is necessary to understand the potential relationships and linkages between the factors identified during the preceding pages. Perhaps the most prominent relationship that can be highlighted is the link between leadership and the creation of a vision to guide idea generation. It has already been noted that leaders must set the 'stage' for idea generation (Woodman et al, 1993; Amabile et al, 1996; Houghton and DiLiello, 2010), and evidence captured by this research has found that the production of a vision (by the leader) is the "primary and initial step" to embedding idea generation in organisations. It can therefore be argued that these factors provide an underpinning to support idea generation in organisations.

Further to the linkage made above, other relationships exist between the factors, notably between the availability of mental capacity, the need for provocative thinking and the requirement that there be feedback on ideas. It can certainly be suggested that in environments dominated by work intensification (Zeytinoglu et al, 2007; Brown, 2012), limited mental capacity will likely cause a lack of provocative thinking, due to limitations on time during the working day. It is also the case that without feedback on ideas there will be little constructive challenge as individuals will have no basis for determining whether an idea was relevant or irrelevant. Building on this point it is important to understand that without a defined system for storing, sharing and retrieving

ideas it will be difficult for leaders (or any other individuals) to provide feedback, or indeed take action on ideas.

Clear linkages can also be made between the need to encourage both internal and external networks/ties and the effect that physical distance in the workplace can have on idea generation. While discussions in **section 4.5** indicated that leadership strongly influenced both of these factors it can also be suggested that the strength of internal workplace ties also has a role to play in combatting the effect of physical distance in the workplace. In other words, organisations with strong connections within and between departments e.g. Organisation B, suffer less of the negative effects associated with physical distance at work than organisations with weaker connections (e.g. Organisations C and F). It is worthwhile noting that employees within organisation B believe it generates lots of ideas while individuals within both organisations C and F feel there is a lack of idea production.

Thinking critically and analytically about the factors discussed in this chapter leads to the understanding that there are also likely to be links between generative error and the ways in which organisations seek to guide idea generation. Where organisations seek to impose strict controls and standards (e.g. organisations G and J), evidence gathered by this study indicates that there are often negative reactions to mistakes, leading to lower levels of idea generation. By contrast to this, in settings where structures and guides are looser (e.g. organisations D and I) the reaction to error is one of learning rather than blame. Given the size of the sample used by this study it is not possible to claim that this is generalisable to all organisations in the South West, but the

pattern is intriguing nonetheless. Building on this it can also be argued that environments which provide looser structures and guides for idea generation also promote a greater number of flow experiences. Interviewees, particularly within organisations such as D and I, noted that they were encouraged to seek out challenges for themselves. It was said that this encouraged greater levels of idea production and it can therefore be proposed that there is a potential relationship between the way in which organisations seek to guide idea generation and the 'availability' of the flow state.

Further to these points there are also important connections between the flow state and feedback. Literature notes that in order to maintain the flow state, tasks must provide feedback (Csikszentmihalyi, 1990, 1997, 2000) so that individuals can understand how well (or otherwise) they are doing. This understanding can logically be extended to feedback provided by the leader, with it arguably being the case that the flow experience is more accessible in environments which provide this feedback (e.g. Organisation I). Moving on from flow, there is also an argument that the provision of feedback may enable organisations to be more open and transparent. This chapter has already noted that idea generation suffers when organisations are perceived by employees to be 'closed', and it is arguably the case that these environments also provide little feedback on ideas, for example Organisations C and J. The reality of the situation may be that by providing relevant and timely feedback, organisations automatically open themselves up and develop two way communication and information sharing. Examples of this are Organisations D, H and I. Particularly instructive in this instance is the quote, mentioned previously in this chapter, from a professional employee at Organisation D where it was felt that

everything was *"*a continual loop, a continual discussion, it is a continual sort of challenge*"*. This continuous loop of information moving between employee and employer was felt to support idea generation in this setting. Feedback has been highlighted as particularly vital to idea generation throughout this chapter and it is linked to one other consideration, action on ideas.

Idea generation is believed to be enhanced where organisations take action on ideas. This is one way in which leaders can demonstrate that they value input from employees, with previous literature indicating that taking symbolic action on ideas is a form of social control (Tushman and O'Reilly, 1997). In addition to this, creative organisations are thought to have a bias to action (Peters and Waterman, 1982). Action on ideas in an SME environment is arguably inextricably linked to the leader. The leader is ultimately responsible for the strategy and vision of the organisation (Burns, 2007), and, as a result it is this individual that decides if action will (or won't) be taken on an idea. Links can also be drawn here to the notion of transparency and openness. Leaders in organisations which are perceived to be 'closed', such as Organisation J, may well have logical reasons for not taking action on specific ideas, but without open and transparent communication of this, employees cannot understand the reasoning behind decisions. Idea generation is believed to suffer as a result of this, with individuals quickly falling into a "what's the point" mind set.

Links can also arguably be made between the notion of generative error and the need for some form of idea storage system. If a key part of generating new ideas is allowing room for error and then picking 'good' parts of old ideas out for future development then organisations must, theoretically, have a place to store

those old ideas. Without an idea storage system, whether mental, physical or technological, it is arguably the case that error will not be generative at all, old ideas that do not work will simply be discarded. Literature discusses the evolutionary nature of idea generation (McAdam and McClelland, 2002; Staber, 2008; Johnson, 2010), with it being specifically stated that 'old' ideas can often be kept until more appropriate circumstances present themselves (Titus, 2000). With this in mind a clear hypothetical link exists between the generative nature of error and the need for organisations to be able to store ideas. Without this storage system, it can be hypothesised that the intensity of idea generation will decrease. Indeed, evidence captured within this study shows that organisations which have highly developed idea storage systems (e.g. Organisation I) produce more ideas than organisations which do not (e.g. Organisations E and F). Although the sample size is relatively small, this finding is consistent across the data set.

Discussions above have indicated that there are a number of possible relationships between the factors affecting idea generation in SME contexts. This understanding will provide valuable underpinning for the conclusions of this study, possibly enabling the construction of a conceptual model or framework to aid understanding in the field.

4.7 Chapter Summary

Investigating idea generation is a complex task, from the differences in labels that individuals attach to essentially the same phenomena (Collins, 1983), to relating key findings back to an incomplete literature. This chapter has

highlighted key findings from fieldwork and developed understandings in an iterative way by moving constantly between the results of primary research and the existing literature. The conceptual model emerging from the literature review provided a useful framework to begin this analysis, with evidence being uncovered to support all of the factors contained within it.

Due to the exploratory nature of this study fieldwork was conducted in accordance with the principles of grounded theory (Glaser and Strauss, 1967; Glaser, 1978; Strauss, 1987). This enabled data collection tools to be tailored to individual contexts and resulted in the discovery of various new issues that were believed to impact idea generation in organisations. Key amongst these was the need for feedback on ideas, not necessarily to support the production of initial ideas but to *sustain* creative effort inside organisations. This chapter has discussed a number of such factors, linking them back to literature as and where possible.

Introductory sections of this chapter highlighted that there is an incredibly rich literature which already exists around the subject of leadership and that fieldwork had, itself, turned up a vast amount of potentially useful information on this subject. Because of this it was decided to dedicate a substantial portion of this analysis to the subject of leadership, exploring the concept as a whole before relating it to each of the other factors that are believed to influence idea generation in SME environments. This discussion will allow for the conclusion to provide firmer, credible answers to the research questions.

Building on this analysis, the concluding chapter will seek to use the various themes and thoughts developed here to provide clear and concise answers to the research questions. It will seek, if possible, to construct a model, structure or framework of the factors external to the individual which impact idea generation in SME contexts.

5.0 Conclusion and Contribution to Knowledge

This thesis set out to build an understanding of the factors affecting idea generation across a range of SMEs based in Devon and Cornwall. The journey has been both complex and interesting, not only in terms of finding patterns in what at first glance appears to be messy and unstructured data, but also in terms of evaluating a significant range of literature. At the very start of this work the breadth of the creativity field was outlined with it being acknowledged that it included references to research on leadership (Politis, 2005; Houghton and DiLiello, 2010; Kempster and Cope, 2010), collective creativity (Chaharbaghi and Cripps, 2007; Sarmiento and Stahl, 2008), the layout of workplaces (Meusburger, 2009; Sailer, 2011), psychological perspectives (Klijn and Tomic, 2010) and views from experienced practitioners (Rudkin et al, 2001; Johnson, 2010) amongst various other topics.

Perhaps the most significant challenge faced by this study was the construction of a robust and defendable methodology. Chapter three (3) discussed issues surrounding the nature of the knowledge present in this study with it being understood that personal understandings, views and beliefs meant that truth varied from place to place and from time to time (Collins, 1983). Fieldwork was undertaken in an open, inductive manner which fitted with the exploratory nature of this study. Ultimately, data collection resulted in the production of case studies (see **appendix H**) (Stake, 1995; Saunders et al 2009) that provided both access to and appreciation for context (Tsoukas and Hatch, 1997). Data analysis proceeded in an iterative way, constructing arguments by comparing and contrasting data obtained in the various different settings and

relating this back to relevant literature. Overall this study revealed some surprising issues; namely that despite the difference and diversity in the sample, remarkably similar understandings were captured in almost all settings. These were documented and evaluated in the previous chapter.

From here this chapter will focus on addressing the following points;

- Providing detailed answers to each of the research questions posed at the end of the literature review
- Communicating the implications that the findings have for the theoretical field
- Critiquing the methodology employed by this study
- Outlining the limitations of this study
- Highlighting areas of possible future research

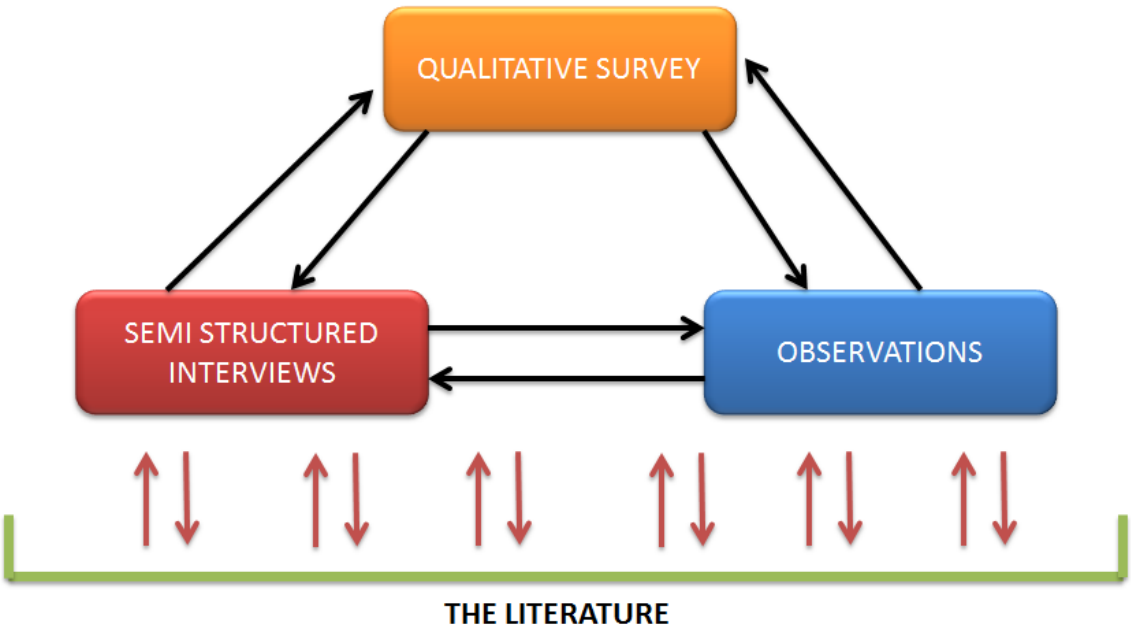
5.1 Answering the Research Questions

Providing answers to the research questions is simultaneously a straightforward and complex task. It is straightforward in that the consistency of broad findings between settings enables clear answers to be given, and complex because of the nuances and variations in understandings that have been captured in the data set. Discussions here will focus on understanding the nature of the findings from this study, relating these directly to the initial research questions. Triangulation is a key issue to consider before these discussions get under way; to what extent has this study provided a suitable cross examination of the various issues? Triangulation is discussed by numerous individuals (Denzin,

1978; Cohen et al, 2000; Bogdan and Biklen, 2006) with it being said that its key purpose is to increase the credibility and validity of results. Essentially there are four types of triangulation (Denzin, 1978);

- **Data:** Gathers information at multiple times and spaces
- **Investigator:** Using multiple researchers to investigate an issue
- **Theory:** Investigating phenomena through multiple theoretical lenses
- **Methodological:** Using more than one method to capture data

This thesis has made use of *methodological* triangulation in that it has used multiple methods (surveys, interviews and observations) to capture data about the factors affecting idea generation. This is easiest to visualise through a diagram.



5.1: Data Triangulation

Chapter three noted that qualitative surveys were initially used to provide a broad picture of each setting. This picture was then refined through a series of semi-structured interviews and periods of observation. In keeping with the principles of grounded theory (Glaser and Strauss, 1967; Glaser, 1978; Strauss, 1987) data was constantly compared to the existing literature in order to build new understandings. Methodological triangulation (Denzin, 1978) allows this study to present results that are more credible and have a greater degree of internal validity (Bryman and Bell, 2007). With these discussions in mind explicit answers to each of the research questions will now be provided.

1. Is it possible to verify the conceptual model ascertaining whether there are common understandings of the individual factors? In particular;
    a. Are there further key factors which exist in real world environments that have not been highlighted by the literature review?
    b. Are there significant similarities or differences in the ways in which the factors operate to influence idea generation in different SMEs?

The literature review presented in chapter two (2) indicated that the territory surrounding idea generation and creativity more broadly, is vast but developing. Certain articles and studies approach the subject from a psychological perspective (Klijn and Tomic, 2010), or a neurological perspective (Penaluna et al, 2010), others approach it from a practical standpoint (Rudkin et al, 2001; Catmull, 2008), while others still engage in specific theoretical discussions about leadership (Kempster and Cope, 2010) and culture (Martins and Terblanche, 2003) amongst many other factors. While diverse, this literature is thought to contain deficiencies, particularly surrounding how specific factors

operate together to influence idea generation in SME contexts. Granted, previous studies have attempted to produce models and frameworks (see Woodman et al, 1993; Amabile et al, 1996; Ekvall, 1996), but these are not thought to be comprehensive in light of research and writing on the flow experience (Csikszentmihalyi, 1990; 1997; 2000), the physical layout of the workplace (Meusburger, 2009; Sailer, 2011) and the storage of ideas (McAdam and McClelland, 2002; Johnson, 2010) amongst other things.

With this as the backdrop, the literature review sought to sift through current understandings, both academic and practitioner in nature, in order to gather key themes and issues together into one conceptual model. While recognising that the underlying literature itself is incomplete, this model provided a base from which this inquiry could begin to investigate the field. The first research question, copied above, sought to rigorously investigate the conceptual model, attempting to understand if indeed there were gaps in the literature and whether there were similarities or differences in the ways that the various factors influenced idea generation in different contexts.

From an objective standpoint it would arguably be easy to dismiss the initial conceptual model arising from the literature review. The analysis chapter discussed several key factors that appeared to be crucial to encouraging idea generation which were not part of this initial framework. These included;

- The need for feedback and action on ideas
- The role that organisational visions play in the guidance of idea generation
- Available mental capacity and freedom in the working day

- How physical distance between individuals affects the formation of ties
- The need for openness and transparency

Due to the discovery of these factors the initial conceptual model has not been verified and instead this thesis will need to devise an alternate way of representing the factors external to the individual that affect idea generation in SME contexts. It has at this point been decided not to reformulate the initial conceptual model purely because of the number and breadth of the additional factors that have been uncovered by this research. While the model emerging from the literature review was a useful starting point from which to analyse data, it was just that, a base built on an incomplete literature which has been proven to contain deficiencies in understanding. In keeping with the need to 'explore' within this study, the development of a fresh, unhindered model, framework or other such understanding will likely lead to an improved theoretical contribution to knowledge.

Having noted that the initial conceptual model is to be abandoned, the analysis chapter did highlight that there were indeed common understandings of the initial group of factors presented in the conceptual model. Fieldwork found, however, that individuals inevitably attached their own 'labels' to concepts and issues (Collins, 1983). Having said this, common understandings were discovered and, as Easterby-Smith et al (2008) notes, 'truth' can be determined through the aggregation of these vignettes. When research participants were asked specific questions about "leadership", "flow" and "idea storage systems" amongst the various other factors presented in the conceptual model, at no time were quizzical or confused responses captured. Throughout the sample

individuals offered direct and concrete answers to questions, indicating that a level of understanding was present even if these understandings were given slightly different terms or references.

Having established that a level of understanding was indeed present, how common was this? In other words were views from the various sites and individuals vastly different or has this study discovered consensus within the dataset? Reflecting on discussions contained in the analysis chapter it becomes clear that there is indeed a level of consensus in the views obtained. This therefore lays a foundation suggesting that the findings of this research study have validity and that the measures of the concepts are stable, in other words they can be held up as reliable (Bryman and Bell, 2007). Evidence to support this assertion can be found within the analysis chapter, for example it was suggested that leadership which provides freedom, avoids strict controls, and facilitates collaborative working is positively associated with idea generation. These markers were found throughout the sample where organisations were believed to generate many new ideas and, conversely, the inverse was found where few ideas were believed to be produced. In other words organisations typified by 'micro-management' (Avramidis, 2008) and strict controls (Hitt et al, 1996) were believed to generate fewer ideas.

An argument remains, however, as to whether the findings uncovered by this study were biased because of the methodology, specifically the decision to use a semi-structured (Easterby-Smith et al, 2008) approach to interviewing. It could be suggested that the selection of certain questions naturally focused discussions on issues central to the conceptual model, meaning that data was

always likely to point at this very conclusion. Having said this, though, it is understood that no researcher enters a data collection situation without at least some understanding of a topic area (Jones, 1985) and the methodology noted that questions for this study were developed to be 'open' and not to lead interviewees toward a specific response. Interviews themselves were guided by, and triangulated against the initial survey which was designed to provide a broad picture of each setting; this enabled interview questions to be tailored to each setting to pick up on issues or points raised within the initial surveys. The fact that this study has found a number of factors not captured by the initial literature review is evidence in itself that data collection techniques did not add a bias to the results. Alongside this it can also be argued that primary research did not close down the possibility of factors not present in the initial conceptual model being revealed.

A final point to consider in answering this research question concerns the different ways in which the various factors operate to influence idea generation across the broad range of SMEs in this sample. Previously it has been noted that purposeful sampling (Patton, 1990) has ensured diversity in this study with the intention that this will facilitate the production of broader conclusions enabling the development of theory. It has indeed been found that there are significant differences in the way that the various factors operate to influence idea generation in SMEs. Analysis has shown that these differences are not connected with the size or sector of the organisation but rather its relative level of idea generation. For instance in situations where a leader had outlined a compelling vision and communicated this to his or her employees many ideas were believed to be generated. The same was true where individuals were

provided with timely and informative feedback or where there was an element of spare mental capacity in the working day. Indeed, across the sample views and evidence converged into a single understanding of how factors operate to positively drive idea generation in SMEs.

2. Does the reality of organisational life in SMEs based in South West England allow for the factors identified by this study to be placed into a robust framework, model or hierarchy?

Answering this research question is significantly more challenging than the last. Data collected for this study was primarily qualitative rather than quantitative in nature (Easterby-Smith et al, 2008), meaning that it is not possible to assign firm, numerical values or weightings to each factor based on its influence over the idea generation process. When asking individual research participants about the 'importance' of certain factors responses were typically in the following form;

*"Positive challenges are **vital**…"*

*"**Yes, it is important**, it is… and it comes in the same category as providing feedback in terms of encouraging people…"*

*"Yes, it (idea generation) **would absolutely depend** on how well the owner communicates with me"*

In almost every situation there was an understanding that the factors mentioned during the interviews were 'important' to idea generation. Differences in meanings and interpretations, however, were subtle at best as highlighted by the extracts presented above. Individuals frequently used words such as "vital",

“important”, “absolutely” and while useful, it would be inappropriate to shoehorn these contributions into a definitive framework, model or hierarchy without further research to attach more specific, perhaps quantitative measures to each factor. While it is understood that a model does not need to have ‘measures’ per se in order to make a contribution to a selected theoretical field, one particular goal of this research exercise, namely to provide a foundation for future studies, is likely to be best served by taking a looser approach so as not to constrain or perhaps incorrectly guide future inquiries.

Having made the points above it could be assumed that all is lost and that the data collected by this study cannot possibly inform wider understandings and add to the existing literature surrounding idea generation in organisations. This could not be further from the truth. It is known that social systems are not natural phenomena, social reality must be interpreted by researchers (Ryan et al, 2002), with these individuals immersing themselves in human and cultural dynamics (Easterby-Smith et al, 2008) in order to gain new perspectives on fields and phenomena. With this in mind it is clear that this study has arrived at relevant results which have the potential to advance views within the given field.

In order to start the construction of a relevant model, framework or other such understanding it is necessary to distil the key factors that have been revealed during the course of this study. Keeping in mind discussions within the previous chapter and the answer to research question one this study has revealed that the following factors, external to the individual, are thought to affect idea generation in SME contexts;

- Facilitative, transparent leadership which frames the broad challenge
- Environments which encourage diverse networks of contacts both internal and external to the organisation, allowing for periods of both individual and collective work
- Positive acceptance of generative error with an understanding that change is part and parcel of organisational life
- The encouragement of skill development/application and the availability of challenging tasks encouraging access to the flow state
- Spaces where individuals are allowed to think differently, offering a constructive challenge, and for there to be no penalty attached to this
- A system, rooted in the context of the organisation, enabling the storage, sharing and retrieval of ideas
- The provision of substantive and timely feedback on ideas
- Environments which, where appropriate, have a bias towards action on new ideas
- Guidance mechanisms including but not limited to organisational visions which seek to provide loose structures and “targets” for ideas without imposing strict controls or micro-management
- Allowing a degree of available mental capacity to be devoted to idea generation with freedom for individuals to work in a way that best suits them
- Reducing “distance” in the workplace, ensuring that individuals and teams identify with the organisation rather than solely with themselves
- Promoting openness and transparency, in terms of systems and processes related to idea generation, ensuring that the organisation is not seen as a “closed shop”

Having already highlighted the difficulties associated with producing a defendable model or hierarchical arrangement of the factors identified above this thesis did not seek to arrive at such a structure. Instead, much like the development of the conceptual model emerging from the literature review, the journey leading to the final framework began with a systematic analysis of the factors highlighted in the previous list. These factors were arranged and re-arranged in a categorisation process in order to establish the relationships between them and whether they could be grouped in any specific way. Critical analysis and reflection on the factors led to two key categories emerging, the factors that have a role in encouraging the *initiation* of idea generation and those with a role in *sustaining* idea generation. Each of the bullet points in the previous list fell under one of these headings.

This new framework, developed purely from the results of this study, is captured in **table 5.1** with the intention that it will add structure to the findings of this study and enable the development of future research streams. It has not emerged from any existing document or source, it is the result of critical reflection on the part of the researcher, seeking to understand whether, and in what way, the various factors affecting idea generation may be connected with one another.

Factors affecting the ***initiation*** of idea generation	Factors linked to ***sustaining*** idea generation
Facilitative, transparent leadership which frames the broad challenge	Positive acceptance of generative error with an understanding that change is part and parcel of organisational life
Environments which encourage diverse networks of contacts both internal and external to the organisation, allowing for periods of both individual and collective work	A system, rooted in the context of the organisation, enabling the storage, sharing and retrieval of ideas
The encouragement of skill development/application and the availability of challenging tasks encouraging access to the flow state	The provision of substantive and timely feedback on ideas
Spaces where individuals are allowed to think differently, offering a constructive challenge, and for there to be no penalty attached to this	Environments which, where appropriate, have a bias towards action on new ideas
Guidance mechanisms including but not limited to organisational visions which seek to provide loose structures and "targets" for ideas without imposing strict controls or micro-management	Promoting openness and transparency, in terms of systems and processes related to idea generation, ensuring that the organisation is not seen as a "closed shop"
Allowing a degree of available mental capacity to be devoted to idea generation with freedom for individuals to work in a way that best suits them	
Reducing "distance" in the workplace, ensuring that individuals and teams identify with the organisation rather than solely with themselves	

Table 5.1: The Factors External to the Individual Affecting Idea Generation in SME Contexts – A Framework to Aid Understanding

As stated above, the purpose of this framework is to add structure and clarity to an otherwise diverse and, on occasion, confusing field of study. Other attempts have been made to map factors affecting idea generation (see Liikkanen and Perttula, 2010; Shah and Ali, 2011; Magadley and Birdi, 2012) although these previous studies do not arrive at a framework similar to the above because of the approaches adopted by the authors. In an empirical sense the framework provides concise and direct steps that managers aspiring to encourage idea generation in their organisations can follow. It shows these managers (and the owners of SMEs) which factors are believed to be necessary to support the initiation of idea generation and which can help to sustain the production of ideas over the longer term. Despite making this point it is vital to recognise that

when the initiators have been put into place this does not mean that attention should switch solely to the factors that can sustain idea generation. As demonstrated in the analysis chapter, managers and leaders in SMEs will need to ensure that all of the factors are present if they hope to build an organisation that produces many new ideas. Issues surrounding the theoretical contribution made by this study will be discussed in **section 5.2**.

As a final thought here it is important to understand that evidence was found across the sample supporting both the 'positive' and 'negative' effects of the factors listed in **table 5.1**. Taking the need for "facilitative, transparent leadership which frames the broad challenge" as an example, this study was able to analyse situations in which this factor was present, and where it was absent. This enhances the rigour of this study (Silverman, 2000) and demonstrates that fieldwork was not approached with the objective of simply finding evidence to support the conceptual model generated from the literature review. Having developed this framework, attention shifts to the third research question and the subject of "leadership".

3. Is there a specific form of leadership that best enables idea generation in SME environments? How does this form or style of leadership interact with the other factors that have been identified as being important to idea generation?

Leadership was discussed at length during the analysis chapter with two sections (**4.4** and **4.5**) being devoted to understanding it and how it relates to the other factors uncovered by this study. It is understood that there is a wealth

of literature which already exists on leadership (see, for example, Lewin et al, 1939; Stogdill, 1974; Taffinder, 1995; Gupta et al, 2004) and a number of sources specifically looking at leadership with respect to creativity and/or idea generation (Catmull, 2008; Amabile and Khaire, 2008; Kempster and Cope, 2010; Ucbasaran et al, 2010). The purpose of this study was not to critique existing contributions per se but to find out if there was indeed one form of leadership that best enables idea generation in SME contexts.

During discussions in the previous chapter it was found that a leadership style that best enables idea generation in SMEs includes the following characteristics;

- Allowing employees a degree of latitude (i.e. freedom) at work
- Encouraging exploration of issues and problems
- Facilitating collaborative working and building a sense of community
- Avoiding strict controls and micro-management

Building on these points, the analysis chapter suggested that the focus on exploration and creating a degree of 'strategic space' at work fits well with existing theories of transformational leadership (Bass, 1990; Rosenar, 1990; Taffinder, 1995). This is, however, far from the end of the story. In addition to characteristics of transformational leadership it was also found that organisations which produced the most ideas had leaders who were characterised by words such as "facilitative", "participative", "collaborative" and "encouraging". These words arguably best align with the existing theories of servant leadership (Graham, 1991; Parolini et al, 2009; Sendjaya and Pekerti,

2010). Based on the results of this study, leaders arguably need to embody the qualities of both transformational and servant leaders if they are to achieve maximum levels of idea generation in their organisations. It has been repeatedly stated that small organisations are very diverse (Burns, 2007), so it would be inappropriate to construct a detailed blueprint that could be generalised across the vast array of contexts. Instead, this study provides a loose framework that might be used as a guide for the development of leaders in SME contexts, highlighting the importance of driving change and creating strategic space (transformational qualities) as well as fostering collaborative environments and facilitating achievement (servant qualities).

In the wake of discussions above one question remains, how does leadership in itself relate to the other factors that have been identified as being important to idea generation in SME contexts? Information, quotes and analysis relating to this particular question appeared within the analysis chapter (**section 4.5**) and will not be repeated here. **Table 5.2** presented on the next page captures the key interactions between leadership and the various other factors affecting idea generation, indicating whether the leader has a direct or indirect impact.

Factor(s)	Direct / Indirect Impact	Details of Interaction (i.e. Leaders need to…)
Encouraging diverse networks of contacts, allowing periods of both individual and collective work	Direct	Encourage socialisation at work and provide relevant contact information/links to individuals and groups. Avoiding micro-management at work
Generative error and change	Direct	Allowing individuals autonomy to explore issues/problems/tasks, having a constructive response to error
Encouraging access to the flow state	Indirect	Develop jobs/roles that allow access to the flow state at work
Thinking differently at work	Direct	Set the stage for discussions and positively encourage constructive challenges on topics/strategies/decisions
The storage of ideas	Indirect	Providing a system, in keeping with the culture and context of the organisation, that allows individuals to store, share and retrieve ideas
Feedback and action on ideas	Direct	Particularly important in smaller environments where the leader is the sole source of feedback and/or action. Vital to develop strong communication channels and associated skills
Guidance mechanisms providing loose structures and "targets" for ideas	Direct	Develop an organisational vision to guide idea generation, adapting it as necessary en route
Mental capacity and freedom at work	Indirect	Setting the stage for idea generation through job design by structuring jobs to allow autonomy and an element of "space" at work for individuals to set their work up in a way that best suits them as individuals
Distance in the workplace	Direct	Choice of workplace design, where sites are "dispersed", taking time to overtly facilitate face to face interactions
Openness and transparency	Indirect	Setting process/systems etc. up to be open in the workplace, ensuring communication channels are clear and transparent

Table 5.2: The Relationship between Leadership and the Various Other Factors That Affect Idea Generation in SME Contexts

Table 5.2 makes it clear that leaders have a direct impact on almost all of the factors affecting idea generation in SME contexts. Where the relationship is believed to be indirect, leaders have a strong role in 'setting the stage' (Woodman et al, 1993; Amabile et al, 1996; Houghton and DiLiello, 2010) for

idea generation, through job design (Armstrong, 2006; Hall and Heras, 2010) and providing appropriate tools and processes for employees, such as those connected with communication and idea storage. The results of this study have shown that leaders have a significant influence over idea generation in SME contexts.

4. Is it possible to reliably identify the factors affecting idea generation across a range of different SMEs?

Building from the conclusions so far, particularly the theoretical framework developed in answering the second research question, it is certainly arguable that it is possible to identify a set of factors that affect idea generation across a range of different SMEs. Perhaps the key word in this particular research question, however, is reliable; is it possible to reliably identify the factors that affect idea generation across a range of contexts?

Reliability in research is connected to the repeatability of studies and the degree to which measures of concepts can be considered to be stable (Bryman and Bell, 2007). Qualitative studies can be affected by a wide range of variables, such as the position of the researcher, so reliability is of less concern although it is still important that conclusions flow from the data that has been collected (Silverman, 2000). Issues connected with this will be discussed during the critique of the methodology in **section 5.3**. While other qualitative researchers may find slightly different factors when following the methodology adopted by this study, its methods are arguably replicable. In other words separate researcher(s) could utilise the same survey and interview tools developed for

this study (see **appendices C and D**), analysing the resulting data along with their own observational findings. This suggests that the findings of this study can be considered to be reliable (Creswell, 2007). The rich case study material (Stake, 1995) displayed in **Appendix H** demonstrates the level of detail that was uncovered in each individual research setting. While the values, beliefs and views of the researcher have inevitably shaped this material due to the very nature of this enquiry, constant comparison with diverse literature has grounded this research firmly in its field.

When thinking about the reliability of this study it is also important to consider whether the results are representative of a broader whole. While validity and generalisability are terms used less often within qualitative studies (Easterby-Smith et al, 2008), this fourth research question implies that there should be some sort of broader meaning which flows from this study. The nature of the sample means that this broader meaning is not derived from statistical significance or any other quantitative measure (Patton, 1990) but rather from its diversity. The fact that a purposeful approach to sampling encouraged the exploration of factors affecting idea generation across a wide range of SMEs lends credibility to the results. Factors including, but not limited to, the importance of vision, the need for feedback and action on ideas and the qualities of those in leadership positions were found in all organisations, from a micro consultancy to a small leisure firm to a medium sized marine/manufacturing organisation. The fact that the same issues occurred throughout this diverse sample means that it is possible to suggest that there is indeed some form of broader meaning that has been captured by this study.

Despite the interesting points discussed so far it is important to recognise that the tapestry of organisational life is often complex and full of diversity because organisations cannot exist without human beings. The various values, worldviews, backgrounds, interpretations and emotional states of individuals can, and do influence organisational contexts. These factors which are *internal* to individuals also have the capacity to influence idea generation and this is an area of further research which will be explored in **section 5.5**. Although the results of this study show that yes, it is possible to reliably identify factors external to the individual that affect idea generation in SME contexts, further work is needed to understand the interaction between these external factors, and the various internal factors that have previously been well documented by others (see, among others, Csikzsentmihalyi, 1990, 1996; Dewett, 2004; Puccio and Grivas, 2009; Baker and Baker, 2012).

5.2 The Theoretical Contribution

Central to any thesis is a contribution to a selected theoretical field (Phillips and Pugh, 2005). This thesis has shown that literature surrounding creativity and idea generation in organisations is dispersed and fragmented and that while previous attempts to produce frameworks to aid understanding (see Woodman et al, 1993; Amabile et al, 1996; Ekvall, 1996; Moultrie and Young, 2009) have been made, these understandings are not yet complete. Before considering where this study specifically adds to the theoretical territory surrounding idea generation in SMEs, it is necessary to examine what 'theory' actually is and whether this study can generate it.

Theory is understood to be concerned with building substantive understanding, normativism and ideational simplification (Howell, 2013). Underlying philosophical positions influence what can be considered to be theory, with the positivistic and social constructionist schools having different understandings. As Howell (2013) states;

"In the former (positivism), theory has to be objective, identify cause and effect, provide generalisation or prediction and ensure reliability. The latter (social constructionism) however, is more concerned with frameworks for providing insight, understanding and validity in historical and specific circumstances."

Source: Howell (2013) p27

Under positivistic philosophies this study could not form a theory. The methodology employed by this study does not provide the necessary level of generalisability and the sample size is not large enough to allow for prediction. As this study follows the principles of social constructionism (Easterby-Smith et al, 2008), however, it is not bound by these constraints. It has already been noted that understandings of the factors affecting idea generation have converged into a single framework and this, according to Howell (2013) might be considered to be theory in itself. Within social constructionism, theory is about providing frameworks for understanding situations and phenomenon through 'thick' data (Howell, 2013).

The core of this study has sought to explore and understand the various factors, external to the individual, that impact idea generation in SME environments. It can certainly be argued that this exploration has provided new insight into the territory by adding coherence to the dispersed and fragmented literature. A framework to aid understanding has been constructed (see **table 5.1**) and this

is the ultimate contribution made by this study. It is different from previous models, frameworks and understandings because it takes account of a fuller range of factors external to the individual that influence idea generation, such as enabling access to the flow state and the importance of providing a method of storing and retrieving ideas. The framework also provides more detail than previous models, enabling further insight into relevant issues such as the need for structure/guidance in terms of idea generation. This framework can be considered to be theory under social constructionist philosophies (Howell, 2013).

Building from the points above the value of this theoretical contribution can be expressed from both academic and practitioner viewpoints. From a purely academic stance, the framework splitting factors into those responsible for *initiating* and *sustaining* idea generation results in this research exercise opening up a new branch of inquiry, providing a platform on which future studies might build. The strength of this theoretical contribution ultimately lies in its simplicity. Rather than developing an elaborate and complex model which may or may not have relevance across organisational contexts, the framework produced within this thesis is broad enough to be applied in various settings but specific enough to focus attention on key organisational issues impacting idea generation in SME contexts. From a practitioner perspective the contribution made by this study is arguably more pronounced. By applying this framework to their operations owners and/or managers in SME contexts have the ability to stimulate and sustain greater idea generation. With an improved understanding of the organisational factors affecting idea generation professional practitioners will be able to design and develop their organisations with the goal of idea

generation in mind. This thesis demonstrates that while creative idea generation may be perceived as ‘chaotic’ and ‘unmanageable’, there are specific organisational factors that repeat across contexts and situations. It is this convergence, captured within the theoretical framework that provides practitioners with a practical guide to enhancing idea generation at work.

Moving back to academic contribution, this framework arguably enables researchers to inquire into idea generation using quantitative techniques, perhaps utilising positivistic or post-positivistic (Howell, 2013) methodologies to add numerical values to the framework or otherwise seeking to assess the strength of the various factors. Alongside this, future research exercises might seek to utilise the framework developed here to integrate the factors *internal* and *external* to the individual that affect idea generation. Future research directions will be discussed in greater detail during **section 5.6**.

5.3 Implications for Practice

Having set out the academic contribution made by this thesis it is vital to recognise that there are also various implications for practice. In answering the fourth research question this thesis notes that broader meaning has been captured by this study as understandings of the factors affecting idea generation converged across a range of different SMEs. In general terms applying the framework shown in **table 5.1** will enable SMEs to initiate and sustain greater levels of idea generation. As organisations depend for their success on creativity, innovation, discovery and inventiveness (Martins and Terblanche, 2003) it can be argued that by applying the framework developed

by this study SMEs will be more successful, generating larger revenues and growing their workforces.

Due to a relatively significant focus on leadership this thesis may also have practical implications in terms of leadership development in SMEs. It is understood that SMEs can struggle with leadership (Kempster and Cope, 2010; Phelps et al, 2007) and this study arguably provides a template (**table 5.2**) which leaders can follow in order to improve creative idea generation. **Table 5.2** provides details of what 'leaders need to do' in order to encourage idea generation with these practical steps including comments such as "encouraging socialisation at work" and "structuring jobs to allow autonomy". By applying these points in practice the results of this thesis suggest that leaders will improve levels of creative idea generation in their organisations.

By taking an organisational approach this thesis may well positively contribute to organisational development within SMEs. Examining Greiner's (1972) growth model it is understood that organisations move through a series of growth phases each followed by some form of crisis. Although this study has only focused on creative idea generation rather than organisational development as a whole, it can be argued that the understanding produced should help leaders to develop their organisations in a more structured way. In tandem with this there are associated links to human resource management (HRM) and human resource development (HRD) themes such as promoting openness and transparency at work and understanding that learning through error is a vital part of creative idea generation.

Although SMEs are very diverse (Burns, 2007) the frameworks developed by this study, notably **tables 5.1** and **5.2** provide elements of practical guidance for leaders and managers. While it would be incorrect to claim that this study set out to provide a 'how to' guide for leaders and managers, it is understood that there are practical connections to organisational and leadership development as well as possible connections to HRM and HRD.

5.4 Critiquing the Methodology

Without a considered and consistent methodology, linked inextricably to relevant ontological and epistemological issues, research cannot hope to produce meaningful findings (Creswell, 2007). Having said this it is also important to note that time and resource constraints, among other things, often require compromises to be made within the research process (Bryman and Bell, 2007; Saunders et al, 2009). The purpose of these discussions is to critically examine the methodology used by this study, understanding both its strengths and limitations and whether it enabled an effective investigation into the factors that affect idea generation.

There are a number of philosophical assumptions that underpin the methodology used by this study (Easterby-Smith et al, 2008). Previous chapters indicated that its ontological position resides somewhere between the relativist (Latour and Woolgar, 1979) and nominalist (Cooper and Burrell, 1998) schools of thought. Coupled with this is the epistemological position which leans towards social constructionism but with relativist elements (Easterby-Smith et al, 2008). With these assumptions in mind, and not forgetting the

mostly qualitative nature of the data collected, has the methodology been successful in enabling an inquiry into the factors external to the individual affecting idea generation in SME contexts?

Much has been written about the validity of research designs which fall under 'constructionist' headings (Golden-Biddle and Locke, 1993; Silverman, 2000; Easterby-Smith et al, 2008); how can individuals be certain that views presented within these types of studies are consistent with the data set, and more broadly, with the realities of organisational life? Certainly, there are relatively few safeguards that prevent researchers from cherry picking data that suits their views and hypotheses (Easterby-Smith et al, 2008), although principles to robustly defend charges of anecdotalism have been set out by Silverman (2000).

In order to indicate rigour within the analysis process, Silverman (2000) suggests that researchers abide by the following principles;

- Refutability
- Constant comparison
- Comprehensive data treatment
- Tabulations

Evidence of the application of 'refutability' can be seen within the analysis chapter where **figure 4.3** indicates the result that speaking to individuals *inside* the organisation is believed to be more important to idea generation than speaking to *external* contacts. Current literature would seem to indicate that the

opposite should be the case, so this is an example of this study looking for evidence in the data set that might disconfirm current beliefs. In a similar vein 'constant comparison' involves researchers looking for cases that will help to extend current understandings (Silverman, 2000). Readers will recognise that this has been a founding aim of this study; to explore the factors affecting idea generation within a diverse range of SMEs. The table of participants presented in the analysis chapter (**table 4.1**) indicates the diversity within the sample, ranging from medium sized healthcare and arts organisations to a micro consultancy and community interest company.

The extent to which data was treated 'comprehensively' is more difficult to prove, save for including every transcript, survey, observational note and computer file that was produced for this study. This is neither realistic, nor practical although the fact that data analysis followed the principles of grounded theory (Strauss and Corbin, 1990, 2008) meant that data was coded in three specific ways, open, axial and selective (Creswell, 2007). This process, by its very nature, involved carrying out various levels of analysis, funnelling concepts and issues through progressively refined filters before arriving at a final output. Finally, "tabulations" are thought to indicate that there has been a degree of rigour in organising the data within a research study (Silverman, 2000). Examples of tabulations used by this study appear in **appendix I**. This provides an indication as to the level of organisation achieved during data analysis.

5.4.1 Alternative Paradigms of Inquiry

While providing evidence to defend the rigour of this study is important, this is by no means the end of the critique. Yes, this methodological approach may have been successfully applied, but was the methodology and overarching philosophy appropriate in the first place? Howell's (2013) table titled "paradigms of inquiry" (copied below) will be used to assess this particular issue.

Item	Positivism	Post-Positivism	Critical Theory	Constructivist and Participatory
Ontology	Reality can be totally understood. Reality exists and it can be discovered (Naïve Realism)	Reality may only be understood imperfectly and probabilistically. Reality exists but humanity unable to totally understand it. (Critical Realism)	Reality shaped by history. Formed by values that are crystallised over time. (Historical Realism) Breakdown of a clear distinction between ontology and epistemology.	Reality is locally constructed. Based on experience although shared by many. Dependent on person/group changeable. Participatory: co-created through mind and world. (Relative Realism) Breakdown of a clear distinction between ontology and epistemology.
Epistemology	The investigator and the investigation are totally separate. Values are overcome through scientific procedure. Truth is a possibility.	Abandonment of total separation of investigator and investigation. Objectivity still pursued.	The investigator and investigation linked. Accepted that historical values influence the inquiry. Results subjective.	As critical theory. However, the findings are created as the investigation proceeds. Participatory: paradigm findings are developed between researcher and cosmos.
Methodology	Scientific experiments based on hypothesis, these are usually quantitative. Conditions that confound are manipulated.	Multiple modified scientific experiment. Pursues falsification of hypotheses; may include qualitative methods.	Needs dialogue between investigator and the subject of investigation. Structures may be changeable. Actions effect change.	Create a consensus through individual constructions including the construction of the researcher. Participatory: similar methodologies can be employed (primarily action research).

Table 5.3: Paradigms of Inquiry

Source: Howell (2013) p29

While slightly different terminology exists in different methodological texts, this study sits firmly in the far right hand column under the heading 'constructivist and participatory'. What might have happened if this study had followed one of the other three broad paradigms? If this study had followed a **positivistic** approach it would have adhered to the principles of deduction (Bryman and Bell, 2007). Such a study would have attempted to form hypotheses from studying current theories/literature and would have employed scientific or quasi-scientific (Easterby-Smith et al, 2008) methods. Outputs from this type of study might have enabled the construction of a definitive model of the factors affecting idea generation. This type of study might have also been able to place numerical values on the 'strength' of the various factors, and/or been able to indicate specific causal relationships. On the face of it, results from this type of study would appear to be very useful and instructive.

Throughout this thesis it has been noted that the literature surrounding idea generation is incomplete. As a result of this one issue the appropriateness of positivistic designs is questionable. These designs are predicated on the fact that current literature is sufficiently detailed to allow for the development of hypotheses (Bryman and Bell, 2007; Easterby-Smith et al, 2008). If a positivistic design had been adopted within this study it is arguable that the many 'new' factors uncovered would not have been spotted. Coupled with this, sampling issues would have taken on considerably more importance, with representativeness rather than consensus arguably necessary in order to validate (or disprove) initial hypotheses. Positivistic designs are therefore largely irrelevant in the context of this study, due in large part to the incomplete nature of the present literature.

Post-positivism would arguably be more suited to this study. These designs take account of close links between investigator and investigation and suggest that reality can only be imperfectly understood (Howell, 2013). As with positivistic designs, this type of approach may well have allowed for the construction of a formal model but with a greater emphasis on the fact that reality cannot be perfectly understood. While seeking out the falsification of hypotheses (Howell, 2013), this study may well have started to uncover various other issues affecting idea generation that were not captured by the initial literature review. This would, in part, counter some of the objections to the use of positivistic designs within this type of study.

A key issue countering the relevance of post-positivist designs is that objectivity is still pursued. The methodology (**section 3.2**) built a case suggesting that, for the purposes of this study, reality is not objective and external, it is socially constructed and given meaning by people (Easterby-Smith et al, 2008). This philosophical assumption was built from the nature of the idea, with it being argued that without people, there can be no ideas. Ideas therefore are not objective and external; they are internal, socially constructed objects which exist within the minds of individuals. Any research design which therefore pursues objectivity in this field is unlikely to allow full access to the factors that affect idea generation.

Having weighed up the potential of positivistic and post-positivistic research designs, the final paradigm which must be examined is **critical theory**. From the information provided in **table 5.3** this design appears to be credible in light

of the goals of this study and the philosophical considerations discussed in chapter three. It takes account of the value laden nature of inquiry (Irvine and Gaffikin, 2006) and the dialogue which exists between the investigator and the subject of the investigation. A study following this approach might have, in reality, allowed for broader generalisations, because findings are fitted into one overarching view of reality. Following this approach would have enabled this study to generalise further beyond its boundaries, perhaps enabling the development of more complete theory. One specific issue which arguably impacts on the relevance of this approach though, is the understanding that every individual has a different interpretation of 'creativity' (Robinson, 2001; Perkins, 2010), and by extension, idea generation. Chapter three noted that the ontological position of this study meant that truth was likely to vary from place to place and from time to time (Collins, 1983). This is due to the differing labels that individuals attach to what are, essentially, the same phenomena (Cooper, 1992). This is why a study recognising that reality is locally constructed (Howell, 2013) (i.e. constructivist) is likely to be of greater relevance in this instance.

Research paradigms, philosophies and approaches are much debated. Yes, there are limitations to the design adopted within this thesis, primarily that it cannot generalise far beyond the boundaries of the specific sample used. Coupled with this is the realisation that it will be difficult to produce a conclusive model which actually attaches relative weightings or proven relationships between the various factors. Given the current state of the literature surrounding idea generation, however, a positivistic or post-positivistic design could quickly be rendered unreliable. Arguments against critical theory

surround the notion that individuals attach different labels to phenomena, leading to the understanding that reality is, in effect, locally constructed. This leaves constructivist (as defined by Howell, 2013) designs as the most relevant to this thesis.

5.4.2 The Sample

Essentially the strategy utilised by this study sought maximum variation within the sample (Miles and Huberman, 1994), with organisations selected because they could purposefully contribute (Patton, 1990) to the answering of research questions. It is certainly arguable that while useful findings were uncovered, the relatively small size of the sample (10 cases) inhibits the generalisability of this research. As noted previously, the methodology selected for this study limits generalisability and it can be suggested that the sampling strategy further limits the ability to draw wider answers from the data set. This is due to the fact that organisations were drawn from very different contexts and sectors of the economy. There is certainly an argument that variations captured within this study may simply be due to the way that things are done in different industries (Burns, 2007). That said, findings have converged towards a single, but broad, view of how the various factors affect idea generation. This, to some extent, counteracts the notion that variances are simply industry specific.

It is notoriously difficult to gain access into SME environments for academic research (Alcadipani and Hodgson, 2009; Altinay and Wang, 2009). As a result of this access took far longer to negotiate than originally planned and use had to be made of available institutional and professional networks. In itself this is not

an uncommon strategy, indeed it has previously been noted that the exploitation of such networks and connections is vital to gain deep access into target organisations (Ram, 1994; Reveley et al, 2004). In addition to this point, the purposive nature of the sampling strategy (Patton, 1990) required the selection of organisations that would likely illuminate the questions under investigation. Despite this justification, however, this approach to sampling does leave this study open to accusations of bias. While the strategy is defendable (Ram, 1994; Reveley et al, 2004) and arguably appropriate given the exploratory nature of this study, future work in this area will need to ensure that sampling considerations do not limit the generalisability of findings.

Connected with issues explored in the previous paragraph it is also important to examine whether sufficient data was collected in each setting. **Tables 4.1** and **4.2** presented at the start of the analysis chapter provide an overview of the data, indicating that 104 surveys, 57 interviews and 26 sets of observational data were collected across the sample. The level of access (Thorpe and Holt, 2008) varied across the sample with proportionately large amounts of data being collected in some settings (e.g. Organisations C, F, I and J) while other organisations granted more limited access (e.g. Organisations A and E). With unlimited access further interviews would undoubtedly have been gathered from organisation A in particular, given that this firm employs 150 individuals it would have been useful to interview between 15 and 20 employees. This would have ensured a more even coverage of views across the organisation. Comments were also received from some sites suggesting that some individuals struggled to understand the initial survey. While efforts were made to use every day language and keep the survey as short as possible in order to improve

response rates (Bryman and Bell, 2007), more extensive piloting could have arguably resolved these issues. By testing the survey template more thoroughly response rates across the sample may have been higher.

5.4.3 Analysis Techniques

Chapter three noted that grounded analysis was far more applicable to this study than content analysis (Easterby-Smith et al, 2008). Discussions highlighted that analysis would need to follow the protocols established by Strauss and Corbin (2008), namely through the coding of documents in three distinct ways; open, axial and selective. It was through this grounded analysis process that the findings presented in chapter four emerged. While arguably effective, it is vital to understand that there are a number of other analytical techniques open to qualitative researchers including the use of network diagrams, repertory grids and cognitive mapping (Easterby-Smith et al, 2008).

Upon critical reflection of the methodology employed by this study, it can be argued that cognitive mapping (Eden et al, 1983) may have been a very relevant analytical tool that could have been utilised. This technique does not seek to build scientific models, but instead attempts to present the world as a particular person sees it (Easterby-Smith et al, 2008). As a result, each cognitive map is based on the individual's own framework, not one imposed by the researcher. It is quite possible that this study could have produced maps for each interview participant and then compared and contrasted these in order to build a view of reality in each setting. By doing this it may well have been

possible to arrive at a robust final model of the factors that influence idea generation.

Having suggested that cognitive mapping may well have been useful to this study it is important to revisit the fundamental aim that the research was attempting to address. Essentially this study was an exploration of an under developed, fragmented area of literature. It can therefore be suggested that analytical techniques seeking to impose too high a degree of structure on the data may well have resulted in the distortion of key concepts. Returning to the notion that every individual attaches different labels to phenomena (Cooper, 1992) it can be suggested that, at this stage of research in this particular field, cognitive mapping and other such analytical techniques may have caused significant confusion and potential for error, simply due to the fact that terminology varies so wildly between settings. This distortion would have rendered findings unreliable. It was therefore necessary, and justifiable, to take a broader view of the research, seeking to understand key concepts which might then be refined by future research.

5.5 Limitations of this Study

All research exercises inevitably make compromises and this study is no exception. While this study has produced an interesting and informative output there are a number of limitations that must be recognised, chief among these is the relatively small sample used. As noted at various stages of this research the methodology was designed to *explore* the factors external to the individual that affect idea generation in SME contexts. This focus called for in-depth

research (Easterby-Smith et al, 2008), which, in this instance, followed the principles of grounded theory (Glaser and Strauss, 1967; Glaser, 1978; Strauss, 1987) and led to the development of detailed case studies (Saunders et al 2009; Stake, 1995). While this approach ensured both access to and appreciation of context (Tsoukas and Hatch, 1997), time and resource constraints (Bryman and Bell, 2007) inevitably limited the number of organisations that could participate in this study.

Limitations on the number of organisations participating in this study mean that the conclusions reached cannot be considered statistically representative of all SMEs based in Devon and Cornwall. Indeed, due to the diversity of small organisations (Burns, 2007) any study claiming statistical representativeness would require a significant number of individual cases representative of an entire population. The upshot of this is that this study cannot claim generalisability to the wider UK context. Indeed, generalisations are difficult to make within the specific location of the study (i.e. Devon and Cornwall) because there is no way of telling if the organisations participating in this study were 'typical' of the broader business environment (Easterby-Smith et al, 2008). While understandings converged towards a single final framework, given the limitations imposed by the sample and methodological approach it would be inappropriate to make claims as to the generalisability of this work.

To address issues connected with the validity (Bryman and Bell, 2007) of this study, a purposeful approach to sampling (Patton, 1990) ensured that a diverse range of organisations of different sizes and sectors was captured. As stated above, findings from this group of organisations have shown that there is

convergence towards a single agreed understanding of the factors affecting idea generation, even if these factors, or, more precisely, the labels attached to them (Collins, 1983) vary slightly between locations. It is this convergence, rather than the data set allowing for broader generalisations, that has enabled this study to answer the research questions.

Connected to sampling issues there is also the understanding that owners may start (and continue) SMEs for lifestyle reasons rather than growth and innovation (Lewis, 2008). This is particularly the case in peripheral areas such as the South West (Lean, 1998). Given this as a backdrop it is certainly arguable that a proportion of SMEs in the target location are simply not 'interested', for want of a better word, in idea generation. While this is a valid consideration to keep in mind, the introduction noted that idea generation is vital to the survival of all organisations (Martins and Terblanche, 2003), especially SMEs (Banks et al, 2002; McAdam and Keogh, 2004). This body of literature somewhat counters the understanding that 'lifestyle' SMEs have no need for new ideas.

From a more theoretical stance it can be argued that this study could have further examined the body of literature connected with social capital (Putnam, 2000), perhaps utilising this as a theoretical 'lens' within the analysis. This may have been a rewarding avenue as the thesis spent a considerable amount of time examining the nature of the ties between individuals. While the literature review did note that organisations displaying 'strong' social capital are characterised by greater frequencies of interaction and communication (Wu et al, 2008), this thesis considered the issue more broadly in association with the

environment created for idea generation inside organisations. This was in keeping with the exploratory nature of this study and the desire to gain an overall insight into the wide range of external factors that affect idea generation. Data analysis in particular focused on a general trend suggesting that 'internal' rather than 'external' ties were believed to be more important to the generation of ideas. By using social capital theory as a lens this study may have been better placed to unpick the nature of these ties, understanding more about the value of networks to organisations and perhaps what specific information related to idea generation is communicated through these ties.

A further limitation of this research is that it has specifically focused on factors *external* to the individual that impact idea generation. There is extensive literature on creative traits or characteristics (see, among others, De Bono, 1970; Finke et al, 1992; Robinson, 2001; Puccio and Grivas, 2009; Baker and Baker, 2012) but it was decided to exclude these *internal* characteristics from this particular study. While this decision was made to ensure that this research could arrive at a firm contribution to knowledge and avoid issues associated with the measurement of *internal* characteristics, the fact remains that there is an inevitable interaction between the external and the internal. This interaction will likely impact specific features of the environment for idea generation inside organisations and this is an issue that further research into the area will need to examine.

In addition to the limitations discussed so far it must also be noted that time and resource constraints meant that this study could also only engage in interrupted involvement rather than complete participation (Easterby-Smith et al, 2008).

While periods of observation were used in conjunction with qualitative surveys and semi-structured interviews there is still the possibility that organisational participants simply told the researcher what they thought would be construed as the 'correct' answer. Triangulation between data sources and constant comparisons between data and the existing literature limits this possibility but it can be argued that without complete participation in a setting it is difficult to capture every facet of an organisational environment.

Finally on this theme, it must be stated that the approach and methodology adopted by this study was designed to counteract limitations wherever possible. Triangulation between the data sources increases the internal validity of the findings but cannot completely eliminate the possibility that the deeper parts of organisational life remained hidden from the researcher's view.

5.6 Areas of Possible Future Research

Throughout this thesis it has been highlighted that a secondary purpose of this research exercise was to lay foundations upon which future studies might build. As discussed in **section 5.2**, the theoretical framework may well enable future studies to apply quantitative methodologies to this area, assigning numerical values to the various factors and perhaps identifying specific, causal relationships between them.

Perhaps the most extensive area of future research revolves around extending this study into the rest of the creative process. While idea generation is a crucial part of this process, it is simply that, a part of a wider system which also

includes idea screening and ultimately idea implementation (i.e. innovation) (McAdam and Keogh, 2004). Future research could arguably take the factors identified in **table 5.1** and assess their relevance to other parts of the creative process. This would enable a fuller understanding of the factors affecting creativity and innovation at work. Alongside this potential research strategy future studies could also use the framework produced by this thesis as a basis for integrating understandings about the factors *internal* to the individual. While this thesis has added structure to the *external*, organisational factors that affect idea generation it notes that *internal* factors also have a significant role to play within the creative process.

Looking more specifically at the findings from this thesis, **section 4.2.2** revealed, quite remarkably, that having contact with others *inside* organisations was believed to be very important to idea generation. Indeed, of all the factors listed in the survey this was believed to be the single most important factor affecting idea generation across this specific group of organisations. This finding contradicts existing literature suggesting that an "external" focus is vital to creative idea generation. The issue with this study is that the sample is not statistically representative therefore while this finding is interesting, further research is necessary to understand if it repeats across a larger sample of SMEs. This could arguably be accomplished through the design, distribution and analysis of a quantitative questionnaire. Further complicating this issue, however, is the understanding of the word 'external'. It could be the case that a contact within an organisation's boundary might still be considered to be 'external' to an individual's immediate work environment or group. This area of

research is likely to have implications for how SME owners/managers define the structure of work groups or teams.

A final interesting avenue of future research concerns the impact that physical distance in the workplace has on idea generation. While previous studies have considered this particular issue (Meusburger, 2009; Sailer, 2011), fieldwork found that the dispersion of a workforce can significantly impact idea generation. Having said this there were occasions, such as at Organisation B, where a strong sense of community and culture appeared to mitigate the effect of physical distance between various sites and departments. Again, the size of the sample used by this study restricts its ability to generalise so further data is needed to understand whether this pattern repeats in other settings.

This study has produced significant findings as well as a range of questions that could form the basis of future research into idea generation within SMEs. The issues highlighted above could prove to be valuable in terms of stimulating research in this field, leading to more advanced understandings of the factors that affect idea generation.

5.7 Concluding Remarks

This study has sought to explore the factors external to the individual that impact idea generation in SME contexts. While the territory surrounding this subject is developing, and will continue to develop into the future, this study has arrived at an original contribution to knowledge. The framework, shown in **table 5.1** provides this contribution by splitting the factors external to the individual

that affect idea generation into those responsible for *initiating* and *sustaining* idea generation. Keeping in mind the limitations and critique provided in this concluding chapter it is important to recognise that this final contribution is *not* considered a theory under positivistic paradigms (Howell, 2013). Given the fact that this study followed the traditions of social constructionism however, the framework can be considered "theory" under these philosophies (Howell, 2013).

A key achievement of this study is the drawing together of a literature which, up to this point, has been dispersed and fragmented. Despite there being an understanding that idea generation is important to organisational survival (Martins and Terblanche, 2003), especially in the case of SMEs (Banks et al, 2002; McAdam and Keogh, 2004), there has, up to this point been little consensus surrounding the key organisational factors. By providing coherence to this field this study has produced new understandings from which future research might build. Fieldwork has proven that there is convergence towards a single understanding of the factors affecting idea generation; it is upon this convergence that research can now build, examining creative idea generation in significantly greater detail.

6.0 Appendices

Appendix A: Study Participants

Organisation A

Number of Employees: 150
Location: Plymouth, Devon

Notes: While part of a larger, UK wide group this organisation operates as its own autonomous unit. Employees take pride in upholding the standards and values of this organisation although it is subject to significantly more government regulation and guidelines than others in the sample. "Red tape" can rule out certain ideas but this organisation still seeks to develop new services for its customers.

Organisation B

Number of Employees: 130
Location: Plymouth, Devon

Notes: Having existed in its current form since the early 1980's this creative organisation (run as a charity) has sought to provide the community with access to the arts. Cuts in grants and external funding have meant that this organisation has been required to make difficult decisions in recent times, making savings whilst still providing creative output.

Organisation C

Number of Employees: 55
Location: West Cornwall

Notes: This well established organisation has grown over recent years with a significant sum of money invested in the construction of new buildings and facilities for customers. While the organisation itself is traditional in nature the current owner/manager is seeking to inject greater creativity into the workforce, expanding the business into "non-traditional" areas.

Organisation D

Number of Employees: 45
Location: Plymouth, Devon

Notes: Being a social enterprise this organisation is subject to different pressures and expectations than others in the sample. Primarily a creative business this organisation and the individuals it employs are constantly seeking out new ideas, knowledge and information. The environment is fluid and changing with recognition that the future will be different to the present.

Organisation E

Number of Employees: 32
Location: Central Cornwall

Notes: Serving the local community is the overarching goal of this organisation. It is responsible for numerous functions and employs a small staff carrying out defined roles. Introduction of new legislation has freed this organisation to take

more responsibility for its strategic goals, something that the present leader is keen to take advantage of. Having said this resistance to change is a key issue facing this organisation, both from the local community and current employees.

Organisation F

Number of Employees: 15
Location: East Cornwall

Notes: Originally started in the late 1920's this organisation has continuously sought to develop itself to the present day. While being "traditional" in its approach this organisation recognises that it needs to reinvent itself for the future and is led by a management committee, membership of which changes at regular intervals.

Organisation G

Number of Employees: 11
Location: South East Cornwall

Notes: This organisation has a history dating back to the 17th century with the present owner purchasing it during the mid-1990's. While the industry as a whole has declined significantly in recent times this organisation survives and has sought to diversify its operations where possible. The owner doesn't have a specific strategy for the future, instead taking a reactive approach to opportunities and threats.

Organisation H

Number of Employees: 4
Location: Plymouth, Devon

Notes: As a company set up to provide benefit to the local community this organisation is somewhat different from others in the sample. Beginning in 2009 this company is still relatively young and experiences difficulties associated with its limited resources. Employees typically have an arts-focused background and this extends into the working environment with the office being more of a "studio". The founders are attempting to develop the company by building links with partner organisations from the public, private and voluntary sectors.

Organisation I

Number of Employees: 4
Location: Plymouth, Devon

Notes: Founded back in the mid 1990's this organisation seeks to take an innovative approach to developing computer software and associated tools. The owner/manager has sought to develop the business gradually over time, recently recruiting new individuals to join the team and expand operations. This organisation deals with a range of clients from the UK and overseas in a variety of sectors including secondary and tertiary education.

Organisation J

Number of Employees: 3
Location: South East Cornwall

Notes: This micro consultancy firm was started by the present owner/manager in 2005. It has grown steadily since then and now provides employment for a total of 3 individuals (including the founder). The owner/manager seeks to grow the business organically, without external funding and has successfully developed his client base, providing stability and security for the firm.

Appendix B: Pilot Interview Questions

Last Edit Date: 13th February 2012

1. Can you tell me what the term 'idea generation' means to you? *(guide discussion and answer towards the interpretation of idea generation in a business context)*

    a. Probe for different sorts of ideas around products or services, efficiency and/or marketing products/the brand.

2. Can you describe a time when you felt most able to generate ideas at work?

    a. What sort of environment was participant in?
    b. What activity were they engaged with?
    c. Was the environment 'planned' or 'unplanned'?

3. How effective do you think your organisation is in building an environment that allows people to come up with ideas?

    a. What do you think the most important factors for idea generation are?

4. Can you provide me with three words which you think best describe your work environment?

5. How much time do you have in your role to think about new possibilities or new paths which you might be able to explore?

6. How well would you say your company balances your skill level with the challenges it sets you? (*Indeed is the participant free to set their own challenges?*)

    a. Can you think of any ways this might be improved?
    b. Drill into answer in detail to uncover relevant contextual information

7. In what ways do you think leaders and managers can support the idea generation process?

    a. Can you describe how your leader or manager works for me?
    b. If you were to approach your leader or manager with a new idea how would they typically respond?
    c. How do you think leaders and managers might suppress idea generation?

    Note: Flip these around for managers, i.e. ask how they respond to new ideas from their team members etc.

8. Thinking broadly and generally do you work mainly by yourself in isolation or do you work in environments where you have contact with others? (*note: ask about both internal and external contacts*)

a. In what ways does your leader or manager encourage you to speak to other individuals/groups? (*Note: if speaking to a manager/leader ask how they encourage their team to interact with others)*
b. Are there any key factors which you think help or hinder workplace interactions?
c. How do you go about sharing your ideas?

9. Can you describe a time when you made a mistake at work? If no response rephrase question and ask about a time when something perhaps did not go quite as planned / when a task did not produce the required result etc.

    a. Drill into specifics: e.g. what was the reaction of management?
    b. In what specific ways did the interviewee learn from this event / is there a process in the organisation for this sort of thing?

10. How would you define the term 'control' in the work environment? Is it necessary? How is it applied in this organisation?

11. Do you have a place where you can personally store your ideas (such as a filing cabinet / computer file)?

    a. Do many people use this / do you find it useful?
    b. Are there benefits to storing ideas which are perhaps not relevant now?
    c. Are you encouraged to share your ideas with other people in the organisation?

12. What's your view on the extent to which your organisation recognises new ideas?

    a. What action do managers/leaders take to recognise new ideas?
    b. How does this make you feel?
    c. Is it important that your manager (or organisation) takes action on ideas?
    (*Note: ask one at a time)*

Appendix C: Finalised Semi-Structured Interview Guide

Last Edit Date: 19th March 2012

(Key questions are marked in bold)

1. **Is this an organisation that generates lots of ideas?**

    a. **Probe for the different sorts of ideas that are needed in the organisation e.g. products or services, efficiency and/or marketing products/the brand.**
    b. **Can you provide me with an example of an 'idea' in this organisation?**
    c. **Does this organisation need to generate ideas for its survival?**

2. Can you describe a time when you felt most able to generate ideas at work?

    a. What sort of environment was participant in?
    b. What activity were they engaged with?
    c. Was the environment 'planned' or 'unplanned'?

3. How effective do you think your organisation is in building an environment that allows people to come up with ideas?

    a. What do you think the most important factors for idea generation are?

4. How much time do you have in your role to think about new possibilities or new paths which you might be able to explore?

5. **Are you able to make full use of your skill set at work? Can you give me an example of this (*drill down to uncover contextual information*)? In what ways does your work provide you with challenges? (*probe for evidence of the flow state here*).**

6. **Do you think that leaders and managers support the idea generation process?**

    a. **Can you describe how your leader or manager works for me?**
    b. **If you were to approach your leader or manager with a new idea how would they typically respond?**
    c. **How do you think leaders and managers might suppress idea generation?**

    Note: Flip these around for managers – as below;
    6. In what ways do you as a leader support the idea generation process? How do you typically respond to ideas? In what ways might you suppress the idea generation process?

7. **Thinking broadly and generally do you work mainly by yourself in isolation or do you work in environments where you have contact with others? (*note: ask about both internal and external contacts*)**

   a. **Does your leader or manager encourage you to speak to other individuals/groups? (*Note: if speaking to a manager/leader ask whether they encourage their team to interact with others)***
   b. **Are there any key factors which you think help or hinder workplace interactions?**
   c. **How do you go about sharing your ideas?**
   d. **How often do you communicate with individuals outside your immediate work group? (both other individuals in organisation and ties external to the organisation)**

8. Can you describe a time when you made a mistake at work? If no response rephrase question and ask about a time when something perhaps did not go quite as planned / when a task did not produce the required result etc.

   a. Drill into specifics: e.g. what was the reaction of management?
   b. In what specific ways did the interviewee learn from this event / is there a process in the organisation for this sort of thing?

9. How would you define the term 'control' in the work environment? Is it necessary? How is it applied in this organisation?

10. Do you have a place where you can personally store your ideas (such as a filing cabinet / computer file)?

    a. Do many people do this / do you find it useful?
    b. Are there benefits to storing ideas which are perhaps not relevant now?
    c. Are you encouraged to share your ideas with other people in the organisation?

11. What's your view on the extent to which your organisation recognises new ideas?

    a. What action do managers/leaders take to recognise new ideas?
    b. How does this make you feel?
    c. Is it important that your manager (or organisation) takes action on ideas?
       (*Note: ask one at a time)*

Appendix D: Finalised Survey Template

Idea Generation at Work

PLEASE NOTE: This survey is gathering information about the various factors which affect the generation of ideas in organisations. Please answer all the questions **ON ALL THREE PAGES** by either writing in or marking the appropriate box. No-one will be identified from the results of the questionnaire, anonymity is assured. Please direct any questions you may have to Graham Perkins at graham.perkins@plymouth.ac.uk or on 07530 742094.

1. Please write down three words which you think best describe the environment for idea generation within your organisation.

2. Which one of these words do you think is most important for idea generation and why?

3. With 1 (one) being most important and 7 (seven) being least important please rank the following things in the order that you think they might affect your ability to come up with ideas inside your organisation. **PLEASE USE EACH NUMBER ONLY ONCE.**

'Enabling' Leadership		Being able to make a 'mistake'	
Speaking to or bouncing ideas off other people inside the organisation		Speaking to or bouncing ideas off other people outside the organisation	
Having a method of capturing your ideas for future reference		Having tasks which challenge you	
Being able to talk about things which might be 'risky' or that 'go against the flow'			

4. What else do you think is important to coming up with new ideas in your organisation?

5. Where are ideas most useful in your organisation? **PLEASE TICK ALL THE BOXES BELOW THAT APPLY.**

For new products or services	☐	For organisational efficiencies	☐
For new ways of marketing products or the brand	☐	Other (please specify in this box):	☐

6. Do you work in project teams or groups within your organisation?

7. Do you feel more productive if you work in a group that has individuals with many different skills, specialisms, backgrounds and attitudes or a group made up of people very much like yourself? Please briefly explain your answer.

8. When do you feel most able to come up with new ideas? **PLEASE TICK THE RELEVANT BOX BELOW.**			
When I work by myself on my own	☐	When I have contact with other individuals	☐
A combination of working on my own and having contact with other individuals	☐		

9. Does action taken by your leader (or your organisation as a whole) on your ideas encourage you to generate more ideas? Please briefly explain your answer.

10. Can you think of anything that might "get in the way" of or stop you from coming up with ideas in your organisation?

11. I think that my organisation does effectively guide/steer the idea generation process. **PLEASE INDICATE YOUR ANSWER BY TICKING THE RELEVANT BOX BELOW.**					
Agree	☐	Neither agree nor disagree	☐	Disagree	☐

12. Referring back to the answer you gave above, how do you think your organisation does this?

13. Do you use places or spaces (e.g. online forums or physical noticeboards etc) to 'store' your ideas for future reference?

14. What is the general reaction you receive in your organisation when something (such as a project or a task) to which you have contributed ideas does not go to plan?

15. Do you think this reaction encourages or inhibits your desire to come up with new ideas?

16. Please mark the category which best fits with your role within your organisation	Senior Manager / Leader	☐	19. Do you have any other comments to add?
	Mid-Level Manager / Leader	☐	
	Junior Manager / Leader	☐	
	Professional / Craftsperson	☐	
	Administrative / Manual	☐	
17. Please indicate your gender	Male	☐	
	Female	☐	
18. Please indicate your age bracket	16 to 24	☐	
	25 to 34	☐	
	35 to 44	☐	
	45 to 54	☐	
	55 and over	☐	

Thank you for the time you have spent completing this questionnaire. As mentioned at the top of page one no-one will be identified from the results, anonymity is assured. Please email on-line versions of this form back to graham.perkins@plymouth.ac.uk. Hard copies may be returned in the envelope provided.

Appendix E: Participant Consent Form

Participant Consent Form

What is the purpose of this study?	This study is assessing the various factors that affect idea generation in organisations.
What contribution am I requesting from you?	I have asked if you are willing to participate in an interview / focus group to gather your perceptions about idea generation in this organisation.
How will I gather information?	Information will be gathered through an interview / focus group.
How will this information be recorded?	I will make written notes during our discussion and with your permission tape record the meeting so that I can produce a transcription of our meeting.
What arrangements will be made regarding confidentiality of information?	All computer files produced in association with this interview / focus group will be password protected. Written notes will be stored in a secure filing cabinet.
What must you do if you do not want to participate or wish to withdraw?	You must inform me if you wish to withdraw from this research either by phone (01579 363068) or email (graham.perkins@plymouth.ac.uk). **You are free to do this at any time.**
What will happen to all the data once it has been gathered?	Once gathered I will input the data into a computer programme where I will analyse it for patterns / key words etc. This analysis will then be written up in my final thesis and a report for your organisation.
How will the findings be reported?	As above. Findings will be reported through my final thesis and a written report which will be sent to your organisation. No individual will be identifiable from these documents – they will talk about general findings and comparisons only.

I confirm that I have **read and understood** the information on this form relating to this research and **I confirm that I consent** to take part:

Name (please print): _____

Signature: _____

Date: _____

Appendix F: Fieldwork Samples (Survey, Interview & Observation)

SURVEY

Idea Generation at Work

PLEASE NOTE: This survey is gathering information about the various factors which affect the generation of ideas in organisations. Please answer all the questions **ON BOTH PAGES** by either writing in or marking the appropriate box. No-one will be identified from the results of the questionnaire, anonymity is assured. Please direct any questions you may have to Graham Perkins at graham.perkins@plymouth.ac.uk or on 07530 742094.

1. Please write down three words which you think best describe the environment for idea generation within your organisation.

Isolation - Time - Freedom

2. Which one of these words do you think is most important for idea generation and why?

In our own experience, isolation has played an important role in generating ideas. I have used the term in relation to 'isolating' ourselves from existing ideas on the subject at hand. In the past we have discovered that once the thought process has become polluted with the 'accepted method' of achieving a goal, it then becomes harder to spawn and develop an original solution.

However, when seeking ideas to code an algorithm to perform a function under the bonnet of the software program, then seeking answers from every source one can think, google, academic papaers etc is more appropriate.

3. With 1 (one) being most important and 7 (seven) being least important please rank the following things in the order that you think they might affect your ability to come up with ideas inside your organisation. **PLEASE USE EACH NUMBER ONLY ONCE.**

'Enabling' Leadership	3	Being able to make a 'mistake'	2
Speaking to or bouncing ideas off other people inside the organisation	5	Speaking to or bouncing ideas off other people outside the organisation	7
Having a method of capturing your ideas for future reference	6	Having tasks which challenge you	1
Being able to talk about things which might be 'risky' or that 'go against the flow'	4		

4. What else do you think is important to coming up with new ideas in your organisation?

Having time to think through the problem. Sounds daft but we have often prepared the ground simply by discussing the problem and then letting it settle for a few weeks; and without trying to think of the best idea. Somehow, by the time the task is re-visited, to be tackled for real, ones subconcious has done plenty of work on the subject without us realising, or putting in any effort!

5. Where are ideas most useful in your organisation? **PLEASE TICK ALL THE BOXES BELOW THAT APPLY.**

For new products or services	☐	For organisational efficiencies	☒
For new ways of marketing products or the brand	☐	Other (please specify in this box): We develop software, and every new feature needs to be invented and implemented. You can bet that the easiest software program you've ever used, was the hardest to develop, and has the most original new ideas.	☒

6. Do you work in project teams or groups within your organisation?
We're a small company, we have to work on individual projects, but as a team.

7. Do you feel more productive if you work in a group that has individuals with many different skills, specialisms, backgrounds and attitudes or a group made up of people very much like yourself? Please briefly explain your answer.

The former. An example is that Fred has much experience with 'RealStudio' software tools, Bert has a lot of knowledge with 'C++' programming language, George knows about hardware and is a dab hand with most programming language too. In other words there are 'experts' within different skill sets in the office and these skill sets rub off on the other members.

8. When do you feel most able to come up with new ideas? **PLEASE TICK THE RELEVANT BOX BELOW.**

When I work by myself on my own	☐	When I have contact with other individuals	☐
A combination of working on my own and having contact with other individuals	☒		

9. Does action taken by your leader (or your organisation as a whole) on your ideas encourage you to generate more ideas? Please briefly explain your answer.

n/a

10. Can you think of anything that might "get in the way" of or stop you from coming up with ideas in your organisation?

Too many ideas can be a hinderance, especially if the chosen one is by committee.

11. I think that my organisation does effectively guide/steer the idea generation process. **PLEASE INDICATE YOUR ANSWER BY TICKING THE RELEVANT BOX BELOW.**

Agree	☒	Neither agree nor disagree	☐	Disagree	☐

12. Referring back to the answer you gave above, how do you think your organisation does this?

Aspex doesn't actually have an organised process for generating ideas. All I can say is that the software projects Aspex is engaged in require unique solutions all the time.

However, there is a distinction between different types of idea/solution:

1. When designing the method by which a user uses the software, and to make this as user friendly as possible, we find it detrimental to the process to see how other packages appraoch the same task.

2. When designing the code to achieve the solution planned in No1 above, then there is everything to be gained from seeing how other developers have done.

Make sense ??

13. Do you use places or spaces (e.g. online forums or physical noticeboards etc) to 'store' your ideas for future reference?

Yes, aspex uses its own Wiki, Blog and an off-site space for storing all tickets, notes and code.

14. What is the general reaction you receive in your organisation when something (such as a project or a task) to which you have contributed ideas does not go to plan?

disappointment, sympathy, regroup and plan a different approach. There is no such thing as failing to complete a project.

15. Do you think this reaction encourages or inhibits your desire to come up with new ideas?

16. Please mark the category which best fits with your role within your organisation	Senior Manager / Leader	☒	19. Do you have any other comments to add?
	Mid-Level Manager / Leader	☐	
	Junior Manager / Leader	☐	
	Professional / Craftsperson	☐	
	Administrative / Manual	☐	
17. Please indicate your gender	Male	☒	
	Female	☐	
18. Please indicate your age bracket	16 to 24	☐	
	25 to 34	☐	
	35 to 44	☐	
	45 to 54	☐	
	55 and over	☒	

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INTERVIEW TRANSCRIPT

Transcription

Organisation H Interview with [XXXX] (Senior Manager / Leader)

Date: Wednesday 17th October at [Company] Office, Plymouth

Graham: Is this an organisation that generates lots of ideas?

XXX: Yeah, [company name] is an arts organisation working across photography and what used to be called “New Media”, so film, digital arts, you know obviously working with artists and creative practitioners. Myself and John who run the company are both artists in previous lives, educationalists more now.

Graham: Where are ideas most needed in the business? Is it for products and services, efficiencies, marketing?

XXX: Yeah, just to answer a few of those elements. I think in delivery, essentially we are running a company that is essentially a small collective of people, which obviously is delivering a certain amount of arts provision so that it competitive at the moment. Lots of people are leaving degree courses with arts degrees so we are competing with freelancers and other organisations so ideas

generation whilst delivering and being kind of ahead of everyone else is really key. The marketing side of things is interesting because we actually don't spend any money on marketing.

Graham: Do you still do any marketing?

XXX: Yeah, we do you know. We all spend time on marketing so I guess time is money but (we are) kind of believers that you are as good as your last job really. Most of our work is generated through working. By working more work comes in.

Graham: By word of mouth sort of thing?

XXX: Yeah, word of mouth and by being physically present and not spending our days sat in an office trying to market what we do, being out doing what we do.

Graham: Sure, being seen and so on.

XXX: Maybe it is not the best model, a Marketing Officer would be fantastic when funds allow.

Graham: Do you think the organisation needs to generate ideas in order to survive? In other words if it didn't generate ideas it would stagnate and decline.

XXX: Yeah, absolutely. I think ideas transfer directly to employment and income generation actually. I don't think we can be passive about what we do and assume things are going to come our way so… so yeah, developing good ideas and innovative ideas has led to a) some of our more interesting work but b) the potential to actually take risks and things not work out. I think that helps inform maybe the next project or the next set of ideas.

Graham: That's an interesting point. There is a question I have got later on about that, I'll come to that one now… If there is a project that hasn't gone quite to plan or something that hasn't quite worked out… what's the general reaction to that in the company?

XXX: Yeah, that's a good question actually. We tend not to evaluate in any formal structure and generate paperwork. We do have pretty regular meetings with individuals that are working on projects so a lot of face to face conversations. Depends how badly wrong something has gone. I guess there is a moment of silence or panic sometimes. Actually I think because we are more of a collective mind-set there is a trying to work things through and trying to resolve things.

Graham: Is there an emphasis on learning and taking from that or is there an emphasis on blame as to whose maybe got something wrong?

XXX: No I don't think so (i.e. no blame attached individually). A good example was a typo in a recent catalogue we published. You know I think it is collective blame actually because anyone at any point…. You know we don't have any hierarchies here particularly so anyone at any point could come and say "I'd like

to proof read that please" and if something is going to print for example everyone will see it so everyone has missed it. So I think there is a shared blame which maybe makes it easier than the "boss" shouting at an employee which is not a place I'd ever like to get to.

Graham: No, that's definitely not something that I associate positively with new ideas absolutely not no…

XXX: So yeah, and I think there is an awful lot of skill sharing within the company where we all become quite multi-disciplined and you know although we have our own individual skills it gets to a point when people come and work with us they can deliver things that they couldn't previously and likewise John and I that run the company and James and Hannah and Tim who are our main associate members I guess at the moment delivering for us… we all kind of actually have a similar you know skill set in the end which is really interesting. So it is quite nice actually to open the company out and bring new people in sometimes.

Graham: Does it help from an idea generation point of view if you do have cross over in skill set… that you can see things from somebody else's perspective perhaps?

XXX: Yeah, I think so. You know I have a good grasp of video editing and I can sit down with James when he is working on a film project and give quite positive input that he respects. I think if I had no knowledge of the subject whatsoever he might listen to me but I think the individual is more likely to sort of go ahead with what they want to get done and not absorb those ideas. So yeah I think confidence in each other's skills is really really important.

Graham: Can you describe a time for me when you felt most able to generate ideas at work?

XXX: I think whilst working… I don't think it is an office based practice coming up with ideas. I think a lot… you know a lot of arts organisations probably do sit round the table and map things out and plan things in a sort of quite formal meeting but actually on reflection of actually doing discussions in those sort of pauses or those long drives back from say running a project in Bristol I think those are the times when actually ideas are generated. Quite often penned as well, we'll return from a trip and actually write down a lot of things that we've discussed.

Graham: So it is more informal if you see what I mean, out of the office, it's…

XXX: Very informal, very unstructured but very productive. Yeah.

Graham: How effective do you think your organisation is in building an environment that allows people to come up with ideas?

XXX: Well we are not a regularly funded arts organisation at the moment so we are delivering project by project as a sort of collective of freelancers so… we are busy which doesn't allow much time when you are working project by

project to offer the individuals space to maybe come up with their own ideas and things that they want to get done.

Graham: Do you think that provision of space is important to coming up with new ideas?

XXX: Absolutely, yeah. I think it is really key. I mean it is you know it is evident should we get to the point where we had some… a large block of funding say from the Arts Council England which we are in the middle of writing out the application at the moment it buys time which buys capacity which buys space and then you can do more (idea generation). I think that is something we have found as a company, if somebody invests in us, even if it is a small amount. You know a good example being running a project with a housing association where a small fee of £1,000 was paid. It sort of bought into our ideas, it allowed us to generate more and we found additional funding to continue working in that community for a year so yeah…

Graham: That's amazing, so it is even just a small amount of time and funding can actually stimulate some quite (big projects / ideas)…

XXX: Yeah, small input can lead to you know with kind of creative folk that are keen to get things done a small investment can go a very long way. I think sometimes that is missed… I think you know I am not saying it is anybody's responsibility to kind of sure up the arts but I think society without the arts would be a very interesting place…

Graham: Indeed, a very boring place, absolutely!

XXX: So yeah, I think it is looking for that kind of small investment now. A good example is Fuji have just sponsored our mobile camper van… our mobile camera obscurer which is in a camper van. Fuji get it… we use their products… we are revamping the vehicle, their logo goes on it we take it to various events, it is quite reciprocal. But again we haven't always got the time to go and develop and nurture those relationships. So yeah time is a massive drawback at the moment.

Graham: Do you think that you are able to make use of your full skill set at work?

XXX: Yeah, I think I do actually on a personal level… you know publishing is something that I have always been interested in and we have just published a book by a photographer called John Kernow which I have worked on for a year and a half. The company allows me to actually play at doing that, as an individual freelancer I would probably still just be pressing the shutter on a camera quite regularly. But that said because I am delivering and running and directing the company I do less photography. You know I am a trained photographer (but) I do less and less of it so…

Graham: Do you find that there's… that you can switch between the two roles if you see what I mean… between company administration and your professional skills and if that maybe encourages more ideas or if it inhibits (idea generation)?

XXX: Yeah, I think I can. I think people assume you… once you take on any type of role people assume that's the only thing you do so I don't know what the perception of me within the company away from here is. I think people are quite shocked when they see me off actually just doing a very simple photography job because I am also in my other role the creative director of a company. It is funny how society in general likes to put people in little categories and pigeon holes. So actually I quite like shifting between these different roles and that actually keeps the whole thing quite enjoyable and probably the reason it has continued.

Graham: Do you think your work provides you with positive challenges?

XXX: Yeah, absolutely. You know you don't know where the next job is coming from, you don't know if you can afford to pay the rent next month or pay your own wage the next month so in itself that is a massive challenge and it forces you to get up in the morning, it forces you to go and do things you don't necessarily want to do and to go and have conversations with people you wouldn't normally spend time with. Yeah, very different to say being the paid employee you know. We are generating that paid employment essentially and I have massive respect to anyone that sets up a company and does that.

Graham: It is definitely one of the hardest things that anybody can do… From an ideas perspective do you feel that you are more creative now than you would be in just a normal paid job?

XXX: I am not sure. I think it depends on the job doesn't it. I think you know certainly living in the South West you are aware that you have to develop a certain type of resilience and I think you know the creative industry is here although they are present they are also massively under resourced. Infrastructure isn't there like it is in London, Bristol or any of the other big cities in Britain and I think there are probably paid jobs in the UK that allow you to be incredibly creative, Theatre Director or you know working in production within kind of photography or you know any of these roles. I think the reality is here in Plymouth to sort of sustain that kind of employment and that kind of creativity you have to do it yourself. It is very unlikely that you are going to walk into that job that allows you all that creative freedom so… I think it is possible but probably less likely here.

Graham: How do you think managers and leaders… yourself being a manager and leader in this organisation… support idea generation for others?

XXX: It is interesting… I think [company name], we've been running for 3 years now and we've just recently realised that… well we wrongly assumed we were creating stuff for an audience. You know so this visual culture that we were engaged with, we were generating ideas and work for an audience but I think we've realised in the last few months actually that the audience is our work. Without the audience we don't… there is actually no point in doing what we do so… you know we ran a big project in June called Digital Mashup which was about pulling people in to have portraits made and we used big screens in Plymouth, Bristol and Swindon and their portraits were going onto the big screens. Those city's archives were going onto the big screen, there was a VJ there, musicians. It was a multi-partner project but it was totally audience

driven. You know we are not the type of organisation that will create work, put it on a wall and assume people will walk in and see it. The camper obscurer is a good example. We take it out, we take it to where there are people so we are very engaging in that level and I think hopefully that gets translated and individuals that engage with what we are doing, feel a little bit more creative and maybe they have different ideas. When some school kids see two bearded men running a camper van as a camera obscurer maybe they think anything is possible. I am not sure what careers advice in like in school anymore but what we do is certainly something I can't imagine a careers advisor talking about based on my personal experiences of careers advisors.

Graham: Mine as well very true…

XXX: It is really interesting working in the creative industry it's a well-known fact that within education and training settings we are training young people for a job that doesn't even exist yet and it is a well-known fact that and I think you know it is really tricky to deliver education knowing that and it is really tricky to imagine what's possible in the future so I guess ideas are probably at the heart of all of these things.

Graham: Do you make an effort to try and link your other associates in with the vision of the business?

Matt: I think that is the ambition, it is currently not where we are at.

Graham: Why do you say that?

XXX: Purely through lack of investment at the moment. I think you need to buy that small space which might be a month, two months to actually just pause or have others deliver what you normally deliver when you know we are busy at the coalface so to speak to… it is really hard to pull back at times and sit down and say "right, ok, what things will we get done in the future?" We do have a very thorough annual general meeting with all the team and anyone who has worked with us is invited and that does allow us to reflect on the year gone and propose what we would like to get done in the year ahead. It is quite… it's very strange how some of these ideas are like balloons really floating off and we attach some of them to the ground but it is amazing how many we do attach to the ground and actually deliver in the end. Just from some you know literally suggesting what we might do in a year maybe 90% of those things happen come the end of the year.

Graham: That's incredible… Do you think idea generation would improve if your associates had a link into that vision or would it not really have too much of an effect do you think?

XXX: No, I think it (idea generation) would improve massively. I think there is this difficulty for anybody now that is graduating or mid-twenties heading towards their thirties financially it is a struggle, rent is high, buying a house is unlikely…

Graham: …saving for pensions as well, paying off student loans…

XXX: Yeah, all these things I think it is a struggle and I think a lot of people are in a very individual mind-set which is "how can I pay the bills" so it is very hard for anyone to get… you know it is a two way relationship it is very hard for somebody to sit down and think "right, if I really invest my time into supporting this company where will this company get to and how will that support me?" and vice-versa, the company is very busy delivering. Again time is the resource that we don't have but absolutely I think it would be imperative in the future if we are to grow the company that the individuals that do link in and work with us a) understand the bigger picture and the benefits of working for a company and b) have more of an input and feel more ownership of the company's sort of ideas and ethos.

Graham: Do you generally work by yourself in isolation or do you work in teams / groups?

XXX: It is a lot of work in pairs within the organisation, I don't know why. I think we've gone and delivered things as small groups where it feels a bit cluttered; we've gone and delivered work individually where you feel it's a bit isolated. I think working as an individual you start to assume "why am I not doing this as a freelancer?" So yeah we tend to do a lot of team… team teaching, team project development. Definitely over the past 2 years there has been a lot of work, no particular pairing of anybody but we seem to go out and work in 2's quite regularly.

Graham: Ok, and do you feel that is a better environment for coming up with new ideas or do you feel that you come up with better ideas when you are on your own?

XXX: Well I freelanced for 8 years before [company name] came along… so… no I think having people around you and people to talk to and not boring your partner or family is really important actually.

Graham: I think I have been accused of that recently as well…

XXX: Yeah, it is really nice to go home and you know everything that I do creatively and logistically and bureaucratically in running a company can be left at the office so to speak, because the people I work with have supported some of that sharing and thinking. You know it is quite a nice feeling to have that around you. As a freelancer I don't remember really having that, just a lot of things rattling around in your head.

Graham: How do you generally go about sharing your ideas in the company? Is it conversations, emails, phone calls?

XXX: Yeah, we use… quite often use shared documents online that we can all add to and they change and it is quite nice to dip into them and see how they have changed so if we are working on a new project or a new funding application. Lot of emails I think… we are trying to push picking up the phone more regularly. I think people slip into the habit of just sending emails because it is easy, actually it is easier to pick up the phone.

Graham: Absolutely… it is quicker to quickly call somebody…

XXX: People prefer it, things get resolved faster, potential organisations that want to work and collaborate with us they feel more confident if you are just on the end of the phone. It is funny how the email just seems a very dated method of contacting people now. So yeah, more… higher phone bills actually over the last year, it has been really interesting to see that go up and up and up.

Graham: Has that been positively related with more ideas coming through do you think?

XXX: More positive outcomes. So when we propose to do things and we have kind of crazy ideas that we want to make happen, definitely more positive outcomes through face to face meetings and you know that more personal conversations with people. Yeah, we seem to have a very good success rate at the moment of things we want to get done and them actually happening.

Graham: How would you define the term control in this particular work environment? Is control necessary for idea generation?

XXX: Well a company… we are a community interest company, we are working with grass roots kind of arts education and make… try to stimulate some kind of social change here in Plymouth and the wider region. I think if individuals working with a company do want to input there has to be that philosophy in their thinking.

Graham: So there does have to be some sort of structure?

XXX: Yeah, there needs to be a structure in terms of the company's aim and ambition and then if people's ideas sit within what we want to try and get done then it can work and I think we've had people come and work with us who are… selfish is the wrong word but certainly their mind-set is on themselves and how can a project benefit them, or their CV or the next step. I think some people do know that working leads to more work so coming and working with us will lead to the next job so there isn't this feeling of (them) like desperately wanting to input into the company, they are using it as a…

Graham: … stepping stone almost…

XXX: Absolutely so that is the relationship and the control side of things that we have not managed brilliantly well in the past but you know I have never had to in my life so… it is something… and I am not sure if you learn it at management school…

Graham: No I don't think you do. I think it's intuitive to a degree…

XXX: Yeah, you know and it is (intuitive) because you are working with individuals that are all very different so some people have their ambitions and you can be as candid with people as you like but some people know where they want to get to and they will use the company to get there. Which is fine if we know that is the situation but sometimes…

Graham: That isn't made explicit?

XXX: Yeah, I think there is an openness and honesty that needs to be there so again that is another reciprocal relationship and I suppose trust forms a huge part of that development and I think ideas as well you know… there needs to be a trust if you are sharing lots of good ideas you know they need to sometimes remain within the company actually. It is very easy for someone else to go and develop your ideas sometimes.

Graham: It's about protecting your intellectual property almost that kind of stuff?

XXX: Yeah. That said quite often we you know… to find work you go and have meetings and you put your ideas out there and you find that someone else has already… does go and deliver them. That is part of business too.

Graham: Is it ever the case when you are sharing an idea maybe somebody else has another half of an idea and they sort of collide together and you come up with something even better?

XXX: Yeah, all the time. I am not sure whether we assess if it is better or worse, certainly different to what we imagined it would be. The unexpected is always good I think, good to kind of… it makes work enjoyable and I think you know quite often people that deliver funded projects, they'll sit there and plan the idea, they'll plan the project, they'll write the funding bid, the money comes in and then the delivering of it actually is going through the motions and probably (it's) less interesting because there has been far too much planning and there is no space for anything spontaneous to happen.

Graham: Thinking more broadly within the company when you are setting kind of a vision or a framework, is it important that it is fairly broad and fairly loose or does that need to be quite tight if you are going to get relevant ideas?

XXX: I think both things happen. I think there is sort of a nucleus that is very structured but then you know these electrons whizzing around the nucleus might… you know that is the broad "anything is possible" and again it is sort of how do you attach those ideas back to what you originally set out to do. Sometimes they are completely irrelevant.

Graham: And that's where the filtering comes in and that other kind of stuff… I know you have just mentioned Google Shared Docs; do you have any other ways of storing ideas in the business?

XXX: No it is interesting. I mean we have got a filmmaker, James, working with us who you have interviewed and James is making a small documentary about our camper van and he is about to shoot 4 or 5 bits of promo film for us about various facets of the company and it is… like now it is really interesting when somebody points a camera or a microphone at you, you have to talk sort of on some of the things you have been thinking about. You verbalise them which is really useful actually. You know we don't have any shared space where they (ideas) are recorded unless James is there making something physically but certainly I don't know… if there was a better way of… I don't know getting these things down on tape so that you know the tape would actually be listened to by somebody actually. I think that is the problem people don't have time… so we

could go and use devices to record them (ideas) (but would the output be used). For now it just seem to be typing, typing, and we are working in a world of words which maybe isn't the best way actually you know for a visual artist to just be typing so much.

Graham: One thing I have seen in quite a few… a range of different organisations is that ideas are stored socially between people. So when you do verbalise something towards somebody else then (the idea) it is stored in that social connection between the two.

XXX: Yeah, I think it is, I think conversation is absolutely key and like I said earlier unless you jot these things down they get lost or missed. I'd be keen to maybe see actually if we had a more regular ideas generation meeting.

Graham: Do you think it would need to be a formal meeting or could it just be something spontaneous? So it might happen one week on a Monday morning, (another time) it might happen on a Thursday afternoon?

XXX: I think it would have to be formal because we are doing it spontaneously anyway in a very unstructured way. I think I would be interested to see if a very structured meeting would lead to anything different… Probably not… I wouldn't have thought so, maybe people looking at their watches thinking "I need to be somewhere else delivering this, that or the other". I think that is the difficulty really, it's getting everybody together at the same time. We've got a lady called Hannah working with us now who is delivering education and she is based in Cornwall so… We did had practitioners in Bristol working for us recently, now they are down in Falmouth.

Graham: So it is the physical space between different people that is sometimes a bit difficult.

XXX: Yeah, definitely. We have recently had Skype conference calls about various projects that need it. Yeah… I think you are right; it is a very social thing maybe networks like Facebook have become useful actually for the company… we use it in a really structured way where after any piece of work we do there is some kind of news posting, our website gets updated.

Graham: That's interesting. So you use social media in a very… there is a formula that you use there for that?

XXX: Yeah, it is definitely… we are not sat there in the office sort of wasting our time with it. It is used in a very… like I say in a structured way, if we put an event on we know that there is X amount of people using it that follow our events so we use it in that way.

Graham: Does that encourage new ideas off the back of that then, through the use of social media?

Matt: Yeah, it is interesting to see who is interested in the work that you are doing and you do get feedback that you would not get time to discover any other way.

Graham: Just picking up on a word you said there… feedback has been a theme in quite a few different organisations. How important do you think it is for you to provide feedback to the people you work with on their ideas?

XXX: Again, I think because we are only as good as our last job I think the feedback is always in "we are doing that again this year" you know I'd like to assume everybody thinks we did a good job and they did a good job. A good example is that we have run the media tent at the Green Man festival for 5 years now and you know the year they don't ask us back is the year everyone would get negative feedback. I don't… it is quite unspoken actually. People aren't… I think they are not looking for the pat on the back or they are not looking… inversely they are not looking for the ticking off when something doesn't work out. I think we all know when we have done something that we should feel positive about.

Graham: So almost the work itself provides the feedback?

XXX: Yeah, absolutely. A busy private view of an exhibition we have organised is an indication that we have done a good job and invited the right people. No-one turning up is well… you sit there with a face, a long face thinking "we didn't quite pull this off". So yeah I don't think (feedback) it always needs to be discussed, it is very visual and very evident.

Graham: Very interesting… What's your view on the extent to which your organisation recognises new ideas when they come through?

XXX: That's an interesting question… Probably… I think they probably sit with us (ideas) for some time before we actually a) digest them or move them forward. But generally… generally a lot of the things we say we are going to do we end up going and doing them. I think we've become a good platform to support practitioners. So we do have work where we have generated… we have individuals come and work with us and they have had good ideas and we haven't you know… the company only has so much capacity and we have actually found individuals work away from this company and we have lost people. I say "lost"; we have supported people in moving on to the next stage of their careers which is fantastic. I think that that support in their ideas and knowing that sometimes we can't actually offer a space for their ideas, a good example being our web designer, had a very specific way of working and very diligent and not enough work through us so he you know… he found other paid employment with another employer which is great… it is great that we can provide that and you know James the filmmaker working with us, we have found him work within the teaching sector. So we are aware now… that loyalty and input into the company I think individuals get that back.

Graham: That is a very interesting philosophy, I think that is quite a… a very good philosophy to have sort of investing in people, them investing in the company and then things do move on naturally as you say.

XXX: Yeah, I think they do and unless you are a true collective where everybody is you know the creative director or everyone has equal responsibilities for everything I think genuine collectives probably fall to pieces very fast because there is too many people. I think John and I try and steward

people and work and… without any sort of dictatorship going on. We do try and… John and I spend a lot of time together as two individuals running the company discussing what's best for the company and… not presuming but thinking about what's best for some of the people we work with and how we… I mean you can see when somebody is flagging or somebody is not interested anymore. How do you support them in moving onto the next stage it's… or helping them realise that maybe it is time to move onto something new and something interesting and creating space for somebody new and interesting to come and work with us as well. We are not trying to create some kind of stagnating organisation with the same team for 10 years. But I think at the moment because we are project by project you know it would be interesting to see if we had some regular funding how we might change structures. Would we have that education officer come and work with us full-time for 2 years and they deliver all education and therefore we don't have any freelancers come in because you know we employed 50 freelancers last financial year. Would we suddenly not be spending… investing in those freelancers anymore? I don't know. It is… the way we are structured at the moment allows a lot of people and ideas to come in and out of the company which is I think positive but from a management point of view it is time consuming. Dealing with one person is easier than dealing with 50.

You know and I'll add it is a good point actually… I think a lot of companies will take on… they are reluctant to have job shares, reluctant to work with many because it is cheaper and easier to work with one.

Graham: But the negative side of that is maybe that the more people you work with the more ideas that can come through and the more projects that can perhaps take place.

XXX: Absolutely and I wonder where your research will lead and I wonder how companies are transformed by more voices and more input and more people and could you suddenly explode a five day a week job into five one day a week jobs? I think Britain is full of part time employees at the moment… something the government needs to recognise…

Graham: (Discussed own personal jobs and how they feed off each other)

XXX: Absolutely so… and I think that is the way certainly with the social enterprise sector I think we are not carving out these big full-time jobs, they don't exist but people have super skills that can come in and one day a week they can transform a company. I think we will keep that ethos, regardless of where we head in the next year.

Graham: Asked Matt if he had any other points to add.

XXX: I don't think so… no I mean I think kind of the word idea is this kind of very big broad thing isn't it.

Graham: Very difficult to research when you have to define what an idea is and then looking for evidence…

XXX: … and define a word that we actually in generating ideas we probably never ever use the word idea. We have all these discussions and all this planning and creative thinking but I don't think I've had a meeting this year where I have used the word idea which is interesting.

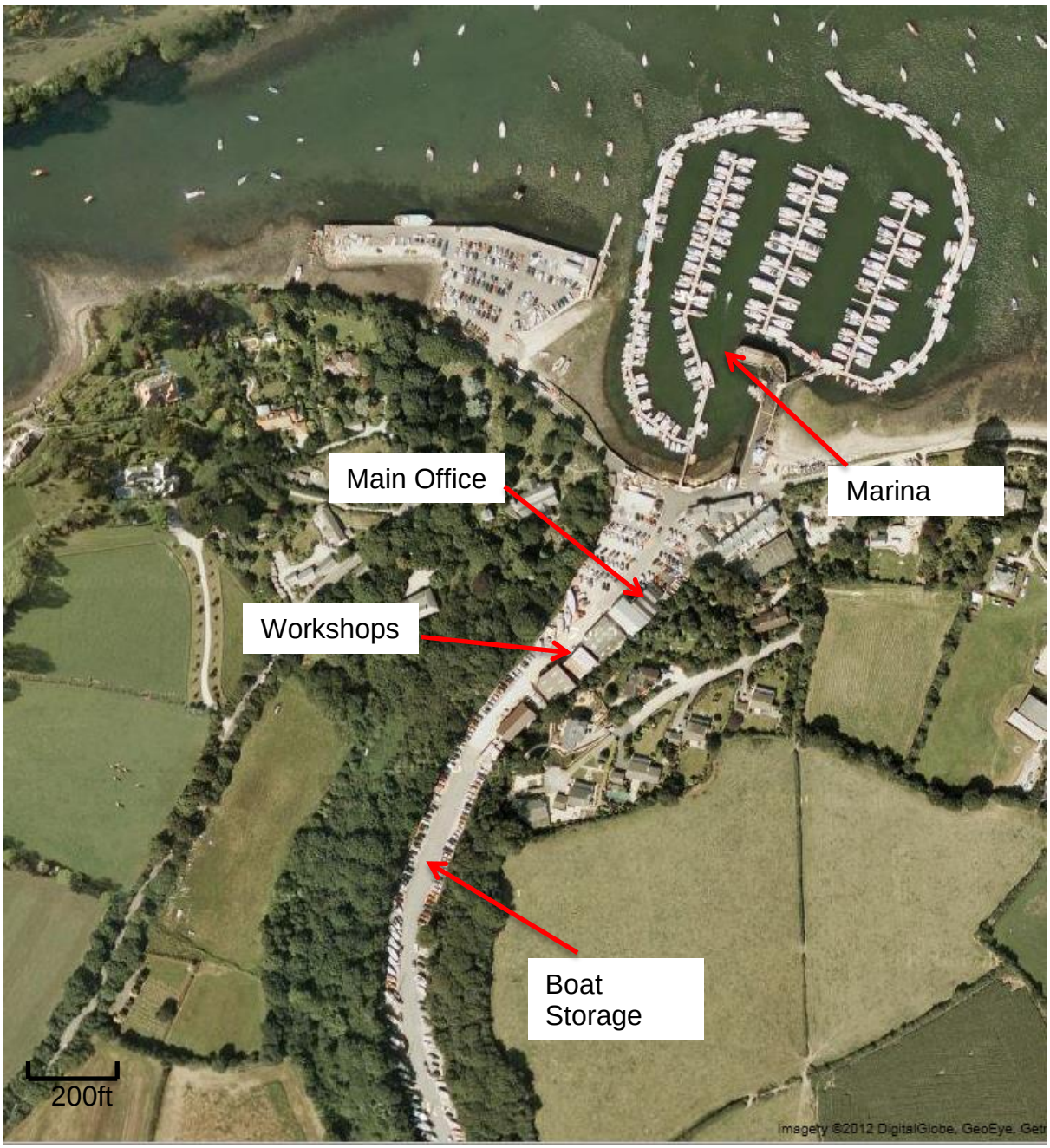
OBSERVATIONAL NOTES

Observation Notes: Medium Sized Marine / Manufacturing Organisation

Key Stats / Organisation Overview

How many people are employed by this organisation?	55
How many offices does this organisation operate from?	1
Describe the environment inside this organisation	This is clearly a craft-based organisation. The workshops hum with the sound of industrial machinery and the open plan office is always full of people. The site is very clean, professional and welcoming, blending in with its surroundings. There is an air of relaxation around this organisation and individuals are clearly proud to work here.
Facilities available to employees	Individuals have access to a huge number of facilities available depending on their job. Some have access to computers, others have specialist tools and equipment. The main office building includes a staff room and washroom facilities. Employees all have individual desks or workbenches depending on their occupation.
Describe the location of the organisation	This organisation is located in a picture postcard area of Cornwall. The pace of life is sedate and the environment is scenic. Access to this organisation can only be achieved through a narrow country lane and it is relatively remote from other businesses / suppliers etc.

Workplace Diagram



Observational Notes

This organisation is set in an incredibly beautiful and tranquil location. It is the sort of place to which you would attach the word “holiday” rather than “work”. The firm is relatively isolated in its location with the nearest town being 4 miles away along narrow, country roads. The wonderful setting may, in reality, be contributing to this organisation’s struggle with change; its current state is so appealing that it makes you question why anyone would want to alter it in any way. Perhaps this is why there is resistance when anyone the owner talks about doing something “new”.

The pace of work at this firm appears to be relaxed. Individuals are clearly very talented (e.g. shipwrights, engineers etc.), each having years of experience in their respective fields. It also appears that the organisation has honed each job

to be as efficient and effective as possible. Nobody in this environment appears to be flustered by anything; each job takes as long as it takes, no more, no less.

The owner is a very likeable individual. Employees respect him and seek out his opinion when working on challenging projects, even if he himself has limited experience in the given field. He comes across as a caretaker and the overriding feeling to an outsider is that he understands what it takes to make the organisation successful. He could easily be depicted as a “steady hand on the tiller” of the organisation and although this is mainly positive it may actually be contributing to the perceived lack of comfort with change even though he himself is keen for the organisation to evolve.

The main office is laid out in a neat and orderly way with a variety of individuals including managers and administrators conducting various tasks during the working day. While the main space is open plan there are a number of smaller rooms that are used for both formal and informal meetings as well as break rooms and washroom facilities for the staff based in the workshops.

An interaction of particular note in this setting occurred while I was observing a typical day in the main office. An administrator and a marina employee were seen having a disagreement over a particular procedure. A perceived error (on the part of the administrator) caused the other employee to become rather frustrated and there were certainly accusations of blame rather than either party seeing to learn from the event. From looking at the demeanour and body language of the administrator after the event it is difficult to imagine that she would be in a state to generate ideas for the rest of that particular shift.

Key Words

Key words to describe this organisation include;

- Idyllic
- Relaxed
- Unchanging
- Skilled
- Experts
- Calm
- Welcoming
- Sedate

Appendix G: Further Survey Information and Summary Statistics

Original Covering Note

The following covering note was attached to the surveys sent out during this study. In almost all cases the survey was distributed by email, although hard copies were sent to participants at Organisation F along with a stamped return envelope. The covering note was amended slightly depending on the requirements of the participating organisation; this example was sent to Organisation B.

Idea Generation in Organisations

My name is Graham Perkins and I am currently studying for my PhD at Plymouth University. My research is looking into the factors and issues that can affect idea generation in organisations and I have developed this survey to capture your perceptions and views.

Idea generation is incredibly important to all organisations and individuals as it is the basis of creativity and innovation. Without ideas we will not be able to introduce anything new whether this is a new product or service, more efficient processes or a different way of marketing a brand.

By completing this survey you will become more aware of the things that can impact idea generation and this could well benefit you both at work and in your personal pursuits.

If you have any questions or comments my contact details can be found on the survey. Thank you in advance for your assistance.

Graham Perkins

Pilot Studies

The survey was piloted with two small organisations in Cornwall with whom the researcher has personal contacts, allowing for detailed feedback about question design and overall survey structure. Information about these organisations is included in the following table.

Organisation	Sector	Number of employees (f/t equivalent)	Number of participants in pilot study	Date of pilot study
A	Construction	25	4	January 17th 2012
B	Services	7	3	January 20th 2012

The initial survey template was designed to be a “check box” exercise as this was anticipated to improve response rates. An example of a completed pilot survey has been provided below.

Creativity at Work — ORGANISATION ONE PILOT

This survey is gathering information about the various factors which affect the generation of 'creative' ideas in organisations. Please answer all the questions by putting a tick in the relevant box of both columns, if you are not sure of your response, please mark your best guess. No-one will be identified from the results of the questionnaire, anonymity is assured.

	My experiences of working in groups inside my organisation					My experiences in my day-to-day job / role				
	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree
1. I am encouraged to contribute my ideas and views even when they might go against the majority	☐	☑	☐	☐	☐	☐	☑	☐	☐	☐
2. The workplace provides me with challenges	☐	☐	☐	☐	☑	☐	☐	☐	☐	☑
3. The workplace provides me with support	☐	☑	☐	☐	☐	☐	☑	☐	☐	☐
4. There is freedom to pursue new lines of thinking	☑	☐	☐	☐	☐	☑	☐	☐	☐	☐
5. My leader or manager shows concern for all my needs (for example they are concerned with things like my personal happiness rather than simply the task at hand)	☑	☐	☐	☐	☐	☐	☑	☐	☐	☐
6. I feel that I have the skills I need to complete the tasks that I am set	☑	☐	☐	☐	☐	☑	☐	☐	☐	☐
7. There is time to reflect on views, opinions, debates and conversations	☐	☑	☐	☐	☐	☑	☐	☐	☐	☐
8. My leader / manager recognises 'good ideas'	☐	☑	☐	☐	☐	☐	☑	☐	☐	☐
9. I believe that my leader or manager has the right abilities to form and co-ordinate effective teams / groups	☐	☑	☐	☐	☐	☑	☐	☐	☐	☐
10. Conflict is managed well	☐	☐	☑	☐	☐	☐	☐	☑	☐	☐
11. I am able to speak to and 'bounce things off' many different individuals during my work	☐	☐	☐	☑	☐	☐	☐	☑	☐	☐
12. We are actively encouraged to interact widely with others during our work	☐	☐	☑	☐	☐	☐	☐	☑	☐	☐
13. We have specific methods for communicating or sharing ideas and/or thoughts	☐	☐	☐	☑	☐	☐	☐	☐	☑	☐
14. We are encouraged to communicate and network within the organisation	☐	☑	☐	☐	☐	☐	☑	☐	☐	☐
15. We are encouraged to communicate and network outside the organisation	☑	☐	☐	☐	☐	☑	☐	☐	☐	☐
16. Mistakes and/or problems are openly discussed without fear of blame	☐	☐	☑	☐	☐	☐	☐	☑	☐	☐
17. Our mechanisms and processes help to highlight poor ideas while helping to build support for 'good' ones	☐	☐	☑	☐	☐	☐	☑	☐	☐	☐
18. We have physical spaces (such as notice boards) where we can store our ideas	☐	☐	☐	☐	☑	☐	☐	☐	☐	☑

19. Please mark the category which best fits your role within the organisation	Senior Manager / Leader	☑
	Mid Level Manager / Leader	☐
	Junior Manager / Leader	☐
	Professional / Craftsperson	☐
	Administrative / Clerical	☐
20. Please indicate your gender	Male	☐
	Female	☑
21. Please indicate your age bracket	16-24	☑
	25-34	☐
	35-44	☐
	45-54	☐
	55 and over	☐

22. Can you highlight three things which you think are important to the process of generating ideas?

→ Talking things through
→ Plans to put these ideas into practice
→ Agreement by everyone

23. Do you have any other comments to make?

N/A

Thank you for the time you have spent completing this questionnaire. Please email this form back to graham.perkins@plymouth.ac.uk or return it to the nominated individual in your organisation in the envelope provided.

The researcher administered the survey in person in order to gather detailed feedback from participants about all aspects of the template. A key issue arising from the pilot process was that while participants found the form relatively quick to complete several individuals ticked only the boxes on the left of the form, ignoring those to the right of the grey divide. If this had been repeated during formal data collection then it is believed that many returned surveys would have been incomplete, thus compromising the study as a whole.

A further issue identified during piloting was that participants suggested that they would like to be able to write more detailed explanations rather than simply tick a box. This point, together with the structure issue noted above led to the reformulation of the survey template, the redesigned version appearing in **Appendix D**.

Survey Statistics

Overall Response Rates:

Organisation	Sector	Size (Number of f/t equivalent employees)	Surveys returned	Percentage response rate
A	Healthcare	150	15	10%
B	Arts	130	25	19%
C	Marine / Manufacturing	55	15	27%
D	Social Enterprise	45	19	42%
E	Public Sector	32	6	19%
F	Leisure	15	10	67%
G	Retail / Tourism	11	4	36%
H	Community Interest Company	4	4	100%
I	Software Design	4	3	75%
J	Consultancy	3	3	100%
TOTAL		**449**	**104**	**23%**

* Percentages displayed in following tables under “question completed” or similar headings are derived from the number of surveys returned rather than the size of respective organisations.

Question 1:

Please write down three words which you think best describe the environment for idea generation within your organisation. (free text response)

Organisation	Size (Number of f/t employees)	Question Completed (%)	Question Skipped (%)
A	150	15 (100%)	0 (0%)
B	130	25 (100%)	0 (0%)
C	55	15 (100%)	0 (0%)
D	45	19 (100%)	0 (0%)
E	32	6 (100%)	0 (0%)
F	15	10 (100%)	0 (0%)
G	11	4 (100%)	0 (0%)
H	4	4 (100%)	0 (0%)
I	4	3 (100%)	0 (0%)
J	3	3 (100%)	0 (0%)
TOTAL		**104 (100%)**	**0 (0%)**

Question 2:

Which one of these words do you think is most important for idea generation and why? (free text response)

Organisation	Size (Number of f/t employees)	Question Completed (%)	Question Skipped (%)
A	150	15 (100%)	0 (0%)
B	130	25 (100%)	0 (0%)
C	55	15 (100%)	0 (0%)
D	45	18 (95%)	1 (5%)
E	32	6 (100%)	0 (0%)
F	15	8 (80%)	2 (20%)
G	11	4 (100%)	0 (0%)
H	4	4 (100%)	0 (0%)
I	4	3 (100%)	0 (0%)
J	3	3 (100%)	0 (0%)
TOTAL		**101 (97%)**	**3 (3%)**

Question 3:

With 1 (one) being most important and 7 (seven) being least important please rank the following things in the order that you think they might affect your ability to come up with ideas inside your organisation. PLEASE USE EACH NUMBER ONLY ONCE. (ranking question from numbers 1 to 7).

- 'Enabling' Leadership
- Being able to make a 'mistake'
- Speaking to or bouncing ideas off other people inside the organisation
- Speaking to or bouncing ideas off other people outside the organisation
- Having a method of capturing your ideas for future reference
- Having tasks which challenge you
- Being able to talk about things which might be 'risky' or that 'go against the flow'

Completion Statistics:

Organisation	Size (Number of f/t employees)	Question Completed (%)	Question Skipped (%)
A	150	15 (100%)	0 (0%)
B	130	23 (92%)	2 (8%)
C	55	14 (93%)	1 (7%)
D	45	18 (95%)	1 (5%)
E	32	6 (100%)	0 (0%)
F	15	9 (90%)	1 (10%)
G	11	4 (100%)	0 (0%)
H	4	4 (100%)	0 (0%)
I	4	3 (100%)	0 (0%)
J	3	3 (100%)	0 (0%)

TOTAL		**99 (95%)**	**5 (5%)**

Average Ranking:

Organisation	'Enabling' Leadership	Being able to make a 'mistake'	Speaking to or bouncing ideas off other people inside the organisation	Speaking to or bouncing ideas off other people outside the	Having a method of capturing your ideas for future	Having tasks which challenge you	Being able to talk about things which might be 'risky' or that 'go against the
A	2.75	3.88	3.50	1.63	2.50	2.75	4.00
B	2.50	3.10	5.00	2.60	2.05	2.55	3.20
C	2.31	3.31	4.38	1.77	2.54	2.46	4.23
D	4.06	4.39	5.17	3.17	2.78	3.61	4.06
E	4.83	3.00	4.00	2.00	2.50	2.00	2.67
F	3.60	2.70	4.20	2.90	3.90	2.30	1.70
G	4.50	2.75	4.25	1.50	1.75	2.00	4.25
H	3.00	3.00	4.50	1.50	2.00	3.00	4.00
I	4.25	2.50	4.25	0.00	3.00	4.50	2.50
J	4.00	3.67	4.33	3.00	2.00	0.67	3.33
AVERAGE	***3.58***	***3.23***	***4.36***	***2.01***	***2.50***	***2.58***	***3.39***

Question 4:

What else do you think is important to coming up with new ideas in your organisation? (free text response)

Organisation	Size (Number of f/t employees)	Question Completed (%)	Question Skipped (%)
A	150	13 (87%)	2 (13%)
B	130	24 (96%)	1 (4%)
C	55	13 (87%)	2 (13%)
D	45	18 (95%)	1 (5%)
E	32	6 (100%)	0 (0%)
F	15	9 (90%)	1 (10%)
G	11	2 (50%)	2 (50%)
H	4	4 (100%)	0 (0%)
I	4	3 (100%)	0 (0%)
J	3	3 (100%)	0 (0%)
TOTAL		**95 (91%)**	**9 (9%)**

Question 5:

Where are ideas most useful in your organisation? (tick all boxes that apply)

Completion Statistics:

Organisation	Size (Number of f/t employees)	Question Completed (%)	Question Skipped (%)
A	150	14 (93%)	1 (7%)
B	130	25 (100%)	0 (0%)
C	55	13 (87%)	2 (13%)
D	45	19 (100%)	0 (0%)
E	32	6 (100%)	0 (0%)
F	15	7 (70%)	3 (30%)
G	11	4 (100%)	0 (0%)
H	4	4 (100%)	0 (0%)
I	4	3 (100%)	0 (0%)
J	3	3 (100%)	0 (0%)
TOTAL		**98 (94%)**	**6 (6%)**

Results:

Organisation	For new products or services	For organisational efficiencies	For new ways of marketing products or the brand	Other (please specify)
A	6	7	9	1
B	5	12	11	3
C	12	13	11	3
D	18	17	15	3
E	3	4	0	0
F	7	6	7	2
G	3	3	1	0
H	2	1	1	0
I	2	3	0	1
J	2	3	3	0
TOTAL	**60**	**69**	**58**	**13**

* No percentages given here as participants were free to select as many options as they felt appropriate

Question 6:

Do you work in project teams or groups within your organisation? (free text response)

Organisation	Size (Number of f/t employees)	Question Completed (%)	Question Skipped (%)
A	150	15 (100%)	0 (0%)
B	130	24 (96%)	1 (4%)
C	55	14 (93%)	1 (7%)
D	45	18 (95%)	1 (5%)
E	32	6 (100%)	0 (0%)
F	15	10 (100%)	0 (0%)
G	11	3 (75%)	1 (25%)
H	4	4 (100%)	0 (0%)
I	4	3 (100%)	0 (0%)
J	3	3 (100%)	0 (0%)
TOTAL		**100 (96%)**	**4 (4%)**

Question 7:

Do you feel more productive if you work in a group that has individuals with many different skills, specialisms, backgrounds and attitudes or a group made up of people very much like yourself? Please briefly explain your answer. (free text response)

Organisation	Size (Number of f/t employees)	Question Completed (%)	Question Skipped (%)
A	150	15 (100%)	0 (0%)
B	130	25 (100%)	0 (0%)
C	55	15 (100%)	0 (0%)
D	45	19 (100%)	0 (0%)
E	32	6 (100%)	0 (0%)
F	15	10 (100%)	0 (0%)
G	11	4 (100%)	0 (0%)
H	4	4 (100%)	0 (0%)
I	4	3 (100%)	0 (0%)
J	3	3 (100%)	0 (0%)
TOTAL		**104 (100%)**	**0 (0%)**

Question 8:

When do you feel most able to come up with new ideas? (mark one response)

Completion Statistics:

Organisation	Size (Number of f/t employees)	Question Completed (%)	Question Skipped (%)
A	150	14 (93%)	1 (7%)
B	130	22 (88%)	3 (12%)
C	55	15 (100%)	0 (0%)
D	45	19 (100%)	0 (0%)
E	32	6 (100%)	0 (0%)
F	15	9 (90%)	1 (10%)
G	11	3 (75%)	1 (25%)
H	4	3 (75%)	1 (25%)
I	4	3 (100%)	0 (0%)
J	3	3 (100%)	0 (0%)
TOTAL		**97 (93%)**	**7 (7%)**

Results:

Organisation	When I work by myself on my own	When I have contact with other individuals	A combination of working on my own and having contact with other individuals	No Response
A	4 (27%)	1 (7%)	9 (60%)	1 (7%)
B	3 (12%)	6 (24%)	13 (52%)	3 (12%)
C	0	3 (20%)	12 (80%)	0
D	5 (26%)	1 (5%)	13 (68%)	0
E	1 (17%)	3 (50%)	2 (33%)	0
F	0	2 (20%)	7 (70%)	1 (10%)
G	0	3 (75%)	0	1 (25%)
H	0	1 (25%)	2 (50%)	1 (25%)
I	0	0	3 (100%)	0
J	0	2 (67%)	1 (33%)	0
Totals (%)	**13 (13%)**	**22 (21%)**	**62 (60%)**	**7 (7%)**

Question 9:

Does action taken by your leader (or your organisation as a whole) on your ideas encourage you to generate more ideas? Please briefly explain your answer. (free text response)

Organisation	Size (Number of f/t employees)	Question Completed (%)	Question Skipped (%)
A	150	14 (93%)	1 (7%)
B	130	25 (100%)	0 (0%)
C	55	13 (87%)	2 (13%)
D	45	19 (100%)	0 (0%)
E	32	4 (67%)	2 (33%)
F	15	10 (100%)	0 (0%)
G	11	3 (75%)	1 (25%)
H	4	3 (75%)	1 (25%)
I	4	2 (67%)	1(33%)
J	3	2 (67%)	1(33%)
TOTAL		**95 (91%)**	**9 (9%)**

Question 10:

Can you think of anything that might "get in the way" of or stop you from coming up with ideas in your organisation? (free text response)

Organisation	Size (Number of f/t employees)	Question Completed (%)	Question Skipped (%)
A	150	14 (93%)	1 (7%)
B	130	25 (100%)	0 (0%)
C	55	14 (93%)	1 (7%)
D	45	17 (89%)	2 (11%)
E	32	6 (100%)	0 (0%)
F	15	10 (100%)	0 (0%)
G	11	4 (100%)	0 (0%)
H	4	4 (100%)	0 (0%)
I	4	3 (100%)	0 (0%)
J	3	3 (100%)	0 (0%)
TOTAL		**100 (96%)**	**4 (4%)**

Question 11:

I think that my organisation does effectively guide/steer the idea generation process. (mark one response)

Completion Statistics:

Organisation	Size (Number of f/t employees)	Question Completed (%)	Question Skipped (%)
A	150	10 (67%)	5 (33%)
B	130	16 (64%)	9 (36%)
C	55	13 (87%)	2 (13%)
D	45	19 (100%)	0 (0%)
E	32	5 (83%)	1 (17%)
F	15	9 (90%)	1 (10%)
G	11	3 (75%)	1 (25%)
H	4	3 (75%)	1 (25%)
I	4	3 (100%)	0 (0%)
J	3	3 (100%)	0 (0%)
TOTAL		**84 (81%)**	**20 (19%)**

Results:

Organisation	Agree	Neither agree nor disagree	Disagree	Skipped question
A	7 (47%)	2 (13%)	1 (7%)	5 (33%)
B	7 (28%)	6 (24%)	3 (12%)	9 (36%)
C	2 (13%)	7 (47%)	4 (27%)	2 (13%)
D	18 (95%)	1 (5%)	0	0
E	0	2 (33%)	3 (50%)	1 (17%)
F	3 (30%)	3 (30%)	3 (30%)	1 (10%)
G	0	3 (75%)	0	1 (25%)
H	2 (50%)	1 (25%)	0	1 (25%)
I	3 (100%)	0	0	0
J	0	1 (33%)	2 (67%)	0
TOTALS (%)	**42 (40%)**	**26 (25%)**	**16 (15%)**	**20 (19%)**

Question 12:

Referring back to the answer you gave above, how do you think your organisation does this? (free text response)

Organisation	Size (Number of f/t employees)	Question Completed (%)	Question Skipped (%)
A	150	13 (87%)	2 (13%)
B	130	25 (100%)	0 (0%)
C	55	13 (87%)	2 (13%)
D	45	19 (100%)	0 (0%)
E	32	6 (100%)	0 (0%)
F	15	9 (90%)	1 (10%)
G	11	3 (75%)	1 (25%)
H	4	4 (100%)	0 (0%)
I	4	3 (100%)	0 (0%)
J	3	3 (100%)	0 (0%)
TOTAL		**98 (94%)**	**6 (6%)**

Question 13:

Do you use places or spaces (e.g. online forums or physical noticeboards etc) to 'store' your ideas for future reference? (free text response)

Organisation	Size (Number of f/t employees)	Question Completed (%)	Question Skipped (%)
A	150	14 (93%)	1 (7%)
B	130	24 (96%)	1 (4%)
C	55	15 (100%)	0 (0%)
D	45	19 (100%)	0 (0%)
E	32	6 (100%)	0 (0%)
F	15	9 (90%)	1 (10%)
G	11	4 (100%)	0 (0%)
H	4	4 (100%)	0 (0%)
I	4	3 (100%)	0 (0%)
J	3	3 (100%)	0 (0%)
TOTAL		**101 (97%)**	**3 (3%)**

Question 14:

What is the general reaction you receive in your organisation when something (such as a project or a task) to which you have contributed ideas does not go to plan? (free text response)

Organisation	Size (Number of f/t employees)	Question Completed (%)	Question Skipped (%)
A	150	13 (87%)	2 (13%)
B	130	22 (88%)	3 (12%)
C	55	13 (87%)	2 (13%)
D	45	19 (100%)	0 (0%)
E	32	6 (100%)	0 (0%)
F	15	9 (90%)	1 (10%)
G	11	4 (100%)	0 (0%)
H	4	4 (100%)	0 (0%)
I	4	3 (100%)	0 (0%)
J	3	3 (100%)	0 (0%)
TOTAL		**96 (92%)**	**8 (8%)**

Question 15:

Do you think this reaction encourages or inhibits your desire to come up with new ideas? (free text response)

Organisation	Size (Number of f/t employees)	Question Completed (%)	Question Skipped (%)
A	150	13 (87%)	2 (13%)
B	130	22 (88%)	3 (12%)
C	55	13 (87%)	2 (13%)
D	45	19 (100%)	0 (0%)
E	32	6 (100%)	0 (0%)
F	15	9 (90%)	1 (10%)
G	11	4 (100%)	0 (0%)
H	4	3 (75%)	1 (25%)
I	4	2 (67%)	1(33%)
J	3	3 (100%)	0 (0%)
TOTAL		**94 (90%)**	**10 (10%)**

Question 16:

Please mark the category which best fits with your role within your organisation (mark one response)

Organisation	Size (Number of f/t employees)	Senior Manager / Leader (%)	Mid-Level Manager / Leader (%)	Junior Manager / Leader (%)	Professional / Craftsperson (%)	Administrative / Manual (%)	Skipped Question (%)
A	150	3 (20%)	3 (20%)	1 (7%)	3 (20%)	4 (27%)	1 (7%)
B	130	3 (12%)	4 (16%)	5 (20%)	6 (24%)	7 (28%)	0
C	55	5 (33%)	1 (7%)	1 (7%)	4 (27%)	4 (27%)	0
D	45	5 (26%)	4 (21%)	2 (11%)	5 (26%)	3 (16%)	0
E	32	1 (17%)	2 (33%)	0	2 (33%)	1 (17%)	0
F	15	5 (50%)	0	0	2 (20%)	3 (30%)	0
G	11	2 (50%)	0	0	0	2 (50%)	0
H	4	2 (50%)	0	0	2 (50%)	0	0
I	4	1 (33%)	0	0	2 (67%)	0	0
J	3	1 (33%)	0	0	2 (67%)	0	0
TOTAL		**28 (27%)**	**14 (13%)**	**9 (9%)**	**28 (27%)**	**24 (23%)**	**1 (1%)**

Question 17:

Please indicate your gender (mark one response)

Organisation	Size (Number of f/t employees)	Male (%)	Female (%)	No Response (%)
A	150	5 (33%)	10 (67%)	0 (0%)
B	130	8 (32%)	16 (64%)	1 (4%)
C	55	9 (60%)	6 (40%)	0 (0%)
D	45	7 (37%)	11 (58%)	1 (5%)
E	32	3 (50%)	3 (50%)	0 (0%)

F	15	10 (100%)	0 (0%)	0 (0%)
G	11	2 (50%)	2 (50%)	0 (0%)
H	4	2 (50%)	2 (50%)	0 (0%)
I	4	3 (100%)	0 (0%)	0 (0%)
J	3	1 (33%)	2 (67%)	0 (0%)
TOTAL		**50 (48%)**	**52 (50%)**	**2 (2%)**

Question 18:

Please indicate your age bracket (mark one response)

Organisation	**Size (Number of f/t employees)**	**16 to 24 (%)**	**25 to 34 (%)**	**35 to 44 (%)**	**45 to 54 (%)**	**55 and over (%)**	**Skipped Question (%)**
A	150	2 (13%)	5 (33%)	1 (7%)	4 (27%)	2 (13%)	1 (7%)
B	130	3 (12%)	4 (16%)	7 (28%)	5 (20%)	6 (24%)	0
C	55	0	5 (33%)	2 (13%)	4 (27%)	4 (27%)	0
D	45	1 (5%)	8 (42%)	6 (32%)	4 (21%)	0	0
E	32	0	0	3 (50%)	2 (33%)	1 (17%)	0
F	15	0	3 (30%)	0	2 (20%)	5 (50%)	0
G	11	2 (50%)	1 (25%)	0	1 (25%)	0	0
H	4	0	2 (50%)	2 (50%)	0	0	0
I	4	2 (67%)	0	0	0	1 (33%)	0
J	3	0	2 (67%)	1 (33%)	0	0	0
TOTAL		**10 (10%)**	**30 (29%)**	**22 (21%)**	**22 (21%)**	**19 (18%)**	**1 (1%)**

Question 19:

Do you have any other comments to add? (free text response)

Organisation	**Size (Number of f/t employees)**	**Question Completed (%)**	**Question Skipped (%)**
A	150	1 (7%)	14 (93%)
B	130	2 (8%)	23 (92%)
C	55	2 (13%)	13 (87%)
D	45	3 (16%)	16 (84%)

E	32	0 (0%)	6 (100%)
F	15	3 (30%)	7 (70%)
G	11	0 (0%)	4 (100%)
H	4	0 (0%)	4 (100%)
I	4	0 (0%)	3 (100%)
J	3	0 (0%)	3 (100%)
TOTAL		**11 (11%)**	**93 (89%)**

Appendix H: Case Studies

Organisation A

The Story of Idea Generation in a Medium Sized Healthcare Organisation

This case study has been constructed from 15 surveys, 7 semi-structured interviews and 4 observational visits to this organisation between August and December 2012.

This organisation is part of a wider charitable trust which operates a number of healthcare businesses across the UK. These businesses include health and wellbeing centres, gyms and private hospitals within a number of specialist areas. Due to the area of work this organisation has close ties to the NHS and seeks to uphold the highest standards of care and practice at all times. As with organisations of all shapes and sizes, this business understands the importance of change and states that it seeks to continually improve its offering to the public.

Broad discussions about idea generation within this organisation often elicited the response that "major" ideas were developed at a "corporate" or "higher" level. Employees in this particular organisation felt that ideas were often top-down rather than bottom-up because all sites reported into a central head office. When pushed to provide more information about this, individuals suggested that this had both positive and negative side effects. The positive being that structure and direction was provided from the central hub while negative responses surrounded the difficulty in changing service delivery at a local level.

As one might anticipate legislation and procedures significantly impact on the number of ideas that are produced in this particular organisation. One senior employee remarked that guidelines issued by the NHS and the medical / nursing professions meant that certain systems and processes simply could not be changed. Idea generation is therefore not needed in these specific areas. In addition to healthcare processes being relatively static, employees also noted that it was difficult to change any other systems or processes that fed into these processes. It was felt that this contributed to the organisation being relatively static in terms of idea generation with any change needing to be carefully thought through.

Building on the points raised in the last paragraph, employees at all levels of this organisation, from senior managers to professional and administrative staff, felt that this business had to work significantly harder than others in order to generate new ideas. It was thought that "legislation" and "process" were sometimes used as excuses by individuals who were themselves reluctant to change. While rules certainly have to be followed, particularly when human lives are involved, employees felt that there were still areas where new thinking was needed, particularly around efficiencies, marketing and better integrating this organisation with services provided by the NHS.

Interviews and observations in this setting found that a limiting factor on the amount of idea generation was the general "busyness" in the working day. Individuals frequently reported that they had a large number of tasks and duties

to perform and that this meant that any time to develop new ideas really came outside the working day. A practical example of this is one administrator being set a challenging and, from her perspective, interesting task to modify a process. While the administrator felt that this was a good opportunity to think about new ideas she reported that there simply was no time in the working day for her to devote to this task. Consequently, months down the line, the project has yet to be initiated.

Being the largest setting in this particular sample it is unsurprising that this organisation contains a diverse mix of individuals. Employees of this organisation represent all age brackets, genders, ethnicities and professional backgrounds. Interviewees mentioned that diversity certainly supported the generation of new ideas, noting that the corporate culture inside the organisation helped to forge constructive, supportive working relationships. Being part of a wider group was also felt to encourage individuals to network outside of their immediate team or site, although this appeared to occur mainly at the middle and senior management level rather than the operational level.

Thinking about diversity in more detail, this organisation is split into a number of different teams and groups. Speaking to senior managers it was felt that different teams had different characteristics which affected idea generation. Teams and meetings which were “operational” in nature such as the “senior management team” and “heads of department meeting” were thought to be reporting forums rather than idea generation spaces. This was argued to be because the membership of these groups was static and the format of meetings was unchanging. By contrast to this, other groups, such as a “customer service forum” were thought to generate a large number of new ideas, some practical, some less so. These groups had fluid membership and took a less structured approach to meetings.

An “isolating” factor inside this organisation was thought to be the nature of some roles. In some professional service areas, such as Human Resource Management, it was felt that the nature of work meant that some issues and projects could not be discussed widely and, in these situations, this team did report a feeling of isolation from the rest of the site. Generally speaking this isolation was not felt to harm idea generation because this team was still in physical contact with the rest of the site and a variety of individuals were seen entering and leaving the office during periods of observation.

Although a relatively large organisation in terms of the number of people employed, this business did have a feeling of “closeness”. The hospital itself is located on a relatively small site, particularly in comparison to the marine business and the leisure organisation. While different departments work in specific parts of this site there are common staff facilities, including a canteen and it was felt that the lunch table allowed individuals to discuss their work and share problems, information and ideas. Observations picked up on a feeling that this organisation is a single collective rather than a collection of single departments.

Investigating communication as a more general issue found that this organisation has develop sophisticated methods of information transfer. As well as emails and letters from the corporate headquarters about company-wide

initiatives and strategies, this particular site has staff noticeboards, notices placed in staff common rooms, shared email address lists, regular "employee forum" meetings and so on. Communication channels have certainly been thought about in some detail although there is perhaps a danger of information overload, or individuals hearing the same piece of news on multiple occasions. Both of these issues arguably have the potential to negatively impact idea generation.

As a penultimate point it should be noted that this organisation operates with relatively sophisticated processes and systems, including those aimed at managing human resources. An interview with the HR Manager, who is herself a member of the senior management team, included a discussion about appraisal systems where it was felt that this was the tool to link individual employees into the vision and strategic direction of the organisation. There were felt to be certain "issues" with the appraisal system, such as managers not having sufficient time to devote to it, but on the whole HR practices were believed to be effective. This view was confirmed by other employees both at managerial and operational levels.

Work within this organisation was said to be challenging and stretching although there were, of course, routine parts to all roles. Individuals reported that they were able to access appropriate learning and development interventions run both by the hospital site and the corporate headquarters. These interventions encouraged individuals to develop their skills and it was believed that there was largely an appropriate match between levels of skills and the requirements of job roles. Challenges in this setting often arose because of legislative restrictions and capacity in the working day. While these were not always positive, employees of all levels indicated that work was largely a rewarding activity where they felt that their contribution was both important and valued.

From this organisation's perspective, idea generation would probably be labelled as "mostly effective with some room for improvement". Individuals working for this organisation have a strong sense of structure and access to relevant information. The site, whilst large, has a feeling of community and shared responsibility with every department working well with others. In order to improve idea generation this organisation would arguably want to create more capacity in the working day for employees to think differently and it might also be suggested that corporate "control" could be relaxed in certain areas.

The table below summarises the blocks and enablers of idea generation within this organisation.

Enablers	**Blocks**
A diverse mix of individuals from all ages, genders, ethnicities and professional backgrounds.	Potential difficulties associated with "major" ideas being driven from a corporate rather than a local level.
A feeling of "closeness" and "community" within the organisation with departments appearing to work well with one another.	Legislative issues related to the respective area of work. This is controlled by government / the NHS / professions and cannot be influenced by this organisation.
Well-developed information systems	(Some) groups which are perhaps too

and flows.	static in terms of both their membership and meeting format.
Employees have access to relevant learning and development resources and skill levels appear well matched with the requirements of individual roles. This means that the "flow" state should be accessible at work.	A lack of capacity in the working day at times to allocate to idea generation and/or thinking about how to "do things differently".
Individuals networking widely within and outside the organisation, both to respective professional bodies and corporate headquarters.	

Organisation B

The Story of Idea Generation in a Medium Sized Arts Organisation

This case study has been constructed from 25 surveys, 11 semi-structured interviews and 5 observational visits to this organisation between April and July 2012.

This organisation has existed in its current form since the early 1980's. It is different from other organisations in the sample and adds diversity to the study because of its relatively large size and the fact that it is a charity. The organisation currently employs the equivalent of 130 full time members of staff and these are split between various artistic, managerial and operational roles. Due to the recent recession and cuts in public spending the organisation is continuously reassessing its operations, cutting all of the "fat" it can in order to maintain the creative output it has become known for.

The organisation has two separate sites each with their own distinctive character due to the nature of the work that is undertaken in each location. One of these sites carries out much of the production work associated with the organisation's products while the other houses a performance centre and offices for many of the back room functions. When one enters the production facility there is a feeling that this is, by design, a creative space while the second facility has a more crowded feel with a maze of corridors and rooms.

From the data gathered at this organisation it can be argued that two of the most significant factors affecting idea generation are vision and organisational structure. Dealing with the latter first it was repeatedly said by individuals at all levels that "openness" was vital if new ideas were going to be produced. Despite this being highlighted as a key factor affecting idea generation operational staff felt that senior managers were somehow separated from the rest of the organisation. Employees felt that ideas often got lost in a "misty void" and that the very top of the organisation was perceived to be closed to new input. Senior managers raised a very different view to this stating that while they would welcome ideas and suggestions from operational staff few, if any, ever arrived at their desks.

Building on the points outlined above it was interesting to note within the survey responses that the organisation's vision might help to support idea generation. Many individuals from both "creative" and "non-creative" backgrounds indicated that the vision provided a framework on which they could hang their ideas. There were a range of opinions as to whether the vision was clearly communicated with those feeling that it was being those who felt most able to generate ideas at work. Following this finding up during interviews and observations it was apparent that line managers play a crucial role in linking employees into the vision of the organisation, without this link the relative level of idea generation appears to drop. Communication was said to be of vital importance in this setting.

Having put ideas forward to a colleague or manager individuals then stated that feedback on those ideas was absolutely crucial. Without an understanding as to why an idea was either appropriate or not staff said that they quickly lost interest in producing more ideas. In the more "creative" parts of the organisation feedback was said to be immediate, detailed and clear while employees working in "back office" functions felt that feedback on ideas was perhaps lacking. Generally speaking the "creative" and "back office" functions held very different views as to the overall level of idea generation within this organisation. The "creatives" thought it was very effective while operational employees felt there was room for improvement.

Other very interesting comments about the idea generation process came from senior managers who felt that part of their role was to try to match the level of idea production to the ability to implement those ideas. The senior managers interviewed for this study stated that not every idea can be put into practice for a variety of reasons and that in some situations a lack of action can mean that the original idea generator loses enthusiasm for the whole process. In order to avoid such situations senior managers said that they tried to implement ideas wherever possible and provide feedback where necessary.

Another key variable affecting the production of ideas in this setting was thought to be the response to unsuccessful events or ideas. Both "creative" and "operational" staff provided detailed stories relating to mistakes or times when projects had not go to plan and both groups clearly had different experiences. Employees in what might be termed creative roles stated that there was generally a positive reaction when things had not gone to plan which encouraged the production of more ideas to resolve problems. By contrast operational employees said that they often felt frustrated and discouraged by reactions that were generally negative. In a handful of occasions it was suggested that political activity needed to be navigated in certain situations and this is understandable given the size and complexity of this particular organisation.

One-to-one interviews often included discussions about physical spaces and how the layout of offices affected idea generation. There was a general consensus that informal discussions or "corridor chats" stimulated fresh thinking with employees of all levels stating that these conversations enabled individuals to run off someone else's thoughts. In more formal settings such as team meetings or appraisal sessions operational employees said they were typically more reluctant to put their ideas forward for fear of judgement from their

peers/superiors. Despite this negative point, managers within this organisation were said to act as sounding boards for ideas with some going as far as facilitating cross departmental discussions and idea sharing. This behaviour does not occur throughout the organisation but where it does occur idea generation appears to be enhanced.

Due to external constraints on this organisation stemming from budget and/or grant cuts it was said that every role is incredibly busy with little time to stop and think. When asked when they had time to generate new ideas individuals often replied with an answer highlighting a period of time outside the working day, e.g. “in the bath” or “on the ferry journey”. There was a general feeling that the day to day operations of this organisation are overtaking everything and that this is inhibiting idea generation. Employees generally stated that they felt most able to generate ideas when they initially started in their roles; the time when they were finding their feet and weren’t bogged down by day to day activities or problems.

While questioning individuals about their respective roles in the organisation it became clear that work often provided them with many challenges. Individuals who suggested that they were positively challenged by their work also responded positively when asked about their desire to generate new ideas. By contrast individuals who felt that they had outgrown their roles or lacked the necessary skills to tackle work-related challenges suggested that new ideas were not the first thing on their minds. From this evidence one can begin to form the opinion that the “flow” state is important to idea generation in this organisation.

Individuals in this setting were also keen to discuss the various ways in which they stored and shared their ideas. One-to-one interviews and periods of observation found that employees developed their own approach to storing ideas with a variety of storage mechanisms being seen including computer files, iPads and the more traditional notebook. Certain teams held central databases full of information that could be accessed while others didn’t seem to encourage this. It was interesting to note that idea generation appeared to occur more frequently where central databases or storage systems existed.

Unsurprisingly given the size of this organisation (the equivalent of 130 full time employees) individuals were very quick to state that having contact with other individuals inside the organisation stimulated new ideas. It was said that diversity supports the generation of new ideas although contacts external to the organisation were thought to be relatively less important to the process. It is true that certain individuals do have “externally-focussed” roles in this organisation and this arguably means that they act as informal gatekeepers of information. The degree to which these gatekeepers interact with individuals inside the organisation appears to be mixed and it can be suggested that this could be acting as a block to idea generation.

Broadly speaking individuals feel that this organisation produces lots of ideas, both creatively and operationally. There are exceptions to this but on the whole there is recognition that the organisation would stagnate and decline if new ideas were not produced. Individuals inside this organisation recognise that different sub-cultures affect relative levels of idea generation although senior

managers believe that a strong vision and management team will help them to achieve their goals. This organisation would arguably like to do more in terms of encouraging ideas but grant and funding cuts (understandably) mean that the focus is currently on ensuring the organisation's survival. We can argue that idea generation in this organisation is "mostly effective" with "room for improvement".

The table below summarises the blocks and enablers of idea generation within this organisation.

Enablers	**Blocks**
Line managers linking employees into the organisation's vision.	A degree of political activity that must be navigated in order to put ideas across successfully.
The freedom to constructively challenge ideas and viewpoints. Broadly speaking the organisation seeks to learn from mistakes.	A lack of time to think about new ideas during the working day.
Offices and workspaces that encourage chance encounters and include spaces for informal meetings.	The extent to which information 'gatekeepers' interact with other members of staff.
A variety of methods of idea storage appear to be in place although this varies significantly between departments.	A feeling from operational staff that the top of the organisation is perhaps "closed" to new ideas and/or that ideas can get easily "lost".
There are significant sources of external expertise that this organisation can and does tap into.	
Managers acting as sounding boards for ideas and facilitating cross-departmental idea sharing.	
Jobs which provide individuals with positive challenges and allow them to make use of their skills.	

Organisation C

The Story of Idea Generation in a Medium-Sized Marine Business

This case study has been constructed from 15 surveys, 10 semi-structured interviews and 4 observational visits to this organisation between May and September 2012.

The first words that come to mind on arrival at this organisation are 'idyllic', 'tranquil' and 'picturesque'. The organisation has been in existence for a substantial number of years and is wholly owned by the present Managing Director. This organisation has a relatively diverse business encompassing a marina, offices, shops and engineering works where boats are built, serviced and repaired. In total some 55 individuals are employed by this organisation including engineers, shipwrights, administrators and yard/marina workers.

These individuals are overseen by 5 senior managers. The Managing Director states that the organisation is profitable and new ideas are not necessarily needed for its survival, they are instead needed to encourage growth.

When asked about the environment for idea generation staff responded with a range of words including “honest”, “closed”, “encouraging”, “inconsistent” and “discouraged”. There appears to be little correlation between the use of positive or negative words and the level that employees are at in the organisation. Both senior managers and the most junior members of staff have diverse views which relate to their own personal experiences in the organisation. The picture becomes more defined when exploring responses to the question “is this an organisation that generates lots of ideas?” In almost all cases the answer to this question was negative and a variety of reasons were attached to it.

Certain individuals simply felt that it wasn’t their place to be producing new ideas while others suggested that the organisation was not open to change, hence they did not feel idea generation was a worthwhile activity. There was recognition that the company itself is very traditional and senior managers highlighted that there really wasn’t a culture that supported idea generation. Observations built on these points and it can perhaps be argued that there is currently little appetite for change because the organisation is incredibly idyllic as it is. The Managing Director states that the organisation is reasonably profitable and this perhaps also reinforces this perceived reluctance to change.

During interviews employees were asked where ideas might be needed within the organisation. On the whole responses to this question pointed out that ideas were needed to solve operational problems and other day-to-day issues that arise in the cut and thrust of the workplace. It was frequently stated by operational staff that business strategy and development was something “done by management” and that they did not feel able to contribute ideas into these processes. Individuals said that they would like to know more about the firm and felt that with this information they may well be in a position to contribute ideas for new products or services and so on.

An issue impacting idea generation which appeared across almost all surveys and interviews was communication. Operational staff stated that communication between management and employees was relatively poor and even senior managers recognised that the culture was a little “them” and “us”. Several senior managers discussed communication issues at length and it was felt that it was the single biggest issue impacting idea production in this organisation. Allied to communication, vision was a key theme picked up in many interviews. It was largely felt that there had not been any real effort to link employees into the organisation’s vision and that without that link their ideas were often “aimed at the wrong target”. One senior manager firmly believed that the workforce would generate more ideas if it was linked into the organisation’s vision.

Many individuals gave colourful stories about their working days and particular projects that they had been involved in producing ideas for. These ranged from fitting out custom made boats to changing the signage around the marina. A general theme emerging from these stories was the reaction to of management when things went ‘wrong’. When describing reactions to mistakes many staff

said that they felt blamed for particular events or outcomes. In many cases this blame was so severe that they immediately thought “what’s the point?” and stopped coming up with new ideas for a period of time. This type of event was seen first-hand during an interaction between an office administrator and a member of staff working on the marina. During the observed conversation the marina employee was clearly unhappy about a particular issue and accused the administrator (rightly or wrongly) of making a mistake. This interaction clearly had a negative effect on the administrator’s subsequent demeanour and it was highly unlikely that new ideas were the first thing on her mind.

Despite the rather negative picture presented above other employees reported more encouraging reactions when things didn’t go to plan. In the engineering and maintenance teams individuals said that they were encouraged to learn from their mistakes and that their line managers supported them to do this. One particular individual went into detail about how he kept a log of his jobs and tasks so that he could refer back to that information if he encountered a difficult problem. He said this helped him to generate new ideas when faced with other challenging situations.

A very interesting point emerging from the discussions above was that while some individuals took time to note down information and ideas there were no company wide systems for the storage or transfer of this data. Individuals said that they generally tried to keep ideas in their heads without writing them down or capturing them in any other way. Some employees, particularly those in craft occupations did make notes about specific ideas or problems but these were not shared either within or outside work teams. There was recognition that some sort of shared ideas board or collection device might be useful but employees were unsure whether this would be used effectively or not. Many individuals justified their answer to this sort of question by highlighting that the organisation’s culture would not support such an initiative at the present moment.

While collecting observational data something that was difficult to miss was the sheer geographic size of the organisation. Employees were seen to be working at quite some distance from each other and it can be argued that this prevents personal ties forming between teams and departments and limits the flow of information. This particular issue was probed during one-to-one interviews and it became apparent that employees did indeed have minimal contact with each other aside from allocated break and lunch periods. As a result of this employees seemed to identify very strongly with their immediate work group but relatively less well with other teams. Employees seemed relatively uninformed about what was happening in different parts of the business not through lack of interest, but through this physical separation.

Individuals in this organisation have an incredibly diverse range of skills with many craftspeople on the books. When asked if work provided “challenges” the answer was an overwhelming “yes” but when pressed on the nature of these challenges answers were less positive. Employees associated the word “challenge” with problems that needed to be solved rather than tasks that would provide fulfilment and it can be argued that this is a potential block to idea generation. Observational data backed this finding up with individuals clearly understanding what they needed to do (i.e. they had the necessary skills) but

there being a sense of relentless problem solving and metaphorical fire-fighting being the norm.

Vision was discussed briefly at an earlier point of this case study and it is a subject that is worth returning to. The owner/manager recognised that the absence of a compelling vision was likely to be an inhibitor of idea generation in this setting but also stated that a part of it was about "giving employees their head." What he meant by this was that he wanted to encourage employees to think as freely as possible when it came to ideas. While discussing this point in more detail the owner said that it was his job to frame the challenge for the business and that this was not something he had yet accomplished. It was felt that once this frame had been set employees would understand where ideas were needed and/or wanted. The owner felt that this vision almost had to come from "outside" although no further clarification was added as to what this "outside" might be.

Linking from the thoughts about vision, senior managers in this organisation felt that there was too much of an inward focus. The owner in particular remarked that there needs to be more proactive thinking and an outward looking mentality if new ideas are to be produced. During interviews almost all individuals where able to name sources of external information that they could tap into in order to stimulate new ideas but workload pressures were often thought to prevent this sort of exploratory thinking.

A final factor that might be impacting idea generation in this setting is hierarchy. While a degree of structure and hierarchy was recognised as important in order to maintain the orderly running of a larger organisation it was felt that ideas could easily get "stuck" in certain situations. Employees from all over the organisation highlighted that a reluctance to change meant that it was difficult to try to introduce anything new as managers would simply not act on ideas. Because of this inaction, the desire to generate more ideas was said to have fallen. All individuals recognised that it is not possible to implement every idea but felt that greater transparency within the ideas "system" would be useful. They said this feedback would encourage them to start coming up with more ideas.

Is idea generation successful from this organisation's point of view? It is certainly arguable that there are two very different answers to this question. Employees highlighted that they had no problem coming up with ideas to solve day to day problems and it was clear that individuals employed by this organisation are very highly skilled. In this sense ideas "for the business" are generated and the process is largely successful as evidenced by the organisation's on-going profitability. A very different viewpoint is arrived at when thinking about ideas related to growing or changing the business. Almost all individuals felt that within this area the organisation was not successful. It was felt that few ideas were generated and that those that were weren't discussed or taken further. In this area idea generation clearly is not successful at the moment.

The table below summarises the blocks and enablers of idea generation within this organisation.

Enablers	Blocks
Employees at this organisation are very highly skilled and have large amounts of professional knowledge and experience to draw from.	A compelling vision has yet to be outlined for the growth and/or change of this organisation.
Certain teams and individuals make a conscious effort to take notes of particular jobs and tasks – storing ideas and knowledge for the future.	A feeling that the organisation is somewhat "closed" to new ideas. This could be related to the existing hierarchy / communication channels in the organisation.
Several sources of external expertise were identified that individuals could use to stimulate idea generation.	The organisation's setting can be characterised as idyllic, tranquil and picturesque. There appears to be little appetite to change this.
	The reaction to error may be suppressing idea generation in certain parts of this organisation; an emphasis on blame rather than learning.
	The geographic spread of this organisation means that individuals have little contact with their colleagues in different teams during the working day.
	A lack of transparency within the hierarchy. Ideas getting stuck or lost in the system with little meaningful feedback.

Organisation D

The Story of Idea Generation in a Small Social Enterprise

This case study has been constructed from 19 surveys, 4 semi-structured interviews and 2 observational visits to this organisation between June and December 2012.

With the word "ideas" in its title one would be forgiven for automatically assuming that this organisation generates many new thoughts, projects and ways of working. While it would be wrong to assume anything, this organisation is described as one seeking social and economic solutions to society's problems in an environmentally considered way. In essence, its entire business model is based around idea generation and problem solving. Employees frequently stated that the overarching aim required the organisation to bring diverse groups together to generate ideas, challenging the status quo and coming up with novel solutions that had previously not existed.

Throughout the organisation it was felt that a wealth of new ideas were created with everyone, from the senior management team to the office administrator, understanding that without new ideas the company would cease to exist. Interviewees pointed out that ideas were needed for new projects,

organisational efficiencies, communicating the brand and, in the broadest possible sense, finding solutions for previously unsolved problems. These discussions demonstrated that employees understood the aim and vision of the business.

Fluid is probably the best word to describe the culture and environment inside this organisation. Individuals said that they were free to organise their working day as they saw fit, arranging meetings, working on projects and completing relevant administrative tasks at a time that was best for them. Observations confirmed that there appeared to be little micro management in this setting with there seeming to be a high level of trust between management and employees. It was frequently stated that you cannot “schedule” creativity and so this fluidity was thought to be a vital base for effective idea generation. Coupled with fluidity this environment appeared to be very open and transparent, with managers and employees sharing information at all times.

Despite the need for fluidity it was said that at times the sheer number of ideas can be overwhelming and this is where management and leadership processes need to keep things on track. As stated above, employees of this organisation understand its vision and purpose and interviewees stated that this helped them to filter their ideas. While recognising that not all ideas are appropriate at any one time it was highlighted that the organisation is flexible and responsive enough to take advantage of opportunities as they present themselves.

Change is very much part of the culture at this organisation with individuals seeking it out rather than resisting it. It is understood that roles and job descriptions will change over time and a realisation that individuals cope with change in different ways and change at different speeds themselves. In many ways the atmosphere was professional and respectful, encouraging individuals to be “part of the change” rather than simply imposing it on them.

Something that perhaps sets this organisation apart from others in the sample is the fact that feedback takes the form of a continual discussion rather than an isolated conversation. Individuals said that it was particularly important to maintain a continual dialogue about on-going projects and ideas with managers and leaders seeking to guide projects in an iterative way rather than rigidly sticking to initial goals. Managers in this organisation were thought to act as sounding boards, helping individuals to shape their thoughts into a relevant project, proposal or strategy. It was felt (and observed) that ideas can come from anywhere in this setting, with diversity (of people and views) being a key driver of innovation.

The presence of continual feedback in this organisation meant that “failure” was not a surprise when it happened. This organisation seemed comfortable with ideas and projects occasionally not working because there was an understanding that if things were not going wrong, risks were not being taken or boundaries were not being pushed hard enough. All projects undertaken by this organisation have a contingency in case things go wrong and employees are actively encouraged to take measured and proportionate risks while working.

Building on the thoughts above in a little more detail individuals inside this organisation had clearly developed a culture where it was “ok to be wrong”.

Employees indicated that ideas should not be squashed but that guidance was necessary if an individual was too focused on one course of action. It was said that constructive discussions needed to be had in these sorts of situations to help those individuals pull back and see the bigger picture. While exploration was absolutely encouraged in this setting, individuals recognised that there were times when energy and effort could easily be wasted without the right sort of guidance and leadership being on offer.

Linked to feedback and risk-taking, responses to questions about the dissemination and storage of ideas were incredibly interesting. More often than not individuals questioned why an organisation would want to capture every idea it had. It was felt that if an idea was good enough it would be remembered and/or put into practice. There was a sense that documenting ideas was actually an inhibitor of creative thought with one individual suggesting that documentation and forms made ideas "die a little inside"! Despite making these points it would be wrong to say that information systems in this organisation were rudimentary. Individuals store documentation and project work on shared computer drives and a virtual office acts as an information store where individuals can see previous work, contact lists and other useful data. Openness in terms of data and information was thought to be an important facilitator of new ideas.

As one might imagine this business is very well connected in terms of its links with other public, private and charitable organisations. Employees understand that new ideas often come about after discussions with others and make a conscious effort to seek new information out from both internal and external sources. The organisation produces an internal newsletter which keeps individuals up to date with projects and schemes and employees are also encouraged to be curious about what others are doing. Anyone can ask anyone else for a meeting and positive input and new ideas are always welcomed, irrespective of their original source.

Observations about this organisation's physical environment back up the points above. Although relatively small, the main office is colourful and set out in an open plan format. This appears to encourage discussion although there may be times where too much discussion and collaborative effort may limit an individual's ability to get on and put ideas into practice. The building also has several meeting spaces which individuals can make use of and interviewees also noted that many staff spend significant portions of time out "on the road". Although remote staff cannot always get to the office they do have access to the computer network and file storage and this appears to encourage and facilitate information transfer.

Work in this organisation is clearly challenging, but in a positive way. What is meant by this is that employees often confront obstacles in their work or new situations but have support and advice around them to ensure that they are successful in their pursuits. Many interviewees highlighted that their work and responsibilities place a "positive stretch" on their skill set, in other words new challenges require them to adapt what they already know to new situations. This was frequently thought to lead to the production of new ideas. Without this positive and stretching work it was thought that the level of idea generation would decline.

From the point of view of employees inside this organisation a wealth of ideas are generated. Part of the challenge from their point of view is harnessing this creative drive and directing it towards defined goals, which, from an outside perspective, they appear to do very well indeed. Ideas are very much believed to be part of the fabric of this organisation and without them it would arguably not exist at all. Employees in this environment would say that change is dealt with very well and is an integral part of this organisation. Everyone realises that change is inevitable and that what happens tomorrow will not necessarily be the same as what happened today.

The table below summarises the blocks and enablers of idea generation within this organisation.

Enablers	**Blocks**
Change is part of the fabric of this organisation's culture. Everyone looks forward to it.	Situations where there may be too many ideas, leading to a possible lack of focus at times.
Fluid environment where individuals can approach tasks and projects in a way that suits their preferences.	
A high level of trust between management and employees.	
The continual dialogue between employees and managers about ideas and possible problems. Continuous feedback.	
Constructive discussions when projects and ideas do not go to plan.	
Stores of information that everyone can access and employees being encouraged to network widely within and outside the organisation.	
Work which is highly likely to encourage the flow state, i.e. presence of positive challenges and projects which allow individuals to make use of and expand their skill sets.	

Organisation E

The Story of Idea Generation in a Small Public Sector Organisation

This case study has been constructed from 6 surveys, 4 semi-structured interviews and 2 observational visits to this organisation between July and November 2012.

This organisation, based in Cornwall, is responsible for a number of tasks within its local community. Broadly speaking individuals employed in this setting look after tourist information and kiosks, communal parks and gardens, room hire,

allotments and so on. The organisation currently employs 32 individuals in a variety of managerial, administrative and operational roles with the organisation itself changing relatively little over the last few years.

Despite saying that this organisation is relatively static the leader does note that the introduction of the new localism act provides the organisation with considerably more latitude for new ideas. Whereas ideas in previous times had to be approved by many committees and individuals the localism act will allow this organisation a greater degree of freedom to augment or otherwise alter the services it provides. With this as the context it is perhaps not surprising that when asked if this is an organisation that *currently* generates lots of ideas individuals respond negatively. When asked about the environment for idea generation individuals used words and phrases including “inhibited”, “lack of time”, “traditional” and “minimal” although some described it as “encouraging” and “comfortable”. From this evidence it can be suggested that this is not an organisation that one would class as being highly creative in its present state.

During one-to-one interviews all individuals felt that the organisation did not need to generate ideas in order to survive. The leader implied that this allowed individuals to become complacent in terms of idea generation, with few, if any new ideas being put forward. It was suggested that employees typically wanted to follow set processes and procedures at work in order to minimise personal and organisational risk and that this too could had a negative effect on “new” thinking. These thoughts were echoed by operational staff who pointed out that while ideas might be needed for on-the-job problem solving they did not feel able to make broader suggestions about the organisation itself (i.e. the services it offered and its purpose etc.).

Interestingly enough the leader clearly stated that it was his role to build a culture and environment that encouraged and supported idea generation. The leader felt that one thing he could do to support increased idea generation would be to encourage a greater number of “open” discussions. When pressed on what “open” discussions were it was said that the role of the leader was to open up a space or forum where issues could be debated and challenged. At the moment the leader said these discussions did not occur in this organisation. Linked to this point the leader highlighted that he would need to be able to set some sort of framework to ensure focus.

Building on the point above the leader indicated that any framework for idea generation should be relatively loose so that it did not stifle idea generation in any way. While it was said to be important to retain some sort of direction or guidance over the idea generation process both employees and the leader felt that too much structure would limit new thinking. Employees highlighted that introducing “open” discussions would be welcome but that it would take time to change the organisation’s existing culture. Individuals recognised that risk aversion was a facet of the current culture that could well inhibit idea generation and it was felt that this reinforced the static nature of the organisation.

While discussing risk in this particular organisation many individuals provided interesting narratives regarding managerial reactions when things “went wrong”. The leader himself highlighted that being overly critical or reacting emotionally to error can quickly halt idea generation and employees held very similar views.

Employees went on to suggest that negative reactions to mistakes were common in the organisation although they did point out that accuracy was a crucial part of their roles. It was generally accepted that mistakes in data entry or record keeping presented problems for the organisation and it was felt that this served to reinforce the aversion to risk. The leader pointed out that informal conversations about new ideas might help to overcome this aversion to risk and he went as far as suggesting that part of his role should be to create a "safe space" for these sorts of conversations.

Individuals generally felt that the leader of this organisation was open and honest in his approach and that this management style helped them to feel comfortable in the work environment. It was suggested that workload pressures often meant that the leader was not as accessible as he might be and that this perceived lack of direction might compromise the production of ideas. Employees wanted the leader to act as a sounding board for their ideas whereas in reality feedback was sometimes difficult to get. Not knowing whether ideas were appropriate or not was thought to inhibit the production of more ideas in this setting.

Probing around the topic of feedback and following up survey responses it quickly became apparent that every individual in this organisation was incredibly busy with little time available to devote to idea generation. Employees talked about needing to work through their lunch breaks to ensure all tasks were finished by the end of the day and observations picked up on this frenetic pace of work in the office. While observing a typical working day it immediately became apparent that there was limited time to think about better ways of doing things or new initiatives that would benefit the wider community. The leader acknowledged that there was little "room" for new ideas and linked this back to funding restrictions and cuts that the organisation was attempting to manage without reducing front line services.

Dialogue with the leader about the wider business environment, particularly the cuts in funding that have taken place, revealed that these constraints have helped and hindered creativity in equal measure. It was stated that ideas have been required (and successfully implemented) to ensure that front line services have been maintained wherever possible although the leader did highlight that there has been very little space to think about ideas beyond this. Employees echoed this view by saying that the organisation itself was perceived to be "treading water" at the moment with a focus on "getting the day to day done."

For the reasons outlined in the last paragraph individuals felt that while their work was challenging it was not necessarily leading to any sort of personal fulfilment. Employees argued that the amount of work and resource constraints meant that they adopted a task-focused attitude rather than thinking about new ideas. For most, idea generation had suffered because of this. Individuals in no way felt that they lacked the skills and experience necessary for their roles, indeed most members of staff had more than ten years' experience in the public sector. The overwhelming feeling was that the pressures of day to day work inhibited the production of new ideas.

Given this organisation's focus on processes and procedures one might expect to find some sort of systematic method of capturing ideas, perhaps using well-

known techniques such as suggestion boxes or forms. When asking individuals about their methods of storing and sharing ideas it was interesting to find that no formal systems were discussed. Instead all individuals spoke about the importance of conversations and the ability to bounce things off of one another in an informal way. It was felt that too much structure would inhibit idea production as there would be a perception that moving from an initial idea to some sort of action would require too much effort. Survey responses received from this organisation reinforced this finding where it was suggested that "speaking to or bouncing ideas off other people inside the organisation" was the most important factor affecting idea generation.

A final very important finding from this setting was the pressure that the leader appeared to put on himself to encourage idea generation. During both a one-to-one interview and periods of observation the leader clearly felt a significant sense of duty and used phrases like "it's down to me" and "I need to make that happen". The leader of this organisation appeared to shoulder a large workload and it can be argued that in reality this is likely to inhibit his ability to encourage the cultural shift that he himself recognises is necessary in order to increase idea generation. One can argue that workload pressures are the fundamental challenge facing this organisation and the largest obstacle to encouraging idea generation.

Does this organisation believe that it currently generates lots of ideas? Given the views captured by this research the answer to this question would have to be no. Nevertheless there is recognition that new ideas are required by the organisation particularly in light of the localism act which has given the organisation more freedom than it has had in the past. There are many reasons why this organisation produces few ideas including workload pressures, individuals being reluctant to take risks and perhaps the leader failing to involve employees in organisational change.

The table below summarises the blocks and enablers of idea generation within this organisation.

Enablers	**Blocks**
Revised government legislation giving this organisation more freedom than it has had in the past.	A culture of risk aversion. Individuals currently want to follow processes and systems rather than thinking "differently".
A leader who has an "open and honest" style and is personally committed to encouraging idea generation.	A broadly negative reaction when things do not go to plan or mistakes are made.
Skilled and experienced employees who understand their roles and purpose.	Workload pressures. Resource restrictions and budget cuts mean that day-to-day work includes no time/space for idea generation.
	Work which does not provide individuals with "positive" challenges or personal fulfilment.
	No system for easily storing and sharing ideas. It is unclear how ideas

	are taken forward after they have been discussed.
	The leader attempting to change the organisation's culture on his own without involving employees in relevant discussions / decisions.

Organisation F

The Story of Idea Generation in a Small Leisure Organisation

This case study has been constructed from 10 surveys, 7 semi-structured interviews and 2 observational visits to this organisation between May and December 2012.

"Traditional" is probably the first word that comes to mind upon arrival at this organisation. The main building is covered with ivy and the grounds are well kept and attractive. The pace of daily life inside this organisation appears to be relatively laid back with club members drinking coffee on a balcony and members of staff warmly greeting everyone they see. The atmosphere is very welcoming and friendly although outsiders may see this setting as somewhat caught in a time-warp.

Ideas are certainly not the first thing on your mind as you walk through the main door towards the staff office. There is a sense that employees are really acting as "caretakers", maintaining the organisation rather than trying to push it forwards. The office, for example, stores most of its information in rows of filing cabinets and while there are a small number of computers, most work is done with pen and paper. These observations lead to the assumption that change might be something that this organisation struggles with.

Survey and interview responses confirmed that change is indeed thought to be difficult for this organisation with it being stated that members are reluctant to make alterations to the status quo. It was said on many occasions that the management committee requires a significant amount of persuasion to try anything new; even committee members felt that there should be a greater amount of experimentation. When new ideas are put forward the typical response was said to be "oh, we tried that years ago and it didn't work so we won't try it now." Far from encouraging change, this attitude contributes to a static culture where tomorrow is very much like yesterday.

Many individuals, at all levels of responsibility, recognised that the nature of committee led organisations was perhaps an issue which needed to be confronted in order to encourage new ideas. While the diversity of committee members was thought to facilitate the generation of new ideas, the level of change in committee membership was thought to be too high. Individuals pointed out that a lack of cohesion impacted negatively on decision making processes, noting that a greater degree of stability would be beneficial for this organisation. Interviews and observations highlighted the importance of the Chairman's role in any committee situation. It was said that a strong Chairman

can guide a committee whereas a weaker one contributes to general malaise and a lack of new thinking.

When asked about the vision of the organisation different responses were gathered. Some individuals put forward their own interpretation of the vision, such as being able to offer reasonably priced activities, in well-kept surroundings to the wider public, while others said the vision was simply to "keep going". After spending time inside this organisation it became clear that there was no shared vision that the leadership committee and the staff were trying to move towards and that this negatively impacted idea generation.

The layout of this organisation is remarkably similar to the marine business discussed in another case study. Both of these organisations have teams working at a distance from one another and in this particular setting staff again identified more strongly with their team than the wider organisation. In this setting the "day to day manager" did attempt to join the teams together, holding regular informal meetings with each, but it can be argued that the nature of the work inevitably means that individuals spent a significant portion of their working day in isolation from one another. As a result of this there was less mention of collective idea generation although a greater importance was placed on being able to speak to or bounce ideas off others *outside* the organisation.

Building on the points above, individuals from both the general staff and the management committee were questioned about why ideas were needed in this organisation. On top of "standard" responses such as efficiencies and marketing, these discussions also included points such as attracting members from other clubs and getting outside groups/agencies to use the organisation's facilities. Individuals were clearly proud of the facilities offered by this organisation and felt that if they could get outsiders "in" once they would return again in the future. Observations backed up this point; the facilities offered by this organisation are clearly well designed and maintained and, perhaps more importantly, enjoyed by the current members.

Despite staff and committee members recognising the key areas where ideas were needed, survey and interview responses indicated a perception that the level of idea production in this setting was not sufficient. All individuals, almost without exception, stated that there simply was not enough time in the day to be able to implement projects, ideas and plans. This was held up as the primary reason why idea generation was perhaps not as effective as it could be. A lack of capacity meant that day to day operations were prioritised over and above the generation of new ideas, as is perhaps typical of many small organisations.

A second key reason behind the lack of ideas, highlighted mainly by staff rather than members of the management committee, was the lack of a strategic plan. This tallies with the earlier point about the lack of an organisational vision and staff felt that with no plan there was no direction or "map" for them to follow. While a small number of ideas may be generated, without a strategic plan it was felt that these were not well directed and consequently the enthusiasm to generate more ideas was dampened.

Searching for evidence of "flow" at work produced some intriguing results in this setting. Due to the nature of this organisation the individuals employed by it,

and those that serve on the management committee, are very interested in the "product", and have an obvious passion for it. This passion was evident during periods of observation and during interviews. While challenges certainly exist surrounding the driving of new business it can be suggested that these have not been properly "framed" at present. This arguably links back to the lack of a strategic plan and/or vision. In addition to this, members of the management committee are often elected due to their sporting skill rather than their business and management acumen. This is thought to result in a mismatch between their skills and the needs of the situation hence meaning that they cannot "access" the flow state at work.

On top of the themes discussed above a further key point raised during several interviews was information, specifically the lack of information within the organisation. Many individuals, specifically the "day to day manager" highlighted that they simply didn't know enough about what was going on to come up with relevant ideas. It was thought that rather than individuals not asking for information, the problem was that systems in the organisation did not capture and store enough data. This is perhaps a consequence of the organisation lacking an up to date, electronic, filing system.

In keeping with the theme picked up above both committee members and staff highlighted that the storage of old ideas was problematic. While ideas were often discussed at committee meetings and these were captured in the minutes, these documents were simply filed away rather than being distributed to the wider membership. Of course, care must be taken not to distribute confidential information but interviewees pointed out that sharing the minutes may help to prompt further ideas. Currently meeting minutes are stored in filing cabinets and are not referred to again for the purposes of idea generation.

Is idea generation successful from the point of view of this organisation? The answer to this question is very likely to be negative. Yes, individuals stated that ideas were discussed but were frequently found to be impractical or requiring large scale investment. Inside this organisation there is thought to be a lethargic reaction to new ideas with certain individuals perhaps trying to maintain the status quo rather than driving change. Arguably the lack of information means that ideas, when they are produced, are not well directed and this, coupled with a lack of capacity means that idea generation is significantly impeded.

The table below summarises the blocks and enablers of idea generation within this organisation.

Enablers	**Blocks**
The passion that members of staff and the committee obviously have for the organisation.	Little time in the working day for idea generation – a focus on the day to day rather than the future.
The organisation itself is welcoming, friendly and generally a "nice place to be".	Some members of the organisation being reluctant to change.
Diversity in the management committee and the wider membership of this organisation.	No defined vision or strategic plan meaning that ideas are not guided or targeted in any specific way.

	Information flows and stores that are out of date meaning that staff and committee members often have little reliable data on which to base their decisions.
	A lack of cohesion in the management committee due to frequent and unplanned changes.
	The physical distance between individuals while they are working.

Organisation G

The Story of Idea Generation in a Small Retail/Tourism Business

This case study has been constructed from 4 surveys, 3 semi-structured interviews and 3 observational visits to this organisation between August and October 2012.

This particular organisation has a long history in Cornwall dating back to the 17th century. The business has changed relatively little over time and consists of a pub, restaurant and hotel amalgamated together in a characterful building. The present owner bought the business in the early 1990's and has sought to ensure its continued survival during a period where local pubs are closing across the UK at an alarming rate. In total the organisation currently employs the equivalent of eleven full-time individuals in a variety of positions including waiter/waitresses, bar staff, housekeepers and chefs. The owner manages the business alongside his partner who deals with various tasks including producing staff rotas, paying wages and managing the employee lifecycle.

Survey and interview data collected from this organisation is intriguing. While it was recognised that the firm does indeed need new ideas for products, services, efficiencies, marketing and so on it is felt that the level of idea generation is low. The owner and his partner firmly believe that the organisation needs to generate ideas for its survival although there appears to be a focus on "today" rather than "tomorrow" which, as a consequence is perhaps limiting the number of new ideas that are put forward.

When other members of staff were asked whether idea generation was necessary for the survival of this organisation a very different answer was given. Employees overwhelmingly thought that the organisation would survive even without new ideas because the pub, restaurant and hotel is, in their words "self-sustaining". Employees advanced the view that paying customers would always want somewhere to eat out or stay and because of this they thought the organisation was unlikely to decline in the future. This divergence of views could be an indication that the owner/manager has not effectively communicated the challenges facing the business and/or linked employees into his vision.

During one-to-one interviews and periods of observation it became apparent that two specific factors greatly affected idea generation in this specific setting; leadership and time. Most individuals in this firm are employed on part-time contracts with bar staff and waiters/waitresses generally working between 6:00pm and 10:00pm and housekeepers working between 8:00am and 1:00pm. When asked about the things that might affect idea generation inside this organisation, operational employees consistently said they had little or no time to "think" at work. A waiter for instance said that the kitchen was incredibly busy from the moment he set foot on the premises each day and that this meant there were few opportunities to think carefully about any new ideas. This finding was confirmed through observations. The pace of work in this organisation can be described as frenetic with all individuals concentrating fully on their assigned tasks.

Alongside the lack of time many individuals wanted to discuss the leader and his leadership style during interviews. There was a general consensus that leadership was somehow "lacking" in this organisation although it must be stated that no individual was openly critical of the owner/manager. When pressed on specific facets of leadership it became clear that communication was thought to be a problem with employees stating that they had no idea what the vision of the organisation was. Members of staff also said that while they got on well with the owner/manager from a personal perspective, during work hours there was a "this is the job, do it my way" attitude. It can be argued that this is evidence of individuals being quite strictly controlled at work.

Speaking to the owner's partner there was again recognition that leadership was perhaps lacking in this organisation. She felt that this probably did impact idea generation in a negative way and made an interesting connection to a lack of formal training. Neither she nor the owner/manager had ever been through any formal management training; instead she said they generally work things out "on the fly". During this discussion she said that both she and the owner/manager would like to take advantage of learning opportunities to improve their leadership abilities but that formal courses were prohibitively expensive from their point of view.

As well as discussing time and leadership issues during interviews employees also provided stories about the owner's reaction to mistakes. Survey responses indicated that the reaction to mistakes was generally positive with employees being encouraged to put things right but the interviews and observation sessions painted a very different picture. Interviewees said that the reaction to mistakes or failed ideas was overwhelmingly negative with a housekeeper stating that the reactions she had received made her reluctant to put any other ideas forward. Another employee highlighted that when things went wrong in the kitchen (an example of this might be the wrong meal being prepared), things quickly turned into a panic with a focus on finding out who was responsible for the mistake rather than solving the problem and moving on. This finding was confirmed first hand during an evening spent in the kitchen. Individuals generally worked well as a team in a busy environment but if something went wrong individual employees were singled out and openly criticised in front of their colleagues.

Despite the points above individuals said that they felt able to try things out when they come up with new ideas. Employees stated that being in the cut and thrust of the workplace helped them quickly put ideas into practice. It was said that this ability to try things out supported idea generation although the owner/manager was said to show little interest in these activities. Kitchen staff said that if they approached the owner/manager with a new idea for the menu they would often only receive a "yes" or "no" response with little indication as to why something either was or was not appropriate. When pressed on this issue staff stated that more detailed reasons attached to this feedback would help them to refine future ideas. It can be argued that this finding provides further evidence that communication in this organisation is relatively poor.

During many conversations individuals pointed out that they did not feel challenged by their work. This finding is unsurprising given that several employees work part-time with their role in this organisation being secondary to their primary job. For instance one waiter works during the day as a freelance photographer and uses his role at this organisation to supplement his income while he is growing his own business. It is widely felt that individuals in this organisation do not need to use all of their skills in order to work effectively and it is interesting to note that the survey results suggest "having tasks which challenge you" is relatively less important to idea generation in this setting.

When questioned about their work routines and what happened to any ideas they had, employees stated that they primarily kept ideas in their heads, rarely writing anything down. There is no central system in place for the storage of ideas, indeed the owner's partner felt that this would not be used. It was consistently said that when ideas are thought up individuals simply talk to one another rather than capturing anything on paper or on a computer. One might be able to link the absence of idea storage systems to the apparent lack of action on some ideas. Interviewees stated that ideas were often forgotten before action could be taken and it can be argued that implementing some sort of idea storage system could help to alleviate this issue.

Picking up on a point mentioned earlier in this case study there were a variety of views about the level of freedom that individuals had in their day-to-day jobs. Housekeeping staff felt that they were left alone to get on with their tasks while kitchen staff felt that micro-management was an issue that inhibited idea generation. It was largely felt that too much managerial oversight stunted idea generation although employees agreed that having a clearer vision from the owner/manager would be helpful. The owner states that his intention is to "keep the business going" but employees felt that this wasn't really a detailed enough statement to know exactly where ideas are either needed or wanted.

It is somewhat difficult to say how this organisation perceives the effectiveness of its idea generation. While it is the case that the owner/manager is not looking to radically change the business it is certainly true that ideas are needed if the organisation is to survive in a competitive marketplace.

Generally speaking there is a feeling that a lack of time hinders idea generation in this organisation. There is also little feedback or action on ideas and individuals appear to feel that idea generation is limited because of this. From the evidence gathered it appears that individuals are willing to contribute ideas

into this organisation but that the environment as a whole does not seem to be set up to welcome new input. Employees do not seem to have a particularly strong connection to this organisation and this could be attributed to either the nature of the jobs they do or to the owner/manager failing to articulate a compelling vision for them to become part of.

The table below summarises the blocks and enablers of idea generation within this organisation.

Enablers	**Blocks**
A degree of freedom within certain roles for individuals to solve problems as they see fit.	No vision articulated by the owner/manager leading to a lack of direction.
Individuals being able to quickly try things out in the workplace – e.g. prototyping meals in the kitchen during breaks.	No systems for idea storage currently in place.
	Lack of time during the working day for individuals to think of ideas. This is due to shift patterns / working arrangements.
	Very tight managerial control in certain situations; a “do it my way” attitude.
	Negative reaction to mistakes / error – owner/manager seeking to apportion blame rather than learn from events.
	Jobs which neither challenge individuals nor allow them to make use of their full range of skills.

Organisation H

The Story of Idea Generation in a Micro Community Interest Company

This case study has been constructed from 3 surveys, 2 semi-structured interviews and 2 observational visits to this organisation between May and October 2012.

Although relatively young (3 years old) this organisation already appears to have rich traditions and its own unique culture. Formed by three individuals previously pursuing individual freelance arts careers this organisation seeks to work with a broad range of diverse communities to support the development of projects that encourage greater social inclusion and a shared exploration of the visual arts. As a result of this focus the organisation has been involved in a wide range of project work including photography, education and publishing. The core team of this organisation comprises four individuals but other freelancers are utilised as and when needed to support the delivery of particular events.

Ideas are clearly the lifeblood of this company. Individuals both with management and operational responsibilities see idea generation as being crucial to the organisation's survival with the Managing Director highlighting that in this particular setting ideas immediately translate to employment and income. The environment inside the firm is described as "experimental", "open", "visual" and "relaxed" with ideas being required for everything from products and services to efficiencies and marketing.

During interviews it was felt this organisation naturally attracts "creative" practitioners and because of this, it is perhaps better able to generate new ideas. The culture of the firm was said to be geared towards trying things out and taking risks with a sense of "collective blame" if something went wrong. The Managing Director highlighted that the organisation is more of a collective than a traditional hierarchy and because of this there is a sense of pulling together in times of difficulty, working through problems to try and resolve them.

The collective mind-set discussed above also appears to translate to a certain amount of skill sharing within the business. Both the Managing Director and a Video Editor noted how vital it is that everyone understands what everyone else is doing inside the organisation if idea generation is to be effective. With a certain amount of cross-over in terms of skillsets it is believed that individuals are more likely to absorb ideas, not dismissing another individual's viewpoint without first giving it proper consideration. This finding was confirmed during an observational visit to this organisation where two employees with different roles were observed collaborating on a film project. Each individual was able to talk about aspects of the project and provide what seemed to be useful input leading to what appeared to be an innovative output.

As with other organisations of this size there seems to be little formality about meetings and the working day appears to be relatively fluid. Individuals happily put in extra time when required to ensure that projects are finished and the creative standards of the organisation are maintained. The Managing Director did say that he had thought about the benefits of bringing individuals together for a more formal "ideas" session but did go on to say that he felt this would not really achieve anything worthwhile. Ideas were said to occur most frequently when individuals were travelling back from events together or in the cut and thrust of the working day. Informal discussions were thought to trump formal meetings in this particular setting.

Something that appears to drive idea generation in this setting is information. Individuals noted that discussions with both internal and external contacts helped them to generate new ideas and interviews revealed that employees tend to spend a lot of time working in pairs. Being able to bounce things off other people inside the organisation and get their feedback was said to be vital to producing new ideas although individuals said they also made extensive use of external contacts too. These external contacts include education institutions, client organisations and friends and family. Collaborative working appears to run throughout this organisation and this appears to enable the production of new ideas.

Organisational structure and collaborative working practices were discussed in more detail when individuals were questioned about the role the leader has in

stimulating idea production. It was thought that a traditional hierarchy was not as noticeable in the organisation with the Managing Director undertaking operational projects alongside operational/professional staff. Leaders were said to be a good source of advice and it was also highlighted that they allowed employees a relatively free hand to complete tasks or projects in the way they thought best. Individuals felt encouraged to come up with new ideas for projects and highlighted they could take these ideas to either of the leaders at any time.

While exploring the mechanics of idea generation individuals highlighted that a balance needed to be struck between individual and collaborative working. Employees felt that they needed individual time to collect their thoughts and views, forming them into something coherent before they could then take this to the group for it to be revised and/or debated in a constructive way. The collective mind-set within this organisation appears to encourage individuals to have open and honest conversations about ideas and this appears to support the development of effective projects and events.

The fluidity of processes and decision making in this organisation also extends to the way that individuals set up their working days. Employees are largely free to frame challenges for themselves and are encouraged to solve problems independently with managers acting as a safety net to resolve problems when necessary. The Managing Director feels that creativity in harmed when too much structure is placed around an individual's role and it is clear that all employees in the firm possess significant technical and professional expertise. Based on this evidence it can be argued that this setting could enable individuals to enter the flow state and this could be one factor which supports the generation of lots of ideas.

Despite all the positives highlighted so far one factor that could be constricting idea generation in this setting is a lack of time. The Managing Director pointed out during an interview that the organisation works project by project at present with a focus on gaining new clients and income. It was said that an injection of funding would buy the time and space needed to come up with more ideas around business expansion/growth.

While discussing time constraints the Managing Director stated that he had a broad vision for the organisation in his own mind but that this had not yet been properly articulated. He put this down, again, to the lack of time. He stated that there was a need to take a period of time to understand the direction of the organisation if idea generation was going to be fully effective, in other words individuals need to spend time working "on the business" rather than "in the business". When pressed further on how the vision might be developed the Managing Director stated that it should be a collaborative process with input from a range of individuals. It was felt that this process would pull the company together, encouraging individuals to look at collective rather than individual goals.

While working on events and project delivery members of this organisation use online shared documents which they can all work on and change without the need to email different versions around and then collate the output. Individuals felt that this method of working was something that took a little getting used to

but recognised the benefits of being able to collaborate and store ideas within this sort of system. The Managing Director highlighted that he was trying to encourage individuals to pick up the phone when trying to share ideas and information rather than write emails. He felt that emails were a dated method of communication and that personal contact often led to more positive outcomes and faster decision making/feedback.

Something that was an undercurrent throughout much of the data collection in this setting was the extent to which one should seek to "control" idea generation. It was recognised that there should be some sort of "boundary" or structure to ensure that things were kept on track but that too much control would likely inhibit the production of new ideas. The Managing Director highlighted that ideas which sat within the company's aim and ambitions were welcomed and other employees noted that boundaries helped to keep things realistic and achievable. There was thought to be an element of "self-control" within the organisation and because of that managerial control was less important. When probing this particular point it was felt that self-control came from professional knowledge and experience which subsequently helped individuals to realise whether an idea was relevant or not.

Does this organisation believe that it generates ideas? The resounding answer to this question has to be yes. This organisation is full of creative practitioners who recognise that ideas are vital if the company is going to survive and grow. There is clearly a wealth of different skills and experience within this firm and the culture appears to be one that thrives on exploring the "new". Individuals are multi-disciplined and the collaborative culture of shared responsibility allows for measured risk-taking. The Managing Director clearly states that ideas in this setting translate immediately to income and employment, without ideas this organisation would cease to exist.

The table below summarises the blocks and enablers of idea generation within this organisation.

Enablers	**Blocks**
Relatively well developed systems for storing and sharing ideas (e.g. use of Google Shared Documents).	A lack of time meaning that individuals cannot step back to take stock of the "bigger picture" very often.
A collective mind-set that encourages shared responsibility when things go wrong or ideas do not work out as planned. Hierarchy is relatively less important in this organisation.	The lack of a fully formed vision to help guide or steer idea generation.
Individuals sharing elements of their skill-set with others.	
A fluid and flexible working environment where informal conversations and chance encounters happen.	
A wide range of ties/links both internal and external to the organisation.	
Individuals being able to access the "flow" state; i.e. the presence of	

challenging work and the skills to meet those challenges.	
Employees being encouraged to have personal contact with others (i.e. phone calls and face to face meetings rather than emails).	

Organisation I

The Story of Idea Generation in a Micro Technology Business

This case study has been constructed from 4 surveys, 3 semi-structured interviews and 2 observational visits to this organisation between April and May 2012.

From an outsiders perspective this organisation is incredibly interesting. It was founded back in the mid 1990's and takes pride from doing things 'differently' to others in the same industry. At this moment in time the organisation employs four individuals in a relatively flat structure. The owner/manager controls the strategic direction of the organisation alongside one other individual with management responsibilities. All employees are highly qualified and work to develop the products which the organisation then distributes to customers.

When asked if this is an organisation that generates lots of ideas the resounding answer is "yes". All individuals were able to provide examples of ideas for products and improvements that they were working on with the owner/manager breaking ideas down into "ideas for projects" and "ideas within projects". There was recognition that the organisation must generate ideas for its survival. It was said that if ideas were not put forward the firm would quickly fall behind the marketplace and decline.

From the surveys and interviews it quickly became clear that the most important factor affecting idea generation in this setting was leadership. While discussing this in detail individuals felt that the most important role of the leader was to provide direction and meaning. The owner/manager put forward a similar view and stated that whilst micro-management must be avoided everyone must understand the path the organisation is following and how their own contribution links in with this. Aside from giving direction and meaning employees also highlighted that leaders must provide thinking "space", allowing them to solve problems independently.

New ideas were often thought to contain some form of risk and all individuals agreed that the only way to understand whether something was worth pursuing was to put it into practice and try it out. In these situations the owner/manager saw himself as a safety net in times of crisis, enabling employees to take risks in the knowledge that failure would not turn into disaster.

Alongside the ability to try new ideas out individuals in this organisation have access to a wide range of technological tools which help them to store and share their ideas. Being a technology company this is perhaps unsurprising

and the list of tools is extensive, including Wikis, blogs, a ticketing system, whiteboards and a collaborative intranet. Every individual felt that it was important to be able to write new ideas down and there was a general feeling that sharing ideas led to the production of more innovative final products. Employees stated that they enjoyed having access to the range of tools on offer inside the organisation. They felt that having freedom to set the work environment up in a way that suited them increased the amount of ideas that they came up with.

Freedom was a word mentioned relatively often during both surveys and interviews. This is an interesting finding in this setting because the nature of the work conducted within this organisation is obviously incredibly intense with tight deadlines seeming to be the norm. During an observational visit it was interesting to find that employees were able to take breaks whenever they needed to and this included individuals having computer games loaded onto their work computers. There is clearly a high degree of trust between the owner/manager and his employees with he himself stating that his role as a leader is to keep the pressure “just on” to ensure focus but prevent burnout.

Building on the points discussed in the paragraph above, “control” was a word that individuals felt uncomfortable with in this setting. Survey responses highlighted a consensus that this organisation was able to effectively guide or steer the idea generation process but during interviews the word “control” was associated with the suppression of ideas. Linking back to leadership individuals felt that the role of the owner/manager was to set the stage or path indicating where ideas were needed and not controlling things beyond that. It appears that the owner/manager changes the way he guides the idea generation process depending on what the exact problem or task is. When undertaking exploratory work the framework is very broad but when working on a specific problem with a product the frame is, of course, tightened down to focus on that specific issue.

As one might expect in an environment that encourages freedom there are times where disagreements over the best course of action occur. It was recognised that individuals can clash over ideas although in these situations it was said that two or more ideas might be quickly prototyped or researched before a final decision was made based on that information. The organisation ensures that decisions are made on facts rather than subjective judgements and time spent prototyping or researching ideas allows individuals to arrive at reasoned, credible conclusions. In the event that someone is “wrong” no blame is distributed, there is a realisation that individuals are working with new concepts and ideas and an emphasis is placed on learning and moving forwards.

During interviews it quickly became apparent that individuals are very highly skilled – they all have relevant professional qualifications and they are also positively challenged by their work. In one very telling interaction an employee highlighted that he was free (to an extent) to frame challenges for himself. As stated earlier in the case study the owner/manager provides a safety net in case of failure and as a result this, this particular employee felt that he could “push the envelope” with his ideas.

After spending time observing interactions within this particular company it is apparent that the reaction to error is important to continued idea generation. It is understood and accepted that in the initial stages of product development there are often "bugs" that need to be worked out because individuals are working to develop new products and concepts. When mistakes are made in this setting or projects end up in a somewhat blind alley feedback from the owner/manager is timely and delivered respectfully. In basic terms there is a simple "how can we fix it, and how long will it take?" reaction from him. In these situations leadership encourages further idea generation by projecting a calm atmosphere where individuals do not fear failure, instead they look to learn from everything they do.

Being a small operation there is arguably little need for frequent formal meetings to discuss ideas for specific projects. The owner/manager highlighted that one of his key strategies for supporting idea generation is to ensure that every individual shares parts of his or her role with everyone else. This overlap means that individuals quickly understand where their ideas may conflict with other jobs or processes. At the beginning of a particular task the owner/manager might bring everyone together for a few minutes to outline the overall goal but idea generation then proceeds in an organic way. Individuals might spend time on their own thinking about specific problems or they might break off into small teams to tackle issues together. "Flexible" and "fluid" are two words that can be used to describe this environment.

Given all that has been discussed thus far something that might upset or otherwise inhibit idea generation in this organisation could be employee turnover. It is very clear that this firm has a relatively specialised way of operating and it could well take time for new recruits to fully integrate themselves into the team. In order to overcome this potential obstacle much time clearly must be invested into recruitment and selection processes with further time being allocated to properly induct individuals into the organisation's way of thinking and operating.

A final point that marks this organisation out from others is its tendency towards isolation. From survey responses and observations one arrives at the view that speaking to or bouncing ideas off people outside the organisation is relatively less important to idea generation. This finding was further confirmed by individuals using the word "isolation" during interviews and highlighting that they take great care not to be influenced by the products produced by competing organisations. This finding goes against the current literature which states that an external focus is necessary for idea generation but in this particular setting isolation appears to be a successful strategy. It cannot be said that this organisation lacks ideas.

To bring this case study to a close it is important to think about whether idea generation is "effective" from the point of view of the organisation itself. As stated at the start, every individual answered positively when asked if this was an organisation that generated lots of ideas and there appears to have been a lot of thought as to how idea generation can be enabled in this setting. Leaders have put specific processes and systems in place to encourage the production of ideas including idea storage systems, jobs that allow for a degree of freedom and an overarching vision that keeps everyone on track. The organisation is

successful and is growing and it is clear from examining the final products that innovation and fresh thinking are at the core of everything this company does.

The table below summarises the blocks and enablers of idea generation within this organisation.

Enablers	**Blocks**
Leadership – providing an effective vision, acting as a safety net in times of crisis and allowing a degree of freedom in the work environment.	Potential employee turnover and the time taken to induct new individuals into this organisation's way of thinking.
Highly developed methods for capturing, storing and sharing ideas (including Wikis, blogs and a ticketing system).	It can be argued that a change of leadership/management personnel or mind-set might negatively impact idea generation.
A focus on providing employees with a framework within which to work but then not "controlling" ideas – "guiding" and "facilitating" are better words to describe the process.	
Everyone seeking to learn from mistakes or times when things do not go to plan.	
An environment which encourages the flow state – i.e. provides positive challenges and allows individuals to make use of their skills.	
Isolation from existing ideas – e.g. products produced by competitors and operating processes used in other parts of the industry.	

Organisation J

The Story of Idea Generation in a Micro Consultancy Business

This case study has been constructed from 3 surveys, 3 semi-structured interviews and 4 observational visits to this organisation between March and June 2012.

The subject of this case study is a consultancy firm based in South East Cornwall. The firm, which specialises in providing consultancy services to various SMEs across the South West, was started in 2005 and currently employs three individuals. The owner points out that the business context is undergoing change and for this reason he is attempting to develop a new position for the organisation to take advantage of new opportunities and ensure its continued success.

All employees recognise that idea generation is important to the survival and success of the firm and during interviews it was highlighted that ideas are

needed to help solve problems or issues for clients as well as driving the business forward. Both the owner and his employees feel there isn't a shortage of ideas when it comes to solving problems for clients but the same cannot be said for driving the strategy of the business. This is an area where few ideas are currently generated. Despite making this point the owner wants to encourage employees to contribute to the strategic direction of the organisation although at present team members feel it isn't their "place" to contradict his ideas and plans.

One potential explanation for idea generation being somewhat stunted within the organisation is perhaps the fact that employees can be characterised as an extension of the owner. A very similar statement is made by Burns (2008) who believes that small businesses can be seen as adopting the traits of their founders. During the interviews employees consistently referred to ideas that the owner would "like", stating that they consciously thought about what he would do when they were solving their own work related problems. This is perhaps an indication that the owner has a high level of control over organisational systems and processes which therefore means that individuals have little latitude to think differently.

Further to the points above the context for idea generation is described in many different ways with individuals using the words "restricted", "unapplied" and "blame" alongside terms including "participative", "fluid" and "enthusiastic". It is clear that there are a variety of views of idea generation within the organisation although there is also an understanding that everyone has to be fully invested and in tune with its vision if it is to move forward. Employees suggest that the personal drive and passion of the owner encourages them to generate ideas. When they can see that there is "energy" coming from him this inspires them and sparks new thoughts. Equally there are said to be times when the day to day business of the organisation overwhelms idea generation. When this occurs there is less (or no) time to invest in thinking about the firm's strategy and idea generation is therefore suppressed.

The dynamics of idea generation in this organisation are interesting. During interviews it was said that spontaneous discussions and meetings were the best forums for sparking ideas. Overly formal gatherings were not thought to be effective spaces for idea generation although team members commented that planned meetings helped them to share information easily. Within the organisation it appears that ideas initially occur most often when individuals are going about their day to day roles. These ideas are then discussed internally in some form of collaborative exchange where actions are agreed. Once the exchange of information has finished individuals take points away and either refine or implement their ideas as necessary.

In an organisation of this size one would anticipate feedback and action on ideas to be both immediate and clearly visible however this is not the case. This finding is intriguing given the perceived level of control exerted by the owner. It appears that a lack of feedback and commitment to "following things through" undermines the desire of individuals to generate ideas. This is said to be because employees are not certain how the owner perceives their ideas hence they are reluctant to put them forward. Individuals within the organisation are aware that not every idea is appropriate or actionable however it was said

that feedback along the lines of “thanks for your idea, it’s very interesting although it might not work because of X, Y, Z…” would be welcome. This substantive feedback would then allow individuals to refine future ideas so that they are more achievable and/or fit more effectively with the vision of the business.

Elaborating on a point discussed earlier it is felt that “control” is perhaps too stringent within this organisation. While it is agreed that individuals look for direction and operational parameters to come from the owner ideas are thought to occur most frequently when there is a degree of freedom within situations and processes. This is not to say that there should be no control but that once a framework has been set employees should feel empowered to solve problems for themselves and explore new possibilities. There is evidence of independent problem solving when employees are tackling issues for their respective clients but this is somewhat lacking when the team turns its attention to the strategic direction of the organisation itself. More ideas may be produced in this setting if there was a looser framework and greater scope for independent problem solving.

Looking deeper into the organisation it may also be the case that the reaction to error inhibits idea generation. “Blame” was something that was discussed during one-to-one interviews and it was felt that this type of reaction may well inhibit learning. Given the nature of the business, errors in client facing work can potentially be costly both in terms of legal action and damage to the reputation of the organisation. As a result of this there must be a focus on accuracy but it is likely that this adversity to error stunts idea generation when individuals turn their attention to things like strategy formulation. In order to overcome this issue there perhaps needs to be specific time allocated to internal projects where it is clear that “free-wheeling” and “off the wall” thinking is ok. Perhaps the owner needs to devise a simple signal that enables individuals to transition from client facing work to exploring the strategy and direction of the organisation in a more open way.

The picture presented so far suggests that idea generation in this organisation is not as successful as it could be. While there are issues that need to be solved, particularly when the organisation is focusing on generating ideas for its strategy and so on there are positive points to build on. The first of these points is that there is a strong sense of togetherness and friendship within the organisation. This means that individuals show their emotions and can critique proposals, projects and/or actions without people feeling offended or becoming defensive. Individuals within the organisation are also keen to learn and develop themselves. It appears that each is striving to achieve the ‘flow’ state and this is something that could be enhanced by framing jobs and tasks to be challenging but achievable.

A final question which needs to be addressed in this case study is whether individuals inside this particular organisation believe that the environment supports the generation of ideas. From the detailed discussions had during interviews and periods of observation it is apparent that idea generation “on the job” is successful. Individuals believe that they can solve problems for clients and that the environment allows them to think carefully about different ways in which they can solve problems.

When attention turns to ideas “for the job” i.e. those relating to business strategy the opposite is the case. There is a belief that the owner wants to do things his way although he himself states that he wants to create a more democratic environment. There is a belief that fewer ideas are generated in this particular setting and it can be argued that this is perhaps because the owner frames the challenge to rigidly, limiting the space for new thinking and the iterative construction of new ideas.

The table below summarises the blocks and enablers of idea generation within this organisation.

Enablers	**Blocks**
Individuals striving to achieve the ‘flow’ state	A lack of clear, detailed and timely feedback on ideas
Strong sense of togetherness / team atmosphere	The extent of managerial control, particularly when new thinking is needed in terms of the direction of the organisation
An environment which allows informal conversations about ideas without the need to arrange formal meetings	A lack of independent problem solving
The personal drive and passion of the leader	Ideas not being followed through and put into practice
	The vision of the leader overpowering the thoughts and suggestions of other team members
	Day-to-day activity overwhelming to the extent that individuals are ‘fire-fighting’ rather than having time to think about and discuss new ideas
	The reaction to error – a focus on blame rather than learning

Appendix I: Data Analysis Tabulations

"Leadership" Coding Analysis (pulled from NVivo)

Concept / Note / Point of Interest	Number of References and Organisation
Allowing freedom / tinkering time / time to think / allowing employees to organise work for themselves / thinking about 'tomorrow' as well as 'today' / providing 'recovery time' in the working day	20 I (4) / C (1) / D (3) / J (2) / B (3) / A (3) / H (4)
Providing direction and vision (great quote: a man may be able to run a marathon, but without a road to run on he will be lost) / pushing people gently in the right direction but knowing when and where to stop and move on / Linking employees into the vision of the business / Allowing employees to contribute to the direction and vision	26 I (5) / H (1) / D (2) / J (2) / B (9) / C (3) / A (1) / E (2) / F (1)
Giving employees an outline of the problem but not specifying precise ways of solving it / listens to ideas/problems and seeks to encourage / not trying to 'sanitise' the views of employees	12 I (3) / D (4) / B (3) / H (1) / J (1)
The leader doesn't necessarily know everything there is to know about the job / acts as an 'oversight' instead / acting as a sounding board / providing a safety net when necessary	9 I (3) / B (2) / D (3) / H (1)
Sense of trust between leader and followers. No micro-management / not seeking to apportion blame if ideas fail / considering each idea on its own merit	11 I (2) / C (1) / D (1) / B (4) / A (2) / F (1)
Calm demeanour – particularly in the face of problems/error/mistakes… being open to being challenged. Challenging people in a way that makes them think rather than panic	7 I (1) / J (2) / B (4)
The leader makes room for idea generation to happen / encouraging informal atmosphere	10 I (1) / H (1) / B (2) / D (3) / J (1) / A (2)
Guiding not controlling. Must avoid controlling employees too tightly / framing things effectively	12 I (1) / J (4) / H (2) / C (1) / D (3) / E (1)
Facilitating the transfer of ideas / helping people share things and bounce them off one another / giving people an opportunity to express ideas / helping to 'grow' ideas / Organising or setting up appropriate meetings or forums where ideas can be shared	14 H (1) / C (1) / D (5) / B (3) / G (1) / F (3)
Taking action where necessary on ideas / following things through to a conclusion / if ideas take a long time to put in place provide an update regularly on progress. Being willing to try things even if they go against your own (i.e. the leader's)	31 F (1) / C (5) / D (3) / J (8) / B (6) / F (3) / A (3) / E (2)

ideas / Seeing things through / avoiding blame when things don't go as planned	
Being open to ideas and being SEEN to be open to ideas / Respecting ideas no matter where they come from in the hierarchy. Ensuring that employees perceive that the organisation is open to new ideas	27 C (1) / D (4) / J (1) / B (11) / F (1) / A (4) / E (2) / G (3)
NOT simply imposing what is to be done e.g. projects / tasks	3 C (2) / F (1)
Providing feedback / feedback with reasons rather than just a 'yes' or 'no' / acknowledging ideas	25 C (1) / D (4) / J (2) / B (7) / H (2) / A (4) / G (2) / F (3)
NOT creating a feeling that people can't say what they think	7 J (1) / B (1) / G (2) / C (3)
Taking care to listen to ideas / not being dismissive / Managers physically asking for ideas / Managers taking time to walk round the organisation asking how things are working or progressing	9 B (6) / C (1) / F (2)
Leaders taking time to interact with staff lower down the 'food chain'	7 B (3) / A (4)
Ensuring that information / communication flows are joined up – i.e. no breaks / ceilings in hierarchy. Transparency.	5 B (5)
Being seen to be keen and motivated yourself (as the leader)	1 J (1)

"Factors Affecting Idea Generation" Coding Analysis (pulled from NVivo)

Concept / Note / Point of Interest	Number of References and Organisation
Isolation (from what has been done previously / competitors) / culture of non-conformity	2 I (1) / D (1)
Relaxed atmosphere / taking time to think things through but keeping the pressure JUST on / taking time to reflect on ideas / having time to develop ideas / not allowing the day to day' to overwhelm	22 I (3) / C (2) / D (3) / J (2) / B (6) / A (2) / H (4)
Ensuring people are 'productive' i.e. not exhausted at work. Building recovery time into the day / challenging yourself	9 I (2) / D (2) / J (1) / B (3) / H (1)
Stable and supportive environment which is not obsessively formal – guidelines yes, prescriptive processes – no… An environment where employees are allowed to get on with things / leaders setting the context effectively / an absence of negative political activity	12 I (2) / D (4) / J (1) / B (2) / H (3)
Allowing people to solve problems for themselves / freedom / NOT micro-managing / sensitive management / leadership being 'open' to ideas & respecting them / a feeling that ideas are listened to	21 I (5) / H (1) / C (1) / D (2) / J (2) / B (5) / G (2) / E (1) / A (2)
Growing a bond within the organisation / sharing parts of roles / COFFEE! / effective communication and networking / Trusting colleagues to hear you out / being able to be open with your ideas / informal chats while working / the way that ideas are received / being encouraged to share your ideas / creating an appropriate forum where ideas can be shared / 'corridor chats'	27 I (3) / H (2) / F (1) / C (3) / D (2) / J (4) / B (8) / A (4)
How sustainable the idea is in relation to the business	1 H (1)
Bringing a variety of skills together (i.e. group work) / having a change in personnel from time to time / having a stimulating environment / BUT retaining a focus on the goal and driving things forward rather than letting things 'drift' / evolving your ideas by speaking to others	15 H (1) / F (2) / C (2) / D (2) / B (2) / A (2) / E (3) / I (1)
Having a range of resources available inside the organisation / Stimulus in the workplace / Access to information about organisation / people taking time to keep themselves informed about the organisation / people constantly learning and seeking out new information	6 H (1) / J (1) / B (4)
Action on ideas / having a focus on outcomes and a clear focus on what you are trying to achieve / The ability to put things into practice / ownership	18 H (2) / C (4) / D (4) / J (1) / B (2) / A (3) / G (2)

of ideas	
Acceptance of change / ability to sustain change / gaining buy in to idea / recognition that change is “normal”	11 F (1) / B (2) / C (4) / D (4)
Understanding the vision of the business / engaging employees in the vision of the business / The extent to which employees feel they can contribute to the vision of the business	21 C (4) / D (2) / J (3) / B (4) / A (2) / G (3) / E (1) / H (2)
Having opportunities to express ideas (1to1s with manager / water cooler conversations etc). / Willingness to share ideas	12 C (3) / D (2) / J (1) / B (2) / A (4)
Understanding the industry and competitors / external environment	5 C (1) / D (3) / B (1)
Feedback (mentioned here but captured through specific feedback node in NVivo) plus explanation is important not just “yes” or “no”	13 J (2) / B (3) / C (5) / G (2) / E (1)
Effective structure to communicate information / cascade it down the organisation / having a two way exchange of ideas up and down the organisation / ensuring that idea generation goes ‘wide enough’ within the organisation	6 B (6)
Having a space inside the organisation where you can go to have a conversation about ideas	3 B (3)
Technical knowledge	1 B (1)

"Collective Idea Generation" Coding Analysis (pulled from NVivo)

Concept / Note / Point of Interest	Number of References and Organisation
Isolation	1 I (1)
Variety of skills / experience / multiskilling / sharing of knowledge / having confidence in the skills of others / team turnover (supportive of IG) but having too many people involved can be counter-productive	35 E (2) / B (7) / I (2) / H (3) / F (5) / C (6) A (4) / D (5) / G (1)
Mutual support, encouragement / being able to compromise and fit ideas together / Combining parts of ideas leading to a better output / being able to freely express your ideas / filtering ideas through a many brains as possible / people "sparking" off of others	13 I (2) / H (1) / C (2) / D (2) / J (1) / E (2) / G (3)
Time for individual and collective work / being able to work on your own with a problem and then share findings with others / group situations which then "break down into some individual time" / pooling knowledge	24 B (7) / I (3) / H (2) / F (1) / A (2) / D (6) / C (3)
Growing a bond within the organisation / others actively listening to your ideas & you actively listening to theirs / networking inside organisation / being able to bounce half-formed ideas off others / it's a "game of tennis" / linking people into the overall vision	15 I (1) / F (2) / C (4) / A (3) / D (2) / C (2) / E (1)
Formal systems for sharing ideas / social media systems but using in a structured way / role of line manager / formal forum for sharing ideas / internal meetings	12 I (1) / H (1) / C (3) / A (3) / D (2) / B (2)
Informal ways of sharing ideas, quick conversations, meetings in the "corridor" / open office environment / being "comfortable" to voice opinions at work / providing constructive criticism / must main professionalism	20 G (3) / I (1) / H (1) / F (1) / C (4) / A (1) / J (3) / B (4) / E (2)
Leaders acting as a coordinator, bringing people together to share ideas / leaders creating a "nice place to work"	6 H (1) / B (2) / D (3)
Talking face to face rather than by email / telephone etc / "communication" is vital / open doors in offices are vital / using email etc only when absolutely necessary	18 H (1) / F (4) / B (6) / C (2) / A (4) / E (1)
Openness and honesty in relationships with others / must be able to manage difference and diversity	3 H (1) / D (2)
Encouraging "different" people to have a say / building links with other parts of the organisation – understanding what they are doing / networking / working with passionate people	15 F (1) / C (3) / D (4) / A (3) / B (4)

When people “dictate” to others it shuts IG down / without strong leadership people can just “go round in circles” / “quiet” people can get lost in strong groups / case of “chipping away” at hardened attitudes over time	11 F (3) / B (4) / G (1) / E (3)
Working with the likeminded can help to get things done / working in a group can help you to solve a problem faster	4 F (1) / C (2) / J (1)
Having time to reflect on discussions on your own is important / space	9 C (1) / I (3) / J (2) / A (3)
Team work is hindered by people who have “fixed” views / groups with “polar opposites” can hinder IG / physically lacking time to communicate ideas with others	5 C (1) / D (1) / B (3)
Bringing in external sources of expertise	4 C (1) / J (1) / B (2)
Following things through to a conclusion – i.e. if something is agreed in a meeting it must be put into practice	1 C (1)
Group structure or makeup should depend on the problem being investigated / too many meetings can stop people putting ideas into practice / building coalitions or gaining allies for your ideas is useful	17 D (3) / B (4) / A (3) / J (1) / H (2) / C (4)
Having a sound decision making chain so you know where your idea is and who will give feedback	2 B (2)
Jobs with a “sociable” nature to them	3 B (3)

"Mechanics of Idea Generation" Coding Analysis (pulled from NVivo)

Concept / Note / Point of Interest	Number of References and Organisation
No organised process – "off the cuff" / being able to quickly prototype things and make them "real" / building off the thoughts of others / outside the working day / informal	20 F (2) / I (3) / C (4) / A (2) / B (3) / E (2) / G (1) / D (3)
Freedom within the working day, no set routine / meetings yes, but not a set "Monday morning meeting for ideas" / fluid working context / unstructured / breaking "the routine" / space	19 B (4) / C (4) / I (2) / H (3) / D (4) / J (2)
Laying groundwork for future projects ahead of time / frequent communication / communicating importance of new ideas / giving people "the big picture" / ability to have open conversations	21 H (2) / C (5) / I (1) / A (2) / J (3) / E (1) / D (5) / G (2)
Micromanagement inhibits idea generation / having "too much to focus on" also inhibits IG / needs to be bottom up not top down / being dogmatic is negative	10 H (2) / I (1) / A (3) / B (4)
Stages of control – tight in beginning then loosening out over time / need direction	2 F (1) / I (1)
Learning from mistakes as you go / not being fearful of being "wrong" / learning by doing	14 I (1) / E (3) / G (2) / B (3) / A (1) / C (4)
Using technology where appropriate to help communication / idea transfer / Google shared docs / intranet sites in larger organisations / emails can be misunderstood / mind mapping	12 H (1) / I (1) / A (3) / B (3) / D (4)
Intuitive / comfort in surroundings / comfort with risk taking / ability to have frank discussions	16 F (3) / J (3) / H (1) / D (4) / E (3) / G (2)
Needing a good quality of resources at your disposal / moving between different environments to spark thoughts	3 H (3)
Group problem solving sessions / face to face communication / collaboration / proactive involvement / cohesiveness	25 C (3) / H (3) / B (4) / A (2) / F (4) / E (4) / D (5)
Play / the organisation being a platform for development	2 H (2)
Money to buy time / space to think	4 H (1) / F (1) / C (2)
Suggestion boxes don't work / need to "do something" with the ideas when you get them / seeing ideas to the end / pushing ideas through	13 F (1) / H (2) / C (4) / A (1) / J (2) / B (3)
Turnover in individuals – engineering that into processes / change in group members over time	6 F (3) / C (3)
Leader acting as "conductor" / improving lines of communication / staff days	10 D (4) F (2) / C (4)
Organisations splitting into two or more parts / your level in the organisation can affect how	12 C (5) / B (4) / F (3)

seriously you are taken	
Mechanics driven by the nature of the business / too many ideas can be troublesome / meeting customer needs / balancing creativity with business	15 C (3) / D (3) / J (2) / B (4) / E (2) / G (1)
Openness and transparency / need to know what's happened with your idea / continued follow-ups or progress reports / ensuring a tangible impact / recognising that new ideas can be controversial / giving people a say	25 B (5) / D (4) / G (4) / C (2) / F (3) / J (2) / A (3) / E (2)
Employee forums / staff groups / people need to feel able to raise their point of view/idea	6 A (4) / B (2)
Reward schemes / benchmarking progress against others	4 A (1) / B (3)
Understanding "where to begin" / balance between providing strong direction and letting people contribute	3 A (1) / J (2)
Developing an effective organisation structure / effective one to ones with manager	6 B (4) / A (2)

"Factors Inhibiting Idea Generation" Coding Analysis (pulled from NVivo)

Concept / Note / Point of Interest	Number of References and Organisation
Too many ideas / not knowing how to choose between two (or more) similar ideas	21 H (2) / I (3) / B (4) / E (2) / G (2) / C (1) / F (4) / D (3)
Not enough time / lack of planning / too much stress / workload / day to day overwhelming idea generation / heavy workloads	31 I (2) / A (2) / D (7) / H (2) / F (3) / C (4) / B (8) / E (3)
"strict" mentality at work / micromanagement / having an approach which is too formal / negative reaction when things are not "right" / blame culture	26 A (2) / J (5) / I (4) / C (5) / D (2) / E (3) / G (5)
Fixed opinions and views / people not listening / reluctance to change	11 C (3) / F (5) / I (1) / A (1) / E (1)
Lacking diversity / lack of "fresh blood" / not knowing where to start / not managing diversity	5 D (1) / H (1) / A (1) / F (2)
Lack of money to invest in ideas / buy time and space to think / lack of resources	8 J (1) / H (2) / F (1) / B (4)
Physical space between people / not working at the same site / lack of cross over in terms of skills and roles / not understanding other roles/jobs / lack of information about other parts of business	12 H (1) / C (2) / A (1) / B (6) / E (2)
Hidden agendas / political activity / strong characters / "closed shop" / lack of openness	16 B (5) / D (2) / F (2) / C (3) / A (1) / G (3)
Too many people involved in decision making / fixed or inappropriate structures / lack of communication / ideas getting "lost" / no feedback	28 B (6) / G (4) / F (3) / J (3) / C (5) / A (4) / D (2) / E (1)
People not having enough knowledge to put forward "good" ideas / not understanding the big picture	5 F (2) / C (3)
Not doing anything with ideas / taking too long to put ideas into practice / not being able to implement ideas	22 D (1) / C (2) / J (5) / G (3) / E (2) / A (6) / B (3)
Not being asked about ideas / disinterest from others / feeling like you are "hitting a brick wall" / ideas being dismissed	14 C (4) / D (3) / J (3) / B (4)
"The leader" / autocratic leadership / "management"	13 C (3) / A (2) / B (4) / E (4)
Comfort with present situation / desire to avoid risk	7 C (2) / E (3) / G (2)
Rules and processes / legislation / guidelines / too many meetings / red tape / too much control	15 A (3) / D (4) / J (4) / B (4)
Not drawing on external influence / inward focus	2 J (1) / B (1)
Trade union	1 B (1)
Conflicts between different parts of business	3

	B (3)

"Feedback" Coding Analysis (pulled from NVivo)

Concept / Note / Point of Interest	**Number of References and Organisation**
Oversight / not necessarily understanding "all" of the intricacies of a situation / informal / steering	6 H (2) / I (1) / F (2) / J (1)
Basing information or responses on facts / using a scientific method / providing something tangible – reasons / constructive / non-judgemental	12 I (3) / C (3) / H (1) / D (1) / B (4)
Encouraging people / using people's work where possible / feeling valued / recognition / maintains morale and motivation	15 D (2) / I (2) / F (3) / C (4) / J (1) / B (3)
Making sure you are "on the same page" / enables focus	10 H (1) / C (2) / B (3) / A (3) / J (1)
Work itself providing the "feedback"	1 H (1)
Makes sure things do not just get "lost" / issues getting "stuck" in the chain / following things through	11 F (4) / C (3) / J (1) / B (3)
Needs to be delivered in a timely way / must be quick / communication problems inhibit feedback / need a good structure	16 C (5) / B (3) / H (1) / F (2) / G (4) / E (1)
Sensitivity required when delivering feedback / listening skills / not focusing on blame	7 C (1) / D (2) / J (2) / G (1) / E (1)
Enables greater future idea generation / helps you to generate more ideas / helps to understand why certain ideas are not appropriate / provides the reason "why"	19 A (2) / C (5) / F (3) / B (2) / J (3) / H (2) / E (1) / I (1)
Leaders / comes from leaders / leaders have a significant role to play	13 D (1) / H (2) / I (1) / G (3) / E (4) / J (2)
Filtering ideas through as many brains as possible / enables collaboration / refines ideas	7 A (1) / D (2) / B (4)
Continuous process / needs to occur all the time / shouldn't be "saved up" for appraisals	14 D (4) / H (2) / A (1) / B (4) / H (1) / I (2)
Important to be able to shut things down when necessary	5 J (2) / E (1) / G (2)

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