If you want to sell design, don't sell design

A qualitative study on effectively communicating the value of design to investors and business managers.

Rohan Sachdeva

International design business management master's

School of Arts, Design and Architecture

Aalto university

Author Rohan Sachdeva

Title of thesis If you want to sell design, don't sell design - A qualitative study on effectively communicating the value of design to investors and business managers. **Department** School of Arts, Design and Architecture

Degree programme International design business managementYearNumber of pagesLanguageEnglish202280

Abstract

Effectively communicating the value of design has been a long-standing challenge for designers, design managers and design consultants. The need to understand and measure how design can create value in organizations is also increasing in the management domain. Multiple studies have been conducted both from design and business, for effectively communicating design value with varying results from, tools and indexes built on existing business frameworks, to positioning design to distinct roles according to the cultures and practices of business managers. Even though a plethora of research exists, design agencies are still in need of finding new and more effective ways to communicate this value. This study aims to find ways to effectively communicate the value of design to investors and business managers. The perspective of taking investors and business managers as the stakeholders comes from Pentagon Design, Helsinki as the partner for this thesis. In Pentagon's view a new investment in a company can act as a catalyst for bringing in new services, this period of change can accelerate the implementation of design at an early stage of the investment by effectively communicating design value to investors and business managers. Further, this thesis, through its approach and findings, argues that limiting the stakeholders to investors and business managers produces a more valid outcome than attempting to communicate the value of design universally. This is due to the impact of professional role, practices and culture of investors and business managers on their perception of design, and its implications on effectively communicating the value of design.

The thesis draws upon literature on why the value of design should be measured and the challenges faced in implementing design, further through the literature, the study shows the impact of cultures, attitudes and perceptions of management professionals and their impact on communicating design, and a few studies done on communicating the understandable value of design. For data collection two rounds of interviews were conducted, first round of open-structured interviews to gain understanding of the world of investing and management with six participants, and then second round of semi – structured interviews with ten participants from investors with different investment strategies and board managers.

Based on the findings the thesis abductively and deductively proposes three core themes 1) the current perceptions of design and design value for investors and business managers, built on the discrepancies due to their professional roles and practices, (2) what investors and business managers value during an investment, and how positioning design as a value creator in these practices can improve its perception and understanding, and finally (3) methods and best practices that can be used to communicate the value of design to investors and business managers. The thesis identifies challenges and enablers associated with the professional practices and preferences of investors and business managers and their implications on communicating the value of design: Ambiguity of design terms, lack of measurability and granularity, lack of understanding and participation from the board, need for relevant references, positioning as a value creator, translating design terms and processes to understandable business terms, aligning design as part of the investment criteria, honesty through activity, and storytelling as a method to communicate a service. Thus, the thesis proposes a story-telling framework for effectively communicating the value of design, which acts as an integrator of the enablers and navigates the hindrances by aligning them according to a script. The script compromises of 1) Foundational elements that act as background and create guidelines for the story telling framework, (2) Actionable insights that align the script according to the interests of the investors and business managers based on relevant references from the industry, and (3) The Premeditated outcomes and implications that are intended from the storytelling script. Through the framework, the thesis aims to educate the investors and business managers by creating their own conviction of the role, function, and value of design.

Keywords Design, management, investing, business, perception, culture, value, practice, storytelling, communication

Table of contents

- 1. Introduction
- 2. Theoretical Background
 - 2.1 Why should the value of design be measured
 - 2.2 Challenges faced in implementing design
 - 2.3 Communicating the 'understandable' value of design
 - 2.4 Meta-theory: the predefined dispositions that exist between design and business
- 3. Methodology
 - 3.1 Data collection
 - 3.1.1 First round interviews and collecting data
 - 3.1.2 Second round interviews
 - 3.2 Methodology
 - 3.2.1 Method: Thematic Analysis
 - 3.2.2 Use of thematic analysis in this study
- 4. Research setting: Understanding design investments
 - 4.1 Investing is a cyclic process
 - 4.2 Different type of investments
 - 4.3 Investment criteria used by investors
 - 4.4 A catalyst for change
 - 4.5 Who to pitch design to
- 5. Findings
 - 5.1 Perception of design and design value by investors and business managers

5.1.1 Perception of the meaning of design

5.1.2 Discrepancies in management and investor roles and design perception

5.1.3 Discrepancies between investors and business managers' professional practices and their perceptions of design

5.1.4 Important gaps between design perceptions vs management roles and practices

5.2 What do investors and business managers value during an investment and its influence on their perception of design

5.2.1 Investment Criteria to assess investment opportunities

5.2.2 Value creation after a new investment

5.2.3 Strategic decision making during the ownership phase

5.2.4 Valuation of the company during the exit phase

5.3 Methods that can assist in communicating design to investors and business managers

5.3.1 Conviction for investing in design requires understanding

5.3.2 Increasing the involvement of the board can influence their participation in design

5.3.3 Reference with relevance increases familiarity and belief for investing in design

5.3.4 Showing the role of design in the process and how the value was created

5.3.5 Targeting critical challenges creates an effective design proposal

5.3.6 Story telling assists in educating by developing interpretations of the meaning of design

6. Discussion

6.1 Sensemaking of the findings

6.1.1 Inhibitors of communicating the value of design to

investors and business managers

6.1.2 Enablers of communicating the value of design to investors and business managers

6.1.3 Theoretical contributions

- 6.2 Managerial Implications
 - 6.2.1 Story telling framework for effectively communicating the value of design to investors and business managers
 - 6.2.2 Foundational elements
 - 6.2.3 Actionable cues
 - 6.2.4 Outcomes
- 7. Limitations and future research
- 8. Conclusion
- 9. Reference list
- 10. Appendix

Acknowledgement

I would like to gratefully acknowledge the constant support from Heidi Hyytiäinen and Arni Aromaa and as my advisor and partner from Pentagon design, their open communication, reflections and belief in my methods during the thesis process was very valuable. It fostered an environment for taking risks and learnings throughout. I would like to thank my other advisor Markus Sjoholm's for his vast knowledge and experience in investing and his down to earth and patient composure. Being new to the world of investing, I was able to learn about the dimensions of investing and understand the culture of investors due to his ability to convey complex terms in simple understandable terms. A special thanks to Tua Björklund and Nico Klenner as my supervisors for all the motivation and confidence which they entrusted in me with their academic supervision and feedback. Lastly, I would like to thank all the interview participants and the IDBM faculty and staff for their time and help which resulted in the valuable insights which set the backbone for this thesis.

1. Introduction

There has been a rise in research into how design can improve the strategic functioning of a company and its effect on management. Design science provides a useful theoretical foundation for understanding the development of novel strategies by shifting strategists' perspectives from "what is" to "what could be" (Rindowa and Martins, 2021). To realize this value, companies are including design in their organizations by either creating their own design teams or hiring design consultancies for a 'design audit' (Moultrie, Clarkson & Probert, 2007).

Despite this growing interest, we still know little about whether design, also referred to under the popular label design thinking, results in superior organizational performance and, if so, how it happens (Roth et al., 2020). The conundrum related to how design can assist in improved strategic performance is mostly universal, not generalized for any industry or company. This grey area of how design can provide value to companies can be considered/is often / is typically where designers operate, under ambiguity, and conduct research to identify and tackle areas of improvement for a company. Although they know design brings value, designers and design managers still understand that one cannot manage what is not measured (Mozota, 2010).

On the other hand, the management of companies, the CEOs, and investors, operate in quantitative factors that influence the risks a company can take before investing in new domains. This creates a paradox where they find themselves unmotivated to invest in design due to a lack of a body of research that demonstrates systematic design thinking ability to deliver value (Liedtka, 2020, p. 78).

As per some preliminary interviews, the lack of a definition of design can confuse and even intimidate non-design managers of a company, making it harder for them to invest in design. Furthermore, this also creates a challenge for design consultancies working on expanding their clientele and pitching their services to new companies. Design consultancies have to 'pitch' in various compelling ways how design can provide value to their clients. These pitches usually preach the value that design can create but don't show how or where it can be aligned with their client's organization.

The thesis project was financed by Pentagon Design Oy, Finland, and aims to find ways to effectively communicate design value to the management of companies and investors for them to start using design more intensively. As per the initial discussion with Pentagon Design, after a new investment has been made in that company, it increases the flow of funds and resources in the company. It was assumed that this new influx of funds could act as the catalyst for changes in the company and, as such, would be the best time to approach the company to provide new services. In the case of Pentagon design, it was assumed that this time would be lucrative to pitch their design services by effectively communicating the value of design. The thesis research was also focused on small and medium-sized companies as they were imagined creating considerable changes with the capital from the recent investment which further acts as a good potential for design services to create impact.

During the initial discussion with Pentagon Design as a partner, it was found that, after a new investment has been made in a company there is a period of adding new changes and services. The company starts exploring new avenues due to the influx of funds, based on changes brought on by the new owner. This is done for quick growth ultimately leading to

higher profits for the investor at the end of their investment tenure. This period can act as a catalyst for external design service agencies and other services to sell their services to the new owner and the company's board. Although there has been pushback from the companies to invest in design services due to a limited understanding of what value design can provide in the eyes of the companies' decision-makers. The thesis addresses how design as a value can be effectively communicated to Small and Medium-sized companies' management and their investors/owner. More specifically it aims at the how (rather than what? and why?) an external design agency (Pentagon) might convince investors and the management of a company to include design in the various functions of their company by understanding the value design can create.

The research in this thesis shows the impact of professional and personal practices of investors and business managers on their perception of design and the value it creates. Therefore, the focus on investors and business managers of a company creates an impactful way of effectively communicating the value of design by reducing the ambiguity of the result by creating a universal solution. By trying to pitch design universally we might undermine these career-specific attitudes and perspectives and create a generalized outcome which might not be as effective. This research case taken through the angle of perspectives and dispositions of investors and business managers show the impact of professional practices on the perception and communication of design value.

Going beyond the scope of Pentagon Design and design consultancies trying to pitch their services, this research argues for design value to be effectively communicated if there is a need to change and develop the perceptions related to design due to the personal and professional practices of the participants. This research encourages any organization/individual aiming to communicate the value of design to include a sociological perspective to their proposal and align their services to any personal/professional dispositions of the audience. This would help reduce the ambiguity around communicating design and help improve the inception of the design field in more industries and organizations.

Therefore, to find potential ways to effectively communicate the value that design can provide in the most explanatory and compelling ways to the investors and business managers of a company. I ask the following research question:

How do investors and SME business managers' perception of design compare to what they value in considering and tracking investments? And how does it impact communicating the value of design to them?

This research project, like the many others I have taken up in my life before, finds inspiration not only from literature but my own experiences as a design professional. There had always been a need for me as a designer to be able to effectively describe the work I was doing and at the same time, help my company measure the value it was bringing. Also, to build my professional journey as an interdisciplinary design learner, this thesis helps me explore how to communicate the value and importance of design to other disciplines and professionals. This improves my credibility as a designer and holistic understanding of how different streams perceive and understand each other. The thesis fits well in the context of the international design business management master's degree requirements and knowledge to be accepted as a thesis done under the program.

2. Theoretical Background

The literature review has been divided into four sections. The first part reviews the literature on measuring design value, the second part reviews the challenges faced in implementing design in the management of companies, and the third part provides a meta-theory built on both angles of strategy and design and how they have an impact on dispositions for design of investors and business managers and finally, the fourth section expands on communicating the value of design which is extended through some methods used in the industry.

2.1 Why should the value of design be measured

The word 'design' has various meanings and can refer to a concept or strategy, an action, a plan or a finished outcome (Heskett, 2005). This plethora of meanings is also shared by the creative ambiguity that designers like to operate in. The demonstrated performanceenhancing benefits of design have sparked avid scholarly interest in the role of design as an approach to innovation and growth, commonly known as design thinking (Bettiol & Micelli, 2014; Brown, 2008, 2009; Brown & Martin, 2015; Carlgren et al., 2016; Dell'Era et al., 2020; Gruber et al., 2015; Johansson-Sköldberg et al., 2013; Liedtka 2015, 2018; Noble, 2011; Seidel & Fixson, 2013). Research shows that design can improve a company's performance by influencing Strategy (Liedtka and Kaplan, 2019; Knight et al., 2020); entrepreneurship (Patel and Mehta, 2017); marketing (Beverland and Wilner, 2015); and business value creation (Brown, 2009). These novels and useful new possibilities form the basis for the design of new business models (Reymen et al., 2017). Such new knowledge, ideas and solutions in design thinking form intellectual capital resources in organizations, which are valuable and firm-specific resources which help firms to innovate (Nahapiet and Ghoshal, 1998; Subramaniam and Youndt, 2005; Fu et al., 2017), design thinking practices have the capacity to create organizational innovative capability by identifying opportunities and reconfiguring resources to exploit them and is both theoretically and empirically important (Liedtka, 2018; Robbins and Fu, 2022).

Different literature and authors have multiple meanings for the value of design by corresponding them to different domains. For example, in the four powers of design article, Mozota explains how design can impact business value by influencing financial value, substantial value and organizational rationality (Mozota, 2010). Despite such extensive claims, empirical evidence on the performance, the impact of design thinking is very limited and research to date points to a 'lack of a body of research that demonstrates systematically design thinking's ability to deliver value' (Liedtka, 2020, p. 78; Roth et al., 2020; Carlgren et al., 2016; Micheli et al., 2019). As the meaning of design has varying definitions, it corresponds to having the value of design being difficult to define. This creates a contradiction as measuring and communicating the impact of design value is a key success factor for designers who want to successfully implement their design strategy (Mozota, 2010). In the context of management and business managers, it is fundamental to communicate a service in business terms and show measurable and quantifiable value. Investors and managers rarely invest in domains that cannot be quantified and treat them as risky investments.

2.2 Challenges faced in implementing design

Based on the literature review, four umbrella categories of literature on the challenges of implementing could be identified as relevant for understanding factors that can negatively impact the communication of design: (1) perception of design (Kouyoumjian et al., 2022; Klenner et al., 2015), (2) conceptual or exploratory literature on design thinking (Bagno et al., 2017; Nagaraj et al., 2020; Nakata and Hwang, 2020; Liedtka, 2015; Cousins, 2018), (3) the education and attitudes of designers (Kaplan and Norton, 1992; Kouyoumjian et al., 2022; Mozota, 2010; Robbins and Fu, 2022), and (4) the organizational culture and practices in management (Ansari et al., 2010; Detert et al., 2000, p. 851).

Some key points from this literature have been noted down in Table 1.

Perception of design by business managers	Literature on design thinking	Attitudes and education of designers	Practices and organizational culture of business managers
Lack of empirical evidence to quantify design value (Cross, 1982)	Conceptual and exploratory literature which is anecdotal, or perspective based (Bagno et al., 2017; Nagaraj et al., 2020; Nakata and Hwang, 2020)	Designers have not embraced design metrics or shown management how their design connects to company performance (Kouyoumjian et al., 2022)	Interplay of value misfit and implementational climate, and Implementation challenges linked to cultural misfit for design thinking (Carlgren & BenMahmoud-Jouini, 2021)
Hard to manage what can't be measured (Klenner et al., 2015)	Limited literature for managers to be able to measure the impact (Meinel et al., 2020)	Ambiguity in work creates difficulty in creating a value model (Mozota, 2010)	Ineffective cross- functional collaboration, unactionable design thinking, and fragmented design efforts with no common framework (Björklund et al., 2020)
Low involvement of top- level managers (Kouyoumjian et al., 2022)		Designers lack knowledge of management concepts (Klenner et al., 2015)	Top management support, leadership of the design function, generation of awareness of design's role and contribution, Interfunction'II coordination, evaluation of design, formalization of product and service development processes

Table 1. Challenges faced in implementing design in different streams of literature

(Micheli, Perks, &
Beverland, 2017)
Difficulty involved in
proving the value of
design thinking work,
the communication
style, the misfit with
processes and
structure, and the
threat to power
dynamics (Carlgren et
al., 2016)

Firstly, the lack of knowledge and empirical evidence on how to link design to business growth makes the senior leaders often reluctant to divert scarce resources to design functions. This is problematic as a strong design capability and environment requires company-level decisions and investments (Kouyoumjian et al., 2022). This gap can be formed due to the rational and practical domains that investors and business leaders usually are educated in. Investors tend to only see the outcome and not the process behind it, therefore giving design value a 'hidden' effect. (Klenner et al., 2015).

Secondly, many of the existing papers on design thinking are conceptual and exploratory (Bagno et al., 2017; Nagaraj et al., 2020; Nakata and Hwang, 2020), entrenched in practice (Magistretti et al., 2021a) or anecdotal and prescriptive (Liedtka, 2015; Cousins, 2018). Academic and theoretical backing is available but reproducible context is missing. Just a few studies on the impact of design thinking on innovation have been conducted (Meinel et al., 2020; Nakata and Hwang, 2020) which do examine the direct or conditional impact of design thinking on innovation outcomes (Robbins and Fu, 2022), but they do not provide managers with information on how this impact can be measured before an investment has to be made.

Third, the reason for why design is still not considered as a core feature by management is because designers have themselves not embraced design metrics or actively shown management how their designs tie to meeting business goals (Kouyoumjian et al., 2022). Designers lack knowledge of management concepts just as business-people lack knowledge of design concepts. To leverage design and prove its value, designers need to go out of their way to learn and integrate how design value can be communicated. Further on the ambiguity that designers work in, creates a difficulty to implement a value model in their everyday practices, nor do they see any real incentive to quantify the value, therefore making measurement and management harder (Klenner et al., 2015; Mozota, 2010).

Finally, work by Ansari et al. (2010) views practice as a range of prescribed values, beliefs, behaviors, artifacts, and symbols and the power distribution among actors and an organizational culture as per Detert et al. (2000, p. 851), is a combination of artifacts (also called practices), values and beliefs, and underlying assumptions that organizational members share about appropriate behavior. Based on this view, work by Canato et al., (2013), Chatman & Jehn (1994) and Klenner et al. (2015) argue that all management practices are underpinned by values and assumptions that are reflected in norms and

expectations and inform formal and informal working practices, artifacts, symbols, rituals, behaviors, and patterns of speech. Various perspectives show that the implementation of a new practice can result in conflicts arising from the values associated with the practice and the culture of the adopting organization (Carlgren & BenMahmoud-Jouini, 2021). Lozeau et al. (2002) describe this as a "compatibility gap" between the cultural characteristics of the practice and those of the adopting organization. Ansari et al. (2010, p. 78) refer to "cultural fit" and "the degree to which the characteristics of a diffusing practice are compatible with the cultural values, beliefs, and practices of potential adopters." Other authors (Klein & Sorra, 1996; Love & Cebon, 2008) highlight the role of the value consistency between the organization and the practice. The implications on design thinking implementation in organizations is observed in the work of Carlgren & BenMahmoud-Jouini (2021) which shows the interplay of value misfit and Implementational climate, and Implementation challenges linked to cultural misfit for design thinking. Björklund et al. (2020) in their study, identifies three pitfalls associated with a mismatch between design thinking and the adopting organization: ineffective cross-functional collaboration, un-actionable design thinking, and fragmented design efforts with no common framework. Micheli, Perks, & Beverland (2017) study identifies six practices and related tensions which limit the implementation of design in organizations: top management support, leadership of the design function, generation of awareness of design's role and contribution, Inter-functional coordination, evaluation of design, formalization of product and service development processes. Carlgren et al. (2016) highlights the difficulty involved in proving the value of design thinking work, the communication style, the misfit with processes and structure, and the threat to power dynamics. These can be understood considering design thinking cultural characteristics such as subjective and aesthetic ways of knowing and team autonomy and informality. These studies show the impact of cultures and practices on implementing design in organizations.

2.3 Communicating the 'Understandable' value of design

The business value of design has been well established (Liedtka and Kaplan, 2019; Knight et al., 2020; Patel and Mehta, 2017; Beverland and Wilner, 2015; Brown, 2009). But the word itself, value, means so much more than the monetized definition imbued by capitalism. Value is an empathic, purpose–driven, and human–centered concept. It defines worth and usefulness beyond financial gains (Briselli, 2022). Design creates value, the value can be described as financial, social, strategic, innovation, aesthetic, customer, environmental and so on depending on the scope that it is has been introduced from. But for creating value, design can be viewed to having roles which can come throughout or at parts of the development through functions and changes. Although, it is no longer enough to simply study design methods and empathize with an audience; we must also acknowledge the blind spots inherent to the power structures in our work, question our interpretations of "designer" vs. "user," and engage more of our audience as experts in their own experience (Briselli, 2022). This equivocation of the definition of design from the design field then transcends to other 'users' is being communicated, which in the case of this thesis are investors and a company's management.

To navigate these challenges, considerable work has been done both in design and business literature to facilitate the use of design and merge strategic processes with design processes. Among the discussed topics, a recurring theme in most literature and the integrative models shows a focus given on communication and language between designers and managers. The effects of using this language have also been tied to improving the narrative of a business

plan, increasing belief and trust with investors (Klenner et al., 2015), creating a bigger impression on business managers and communicating strategy to own design teams (Mozota, 2010).

As this communication between design and business is based on processes, it naturally calls for design value to be quantified, estimated in advance, measurable after the fact, (Klenner et al., 2015) and effectively communicated to company managers irrespective of their fields. Further, for companies to face increasingly complex environments, requirement of models that can visualize, manage, and stimulate the workings of a company would emerge (Kaplan and Norton, 1992; Mozota, 2010).

In parallel, research that addresses the implementation of design thinking through a cultural perspective is not very prevalent, although recent few studies state the use of proposing design thinking as a cultural archetype, that associates challenges specifically focused on values and their enactment (Carlgren & BenMahmoud-Jouini, 2021). In their work, they use cultural archetypes to create awareness and foster dialog in order to understand and limit potential tensions, thereby better managing the adoption of design thinking. Micheli, Perks, & Beverland (2017) study explains how design elevation practices is impacted by the forms of legitimacy, which they include as pragmatic (which relates to the business cases), moral (design as the right thing to do) and cognitive (relates to value creation through design being taken for granted). These studies show influencing the culture perspective impacts communicating the value of design successfully.

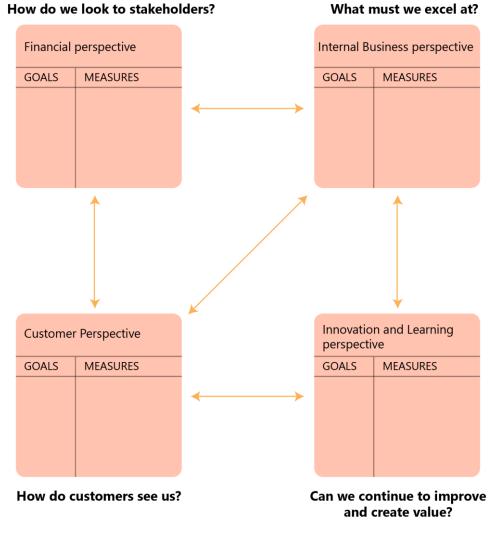
Carlgren & BenMahmoud-Jouini's (2021) study also shows through the interplay between value misfit and the implementation climate, the importance of utilizing both ways of impacting the culture and management innovations discussions for better implementation of design thinking/design.

To answer this need to communicate and integrate design value while enhancing a company's understanding of its processes, various tools and models were studied. The Four powers of design framework were used by Pentagon design as a background to create their value offerings in their proposals. Whereas the design indexes like McKinsey design index and the Design management institute, Design value index were tools which inspired investors during the preliminary interview discussions to adopt design in their processes.

- Four powers of design

In the Four powers of design framework, Mozota describes the need for a value-based model that is built on the Balanced Scorecard (BSC) tool and correlates the perspectives of the BSC model with domains of design, namely the four-design values system: customer perspective (design as differentiator); process perspective (design as coordinator); learning perspective (design as a transformer); finance perspective (design as good business) to the BSC perspectives, this model has been depicted in figure 2. Further, the Balanced scorecard is widely known by MBAs and often used by audit and strategy consultants making it a familiar and trusted model, by building the Four powers of design model on the Balanced scorecard model, it facilitates the changes in terms between the two models making the Four powers of design easier to comprehend. The Balanced Scorecard is split into four performance measures, (1) the financial perspective, (2) Internal business perspective, (3) the innovation and learning perspective, and (4) the customer perspective (as depicted in figure 1). Therefore, translating the BSC model by carefully substituting practical terms

whenever they can be used without loss of precision helps facilitate the convergence of design and management. The design value model and its application through the Balanced Score Card toolkit provide a common language for designers and managers and this can help the design profession effect a change from project-based to knowledge-based (Kaplan and Norton, 1992; Mozota, 2010; Sarasvathy, 2021).



The Balanced Scorecard Links Performance Measures

Figure 1: Balanced scorecard, Source: Based on, Kaplan, R. and Norton, D., 1992. The Balanced Scorecard—Measures that Drive Performance. [online] Harvard Business Review. p. 32

1. THE CUSTOMER VALUE PERSPECTIVE

How should we appear, through design, to our customers in order to achieve our vision?

Increase market share/% products or services above mean price. Improve brand image/% products or services sold under our brands. Improve cusustomer satisfaction/User oriented design; customer statisfaction survey.

VISION

3. THE LEARNING PERSPECTIVE

How does the design department sustain our ability to change and improve?

Recruit high potential profiles/recruitment design. Competent staff/Improving learning abilities through design. Motivated and empowered staff/ Working through design on transversal multicultural teams.

2. THE PERFORMANCE VALUE PERSPECTIVE

How does the design department improve the process we excel in? Improving the innovation process/more projects conducted per year. Improving production process/ fewer defects. Implementing CRM/ Design in information systems management fewer complaints.

VISION

4. THE FINANCIAL VALUE PERSPECTIVE

To succeed financially, how should design appear to our stakeholders?

Increase turnover/% sales of new products or services. Improve intangibles/Number of licensed and protected designs. Improve ROI/ Improve results versus capital invested in design projects.

Figure 2: How design creates value from the perspective of the BSC, Source: Based on, Mozota, B., 2010. The Four Powers of design: A Value Model in design Management. Design Management Review, 17(2), p. 48

VISION

NOISION

Design indexes

Indexes like the McKinsey design index (MDI) by McKinsey and the design Value Index (DVI) by the design Management Institute, identify key areas of action that companies can take to reach the 'top quartile of design performers' work as scoresheet metrics (Figure 3). These indexes are created by consultancies and institutes to track the value of publicly held companies that met specific design management criteria over a period, further organizations create their own models and frameworks which companies can then follow to achieve high scores in these indexes. Figure 3. depicts the four perspectives of the McKinsey design Index, as per McKinsey the top quartile companies facilitate design in their companies by having these four perspectives. Namely, the top scorers in the Mckinsey design Index (1) include design as part of their analytical leadership, (2) view it as cross-functional talent, (3) align it with the user experience and (4) use it for continuous iteration. (Kouyoumjian et al., 2022). These tools are created to improve/increase the use of design by a company by following specific parameters to improve the performance of a company and are created by surveying many companies and their growth (Westcott et al., 2013). Although they don't explicitly explain how improving these design parameters can improve a company's functioning, they do act as provocative models.

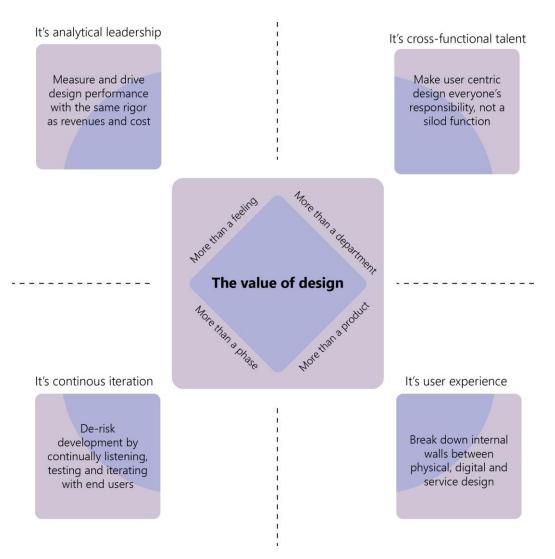


Figure 3: McKinsey design Index, Source: Based on, Kouyoumjian, G., Sheppard, B., Sarrazin, H. and Dore, F., 2022. The business value of design. [online] mckinsey.com.

2.4 Meta-theory: the predefined dispositions that exist between design and business

In the literature studied, there were linkages to how attitudes, cultures, and perceived meanings impact the perceptions of investors and company representatives on design. This links to the habitus and dispositions theory which are concepts in sociology. This includes the attitudes, culture, way of communication, and mindsets that create tension which eventually creates hinderances to implementing design by businesspersons (Klenner et al., 2015). Usually, the company's management board is made up of business managers and leaders where most investors and business professionals are educated in scientific institutions, which promote objectivity, rationality, neutrality, and the search for truth, whereas designers value practicality, ingenuity, empathy, and appropriateness (Cross, 1982). This creates a habitus or socialized norms or tendencies that guide behavior and thinking (Bourdieu, 1980; Wacquant, 2005). Designers employ divergent thinking in generating multiple and new solutions and responses to a challenge or situation, whereas businesspeople typically use a convergent thinking approach in analyzing the available solutions and options to determine the most logical and practical way forward (Liedtka,

2000). The convergence of these two approaches creates tension, which needs to be effectively managed. Further on the differences in education and practice, there is also a communication gap and as the value of design is being communicated primarily to stakeholders that are not designers it becomes crucial to use language that the broader audience understands. Tensions and contradictions arise when people are encountered and challenged by different contexts and also the cultural difference between investors and designers that creates these tensions and which leads to a limited understanding of each other's domains (Klenner et al., 2015; Bourdieu, 1980). Traditional performance measurement systems specify the actions, and in the case of investors and management specify the risks and investment liberty, and then measure if those actions have been taken. In that way, the systems try to control behavior (Kaplan and Norton, 1992).

In my study, some investors and business representatives position these roles according to their personal experiences and preconceived notions they work in/have worked in. This creates dispositions and limits their understanding of the role of design. I have related this to 'Professional habitus', a framework built on Pierre Bourdieu's 'habitus' theory. Table 2 shows how the interplay between the practices and education of designers and business managers creates tension through difference and forms a professional habitus. Most commonly, these roles of design have been limited to activities like rebranding, aesthetics, app design and customer experience, etc. Although they very well create value through design and are important, their dispositions limit their perception of design to these roles and effects its use in their professional domains.

Practice and education of businessperson's	Tensions through differences in professional habitus	Practice and education of designers
Built on objectivity, rationality and neutrality	Differences in education and practices of designer's and business managers	Built on practicality, ingenuity, empathy and appropriateness
Convergent thinking	Convergent vs divergent thinking	Divergent thinking
Practice based on numbers and calculations	Cultural differences entrenched in practice	Practice is based on tacit data and curation from ambiguity
Business terminologies	Communication gap between terminologies	Design terminologies

Table 2: The differences in practice and education of businessperson's vs designers create a professional habitus in their perception of each other's domains in my own reasoning

To conclude, the review finds the need to communicate the value of design and the challenges being faced in communicating this value. The review also finds connections between the perception of design for investors and business managers and their cultures and professional practices and explores studies that have been conducted to mitigate these connections from both the cultural and the management innovation framework perspectives. Therefore, stating for the value of design to be communicated, it needs to be facilitated from the cultural perspective and by showing the implications of design to

managerial innovation practices and discussions. The meta-theory further develops this connection by reviewing it from a sociological perspective.

3. Methodology

The data collection of the thesis was broken down into two stages, the first-round interviews and the second-round (final) interviews. The first-round interviews were open structured interviews aimed at creating the research setting and compromised of six interviews from participants related to investing, design consultancies, and in-house designers. This helped gather important data on formatting the research question for more directed research.

The second-round interviews were aimed at gathering more specific data through a semistructured interview method and an interview guide created to help answer the research question - 'How do investors and SME business managers' perception of design compare to what they value in considering and tracking investments?'. Ten interviews were conducted between investors from various investment strategies and CEOs and board members from companies. The interviews were then coded and analyzed using a combination of inductive and deductive analysis to form the findings for this thesis.

3.1 Data collection

3.1.1 First round interviews and collecting data

The preliminary interviews/discussions were focused on open data collection and understanding the processes of investing, working of a design agency and views of established designers in the industry on the business value of design and how is it being perceived in their companies. There were multiple interviews conducted with six participants under this preliminary phase (Table 3), each interview had an open structure and was intended to gather knowledge and set a premise of how these industries and professionals operate. They comprised of four interviews/discussions with one professional from the Private equity investment strategy, five rounds of discussions with two participants from a design agency, and one interview each with three different design professionals (Lead design manager, Chief Design Officer, PhD. Design researcher). These discussions helped in collecting data and creating assumptions which then needed to be validated by a more structured process.

Nr.	Pseudonym	Profession	Years of experience	Company	Location	Interview duration (min)
1.	Henry	Private equity investor	26	Company 1	Finland	300
2.	Mathilda	Lead design consultant	15	Company 5	Finland	350
3.	Damon	CEO of a design agency	25	Company 5	Finland	120

Table 3: First round interview informants

4.	Lause	PhD design researcher	6	Company 6	Finland	45
5.	Alicia	Lead design manager	23	Company 7	Sweden	60
6.	Frank	Chief design officer	28	Company 8	UK	65

3.1.2 Second round interviews

After gaining insights from the literature review and preliminary research interviews, it was found, what is perceived as design and design value, varies among investors and business managers based on their experience and knowledge, investors and business managers work with a set of work practices and procedures and continuously try to find ways to improve them, and notions on the way a service feels clear/unclear to them. These initial findings were then synthesized into three themes, that can help answer the research question (1) how and why design value is perceived the way it is, (2) what do investors and company managers value during an investment, and (3) the methods for how design value can be communicated. This led me to refine my research question and divide it into three sub-questions:

Scope 1: How is the value of design perceived by investors and business managers?

Scope 2: What do investors and business managers value during an investment duration?

Scope 3: What are the methods to effectively communicate design to Investors and business managers?

Participants:

This part involved interviewing participants from Finland based on their profession. It comprised of ten questions across various themes (see Appendix 2 for the list of interviewee questions) and was tweaked accordingly for the two groups. A total of ten interviews (Table 4) were conducted using a semi-structured interview process, each followed by an open unscripted discussion. All interviews were online on Teams and then recorded for transcribing. The participants were divided into two groups:

Group 1: Investors

The investor group participants for the study varied based on their investment strategy from Private equity, buyout and growth investment strategy mostly from Finland or investors who have practiced in Finland. Investors were selected based on their experience and their time as an investor in companies. The selected participants were either experienced with more than 20 years of experience or a few in their initial years (5-15 years). Eight participants were interviewed for the data collection of this group.

Group 2: CEOs and board members of Small Medium Sized companies

This group is comprised of CEOs and board members of SMEs (companies with fewer than 250 employees and a turnover of no more than EUR 50 million) in Finland. Selection criteria for these participants comprised of - if any investment has been made in their companies

and if they have been a part of the strategic board of the company. Two participants were interviewed for this group, more interviews would have been preferred but there was difficulty in booking an interview slot with this group of participants.

Nr.	Pseudonym	Profession	Years of experience	Company	Location	Interview duration (min)
Group 1						
1.	Henry*	Private equity investor	26	Company 1	Finland	55
2.	Michael	Private equity investor	29	Company 1	Finland	65
3.	Mason	Private equity investor	25	Company 1	Finland	65
4.	John	Growth investor	8	Company 1	Sweden	55
5,	Marco	Growth investor	8	Company 1	Finland	60
6.	Thomas	Growth investor	2	Company 2	Finland	60
7.	Saga	Growth investor	1	Company 2	Finland	60
8.	Liam	Growth investor	2	Company 2	Finland	50
Group 2						
1.	William	CEO	23	Company 3	Finland	60
2.	Kim	Chair of board	23	Company 4	Finland	65

Table 4: Second round interview informants

*Second interview after Round 1 interview

Anonymity:

For the scope of this thesis, a few participants asked to be anonymous due to their personal preferences. In my own decisiveness, I have decided to make all my participants anonymous to respect their privacy and opinions. This thesis is not influenced in any way by their name and/or demographics, but is influenced by their profession, hence I have added the profession and the type of investment in the case of investor participants.

Structure and type of data collection:

The goal of the interviews was to generate new data and a depth of understanding. This data was imagined to be based on tacit knowledge, experiences and attitude that the participants might show regarding their profession. Due to this I chose to conduct a qualitative research process for data collection. Further, a semi-structured interview protocol was developed,

which allowed space for personal perspectives and renditions. These were backed by a structure through carefully constructed unbiased questions. The sole purpose of this interview process was to gather deep insights by conducting an analysis on them. All interviews conducted were for 60 minutes each and comprised of the ten questions in a semi-structured format, followed by an open discussion which was facilitated in an organic sense. There were slight modifications made to questions taking cues from the interviews as they progressed, but nothing considerable to disturb the quality or content of the research. The interviews were conducted online on Teams and were audio-video recorded and then transcribed orthographically and visually, reproducing all spoken words and sounds, including hesitations, breaks in speech, laughter, long pauses, strong emphasis, and visual cues extracted from facial contemplation, speed and excitement, hand gestures, body language, and expressions. These special expressions were written alongside the transcription. There are many different styles of transcription (e.g., Edwards & Lampert, 1993) but for thematic analysis this level of audio and video transcription is sufficient (Braun & Clarke, 2012).

Questions and themes:

The questions in the interview were tailored for the 2 groups differently and were based on insights from the preliminary interviews and the literature review and were formulated to answer the three themes discussed earlier. (1) How is the value of design perceived by investors and CEOs? (2) What do investors and managers value during their investment tenure? (3) What are the methods to effectively communicate design to Investors and company managers?

The questions were structured around topics like opening and knowing about the investors and CEOs and their company, their roles and strategies, Behavior and attitudes (dynamics in the company and relations), Investing in a company (before and after), Investment criteria, participants perspective on design and its use, what motivates them to invest in a project in the company. The questions were created by merging the insights from the preliminary study and the literature review and were formed to be able to gather data from both inductive and deductive thematic analysis. The inductive analysis was used to validate if the assumptions and insights from the preliminary study and literature review were correct. Whereas deductive insights were used to find new patterns which might be overlooked due to the bias from the first round of interviews.

3.2 Methodology

3.2.1 Method: Thematic Analysis

For analyzing the data from the interviews, I conducted an In-depth thematic analysis. The semi-structured interview structure was complemented by thematic analysis as it provided more flexibility to assess new themes and patterns of the qualitative data.

What is Thematic analysis?

Thematic Analysis is a method for systematically identifying, organizing, and offering insight into patterns of meaning (themes) across a data set. Through focusing on meaning across a data set, thematic analysis allows the researcher to see and make sense of collective or shared meanings and experiences (Braun & Clarke, 2012). As multiple themes can be generated from doing thematic analysis, it is important that the themes derived pertain to

the research question being explored. Thematic analysis is widely used by researchers in analyzing data new to their field and creating qualitative insights backed by multiple participants.

Why Thematic Analysis?

Thematic analysis does not force the researcher to be an expert in the topics and to know the background in depth (Braun and Clarke, 2012). This opens possibilities of new interactions and perspectives which the researcher can cross-examine with the experts in the industry. As this was my first inception in the field of investing and business management, doing a thematic analysis made me use my own experiences as a design researcher to create the themes. This allowed flexibility in my research process and analysis. Furthermore, the sub-research questions, the interview questions, the semi-structured interview process and the data collection all suited thematic analysis.

Choices in thematic analysis:

This thematic analysis was done using a combination of inductive and deductive approaches. Inductive thematic analysis was used to derive the codes and themes from the content of the data, in parallel a deductive approach was used to derive insights pertaining to the research statement and the interview questions. This gave a wider spectrum of codes relating to planned and new themes. This type of dual combination is mostly used in thematic analysis as, it is impossible to be purely inductive, as we always bring something to the data when we analyze it, and we rarely completely ignore the semantic content of the data when we code for a particular theoretical construct. One tends to predominate, however, and a commitment to an inductive or deductive approach also signals an overall orientation that prioritizes either participant or data-based meaning or researcher or theorybased meaning (Braun & Clarke, 2012). Being the sole researcher and author of this thesis, the data analysis was chosen to be a combination of inductive and deductive thematic analysis. Deductive as the interview research question was a formulation of months of previous research conducted by me and gave me a sense of assumptions that I wanted to validate using the analysis. Therefore, a part of the coding and finding themes was related to clarifying these assumptions. The inductive thematic analysis allowed the freedom to explore new themes which were previously not found or non-existent in the literature review and previous research. This combination allowed a mixture of grounded preimagined data and new data from stories that were not affected by my previous research.

3.2.2 Use of thematic analysis in this study

Reviewing the data:

All interviews were recorded with audio and video. Later using these recordings and reviewing the interviews multiple times analytically and critically, they were transcribed. I used Microsoft Word to transcribe each interview and based on my initial perspectives and inferences from the data I highlighted sections that I found interesting, not previously explored, and that strengthened or validated the pre-research.

Generating initial codes:

After creating initial notes of the transcripts, I imported the data to Atlas.ti. Atlas is a tool used for qualitative assessment of data to create actionable insights. Realizing the bulk of data, I had collected during the interview phase, there was a need for software that could

help showcase it using a simpler interface. Atlas provides features like a code manager and network analysis which helps researchers with a visual organization of their data. Codes were then created using thematic analysis of the data. In all these phases there was a use of inductive and deductive analysis. These codes were labeled according to how they answered or might affect the research question. Multiple interviews participants sometimes mentioned similar insights which created codes with a grounding in many interviews. During this stage, 64 codes were created using 288 quotations from the interviews (see the selected quotes in appendix 1A-C in the appendix). There was data which was coded in different sections due to their relevance in more categories.

Finding themes:

This bulk of codes then needed to be divided into themes based on their relevance to the research question. This was a difficult and time-consuming task due to the huge amount of information and codes. Therefore, I decided to create a network map in Atlas. After importing each code in Atlas, they were then placed according to the data they consisted of or irrelevance to their overall meaning into clusters. I then created associations in these clusters on how one code affects, improves, contradicts, is part of, and is based on another. This created a web diagram that showed relations between different codes. I then condensed these clusters into code groups. 13 code groups were created which correspond to 13 initial themes (see the themes in figure 6). This gave me a thematic map with the associations between code and code groups.

Reviewing the themes:

The thematic map was able to show codes that could be merged with other groups and simplify the data. A thematic map is a visual (Braun & Clarke, 2006) or sometimes text-based (Frith & Gleeson, 2004) tool to map out the facets of your developing analysis and to identify main themes, subthemes, and interconnections between themes and subthemes. By using a thematic map, I was able to process the codes with a more investigative approach, I was able to find similarities in codes, create associations between them and eventually also create hierarchies existing in the codes. This view helped me structure my themes for analysis and structure the flow of this document. These code groups and initial themes were then corresponded to the sub-research question to find how they were associated with the research question. I used a comparative lens to view how do the themes answer the sub-research questions and color coded them. Where red color denoted themes which act as hindrance towards communicating design, the green color denoted neutral themes which were important to structure and argument the two other groups.

Defining and naming the themes:

Although the themes created in the previous step were the central junction for explaining the codes. The colored comparative lens provided another perspective on documenting the themes. Further I divided the themes under each sub-research question and used them to structure the findings section.

4. Research setting: Understanding design investments

The first round of interviews and discussions with Pentagon design acted as the research setting for the thesis and provided an industry background on investing. This section has been included to depict the thesis background to the reader and is not a direct part of the findings but instead will be required to understand the thesis setting better. These findings include:

4.1 Investing is a cyclic process

This section describes some basics of an investment life cycle from an investor's perspective, to explain to the reader how an investment process works. Knowledge of this life cycle makes the reader understand how the role of the investor and the company changes during these phases. It has been simplified enough to showcase the important sections needed for this thesis.

Investing is a cyclic process, where the ownership changes from one owner (lead investor/chairman) to the next. The investment cycle can be divided into various phases based on their chronology during the investment life cycle and are repeated by every new owner. Although different investors have their own personal investment criteria, owner roles and evaluation criteria which are parts of these 3 phases, the overall umbrella phases remain the same. These phases are categorized into the buying phase, the ownership phase and the exit phase.

Pre investment - Screening, Due diligence, investment decision

During ownership - Mentoring, guiding and strategic board functioning

Exit phase – Planning the exit, documenting assets, negotiating the valuation to the next buyer

Pre-investment (buying stage): This stage begins with a company either at the end of its ownership under an existing investment or when a company becomes open to the market for investment. This stage then attracts multiple buyers who gauge the company based on their own investment criteria and then evaluate the company by conducting a due diligence to create their own evaluations. Although these companies create their own valuations which are then negotiated with the new buyer. After the negotiations a new investor then buys the company and the ownership changes. This process can be different for different types of investment strategies, for example for growth investors they own a small percentage of the company and are part of the board of multiple investors. Whereas in buyout strategies there is only one investment team who then takes ownership of the company. Although these strategies influence the role and participation of the investors, this thesis focuses on the lead investor of the round or the sole owner of the company.

During ownership: After an investment has been made with the new company, there is an initial settling-in period and then a strategy is formulated with the investor and the company management for the investment duration. This strategy is also called an action plan and can be sometimes divided into short term action plan and a long-term action plan. Not all investors create an action plan and if there is a proven growth track of the business, they do not bring make any major changes in the company strategy. In most cases investors don't influence the operational working of the company and their roles include strategic decision

making and mentoring the CEO and management. The initial phase of ownership is also associated with a lot of changes and acts as a good place for new projects or investments to be introduced. The investment strategy is then created and deployed, although most action plans are flexible and are iterated as time goes by. The growth of the company is prioritized during investment to increase its valuation during the exit phase. There are measures and legislation that state all decisions taken by the investors should always prioritize the growth of the company and not their own profits.

Exit phase: A typical investment duration lasts from around 4-6 years; at the end of the ownership the company plans the exit and documents the growth of the company. Another crucial part of the exit stage is to be able to leverage the growth and new developments in the company to the new buyers for negotiation. The investors create their own valuation of the company and negotiate it with the new buyers who then conduct their own due diligence and investigation to create their own evaluation. The company's valuation is not defined as a set science but instead created on valuations by compiling quantifiable and tacit assets of the company by the existing owner. And if the new buyer shares the same philosophy, they ease the negotiation and buy the company. Beyond this a new investment cycle continues.

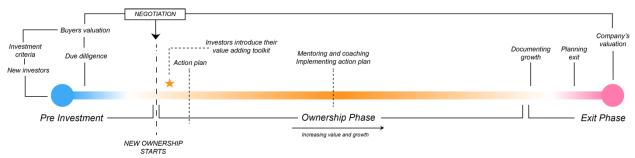


Figure 4: Simplified investment life cycle from an investor's perspective

4.2 Different type of investments

Types of investments can be denoted by investment strategies. In big asset management companies, there are multiple investment strategies with each strategy having its own dedicated team and methods. After a fund has been raised these teams then independently find companies worth investing in which would be lucrative to their strategies. These strategies differ from each other based on their share of the company, the investor's objectives, and the goals of their investment plan. For example, in Private equity buyout funds, which make up the largest segment of private market strategies, Buyout managers aim to take a controlling stake in mature businesses with the intention to improve the business and exit at a higher multiple. Since they are maturity investors, buyout investors are heavily involved in the board for strategic decision-making and may bring changes to the company as part of their value-adding toolkits. On the contrary, growth investing refers to capital allocation in potentially high-earning companies such as small caps, startups, and SMEs that grow much faster than the overall industry or mature companies. Growth investors usually have a smaller share in these companies and have a more passive role than buyout investors. They usually make plans with the company management pre-investment and then affect those plans by being part of the board. Based on the investment strategy there are also some special competences that investors bring on board to assist the companies they invest in like the ESG policy, and restructuring the balance sheet etc.

Therefore, the different types of investment strategies influence the role of an investor in the decision-making process of a company.

4.3 Investment criteria used by investors

When a company goes up for selling in the market, Investment criteria are the defined set of parameters used by financial and strategic investors to assess an investment opportunity. Most investors create a set of their own investment criteria through experience and practice. Based on the investment criteria backed by the due diligence report an investor can determine if they should invest in a company. Companies constantly try to improve their functions according to the Investment criteria of the investors to have a higher valuation and success in getting a new investment.

4.4 A catalyst for change

Through discussions with Pentagon design and Markus Sjoholm as a private equity investor it was inferred that during the initial phases of a new private equity buyout investment, there is an environment for change and the new investor was to bring something new to the company for potentially increasing its value from an early stage. This assumed that design could bring value to the company and investors relate design to providing financial and strategic value.

4.5 Who to pitch design to

During the initial discussions with Pentagon design, it was inferred that a company's management doesn't align design to be a strategic level change that limits its use and impact, but for a company to effectively start using design it should be introduced as a strategic function. The assumption is that investors and company managers would be interested in using design in the strategic functioning and decision-making process.

Although after analyzing the interviews all investors, irrespective of their investment strategy, and CEOs pressed upon the role of good dynamics in the company. The unanimous verdict is that most strategic decisions are taken with the combined consensus of the board. This was an important finding to determine the person or group who would be taking decisions which are the target stakeholders. Therefore, for the purpose of this thesis a company's management board was determined to be the primary point of approach to communicate and accelerate the use of design.

5. Findings

Based on the themes and findings from the thematic analysis, the findings and themes of the interviews have been broken down into 3 sections corresponding to the 3 sub-research questions.

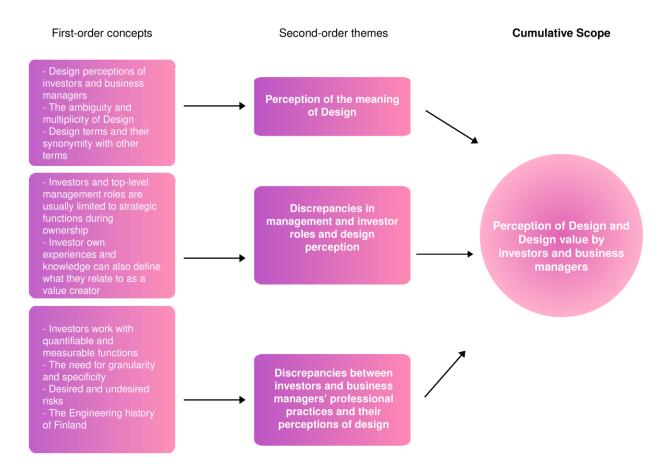


Figure 5a. Data Structure

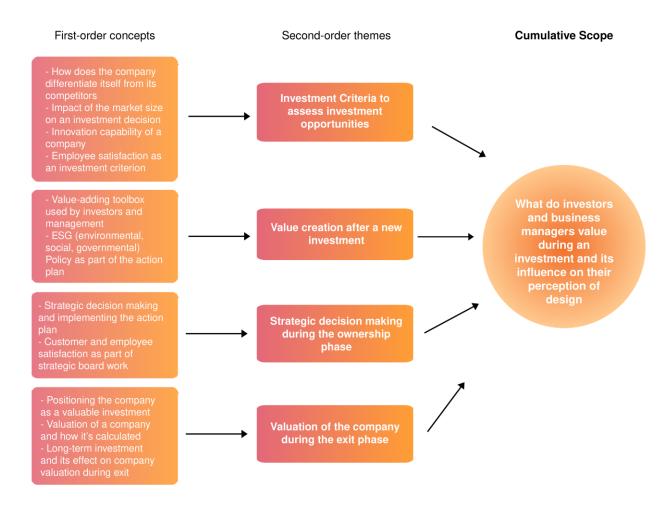


Figure 5b. Data Structure

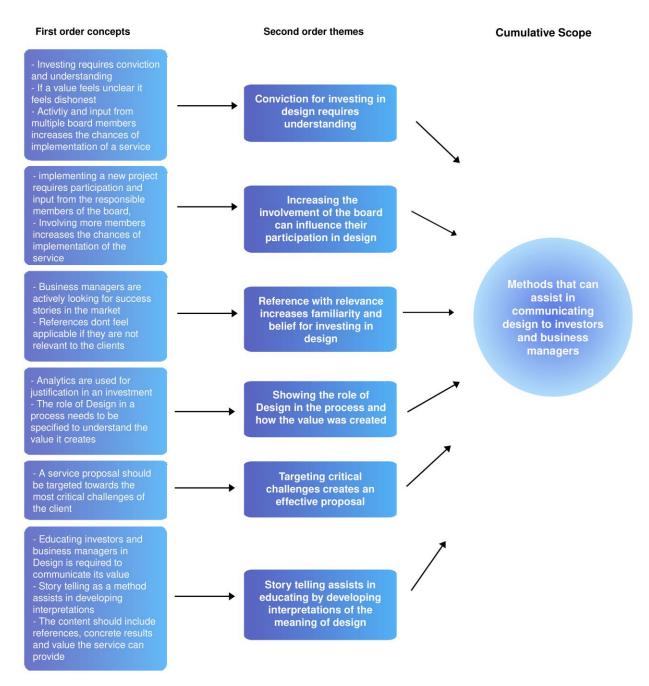


Figure 5c. Data Structure

5.1 Perception of design and design value by investors and business managers

Before understanding How the value of design should be communicated effectively, it was important to understand how investors and business managers perceive design and design value and what might be the reason for this perception. They have been categorized into three categories, 1) the meaning of design, 2) the professional practices of investors and business managers, and 3) their participation and role.

The 3 categories discussed above, the impact of Perception – Role – Practice of investors and business managers in communicating the value of design to investors and company management, were found to have linkages between them and influences the other and its

subcategories through the interviews. Figure 6. shows an affinity diagram of these affiliated associations, where quantitative connections refer to links between the sections which are due to design not being quantifiably measured, and qualitative connections to the links are based on the ambiguity of design and its terminologies. The following section will explain how these linkages were created.

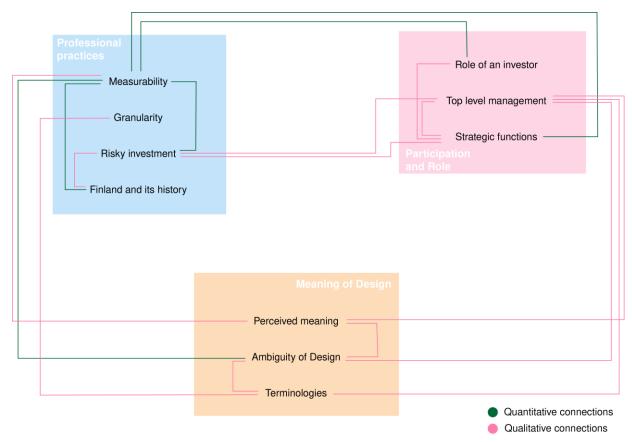


Figure 6: Affinity mapping of connections between, meaning of design-professional practicerole and participation of investors and businesspersons and how it affects their perception of design

5.1.1 Perception of the meaning of design

Through the interviews I was able to identify themes which were grounded and repeated by different participants from investors to CEOs. I then categorized these themes and elaborated on how they view design/value of design. This section shows how the perception of design is affected due to the own experiences of investors and business managers, and the ambiguity of the design stream.

- Design perceptions of investors and business managers

To explain how they view design it was imperative to understand what investors and CEOs mean when they are talking about the word 'design', what role do they place design in, based on their own experience, education, knowledge and use. For example, a participant stated that for most investors and business representatives design is just fancy words and should be limited to aesthetics and marketing:

"Design is some nitty gritty marketing jargon and there is no substance behind it [...] design is just some nice words because they really don't understand it." (CEO – Company 3).

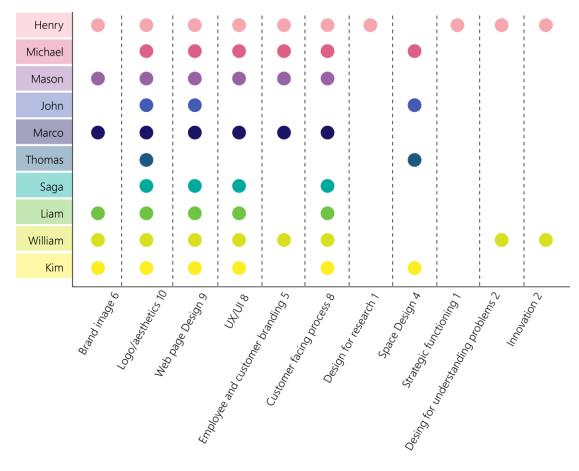


Table 5: The number of interviewees mentioning different roles of design

In most interviews, the perception of design as a term was repeated to be relating to these categories:

Brand image design, space design and mindfulness rooms, surface level design like logo, aesthetics, web page and UI, employee branding, customer facing processes and I one case patterns and fabrics.

"When I think about design, I mostly of course think about what's the user experience and so forth and only the customer-facing part" (Growth investor – Company 2)

There were also some investors who related design to strategic activities like:

Design for understanding problems, testing and creating possible solutions, design for research, design for assisting R&D, design for improving functioning of a company. (Multiple Private equity investors and growth investors from companies 1 and 2)

The number of examples relating to design assisting in strategic roles as compared to aesthetic and user experience roles were one out of every four participants. This helped me get an idea of how the investors and business managers in this study perceive the role of design in their organizations. The next step was to understand the cause of this limited perception.

- The ambiguity and multiplicity of design

Design was considered as an ambiguous term by investors and business managers due to the multiplicity existing under design. This confuses the investors and company managers who are aware of just a few of these roles. Interview participants asked for specificity when asked about their experience with design due to the wide spectrum of activities that come under design and their own perception of design:

"What do you mean when you say design? design is a big thing, and it has a lot of [...] subsections there, so I think it would be easier if we talk about something more specific. So, when you say companies are not using design, it's because they don't know where to start" (Growth investor – company 1)

This suggests that the discrepancy caused by multiplicity existing under the word design and design as a stream confuses individuals on its extent and use.

- Design terms and their synonymity with other terms

Another core reason for the limited view on design and therefore the value of design by investors and CEOs is terminologies used in design which are co-occurring in other functions of their organizations. Interview participants stated that the 'design terms' which explain a process or activity have a different term in their industry and due to the education and practice of business managers and investors the term used by them for the same activity is different and "gives the wrong idea". This creates a problem for the business managers to associate design with an activity they already have attributed some other stream to. These statements show how investors don't associate many activities with design as they haven't been taught/explained to them in those words.

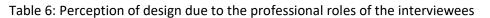
"My main initial reaction is that maybe it's not spoken as design, right? So, when I think about innovation and creating a competitive edge it goes more toward R&D and engineering and more of the strategic role [...] but that's just maybe because we never speak about it like design terms [...] but more in an industry level" (Growth investor – Company 1)

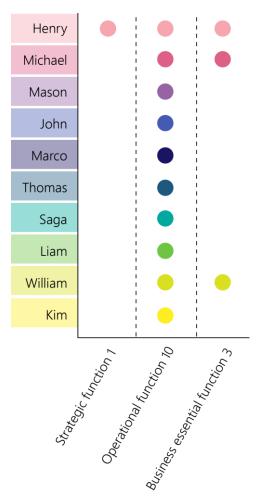
"You should consider not using the word design because it gives the wrong idea and people might think you are talking about Marimekko fabrics" (Private equity investor – Company 1)

In the views of the participants, the term design combined with the specific terminologies that exist in design streams confuses the investors and business managers with pre-existing terminologies used by them in their industry and streams, further limiting their understanding of the roles design can assist in.

5.1.2 Discrepancies in management and investor roles and design perception

Through the interviews, it was found that the role and participation of investors and business managers professionally limit their perception of design. This section describes their roles and how they influence/limit their perception of design. After conducting round two interviews, I found out the roles of investors and managers are very different in a company. This role is also affected by the position of the investor on the board and further by the type of investment strategy they are part of. This also influences the dynamics and role that an investor might have in a company. Therefore, for the purpose of this thesis, I have aimed to look at the owner or the lead investor and the company's management as points of contact.





- Investors and top-level management roles are limited to strategic functions during ownership

Investors are short-term owners of companies; their goal is to help the company scale and become bigger. Depending on the type of investment strategy, an investor's position and participation in the board can vary, but usually, they are part of the board as the chairman. Different investors have varying roles depending on the type of company they invested in and the investors' own philosophy. For example, some investors bring a lot of changes as part of their value-adding strategy, and some investors don't change much of the business case and rely on the companies' representatives to manage their company. In the interviews, all investors mentioned their roles were mostly part of the strategic functioning and strategic decision-making process and not much over the operational functioning of the company. Most investors believe that the operational decision-making in the business should be left in the hands of the company management as they understand their company best, and investors mostly are participating and interested in decision-making solely on the strategic front:

"The investors look at kind of the North Star metrics [...] our job is not to look at the day-today activities. But do we hit under the North Star metrics and strategic decisions and then, of course, it goes to the management [...] then we help create the value creation plan and they delegate it" (Private equity investor – Company 1) "Negotiation and financial discussions or if there could be a merger [...] that type of strategic discussions, I'm actively involved in. [...] when we decide to sell the company is basically based on my recommendation of the timing and how we would do that. I'm then managing that negotiation and process as well to find a new owner for the company" (Private equity investor – Company 1)

"The design area and similar smaller tickets is of course handled by the operational team, and I don't participate in those areas" (Private equity investor – Company 1)

Multiple participants noted that design was considered an operational feature and is not discussed in the strategic decision-making of the board.

Similarly for the top-level management, informants stated that the participation of the toplevel management is necessary in order to make a new change in the company. Although the top-level management mostly only discuss business critical and company's strategic functions as part of discussion in the board and weigh new projects and services by checking the financials.

"Everything is put into financials for the top-level management to understand. [...] that's an investment, it will have a payback time in three years and it's worth doing it. Otherwise, you will be just sort of throwing your hands in the air and making promises that nobody knows will happen or not." (Growth investor – Company 2)

- Investors' own experiences and knowledge can also define a value creator

Although, what defines as a strategic function/decision is also heavily dependent on the investment philosophy of investors and what is considered important by the company. According to an investor, an investment philosophy is a personal representation of what an investor thinks of as a value creator due to their own experiences and knowledge. These value creators are usually then introduced to companies by the investor and can also define what constitutes a strategic function in the company. As an example, for this investor good company management is a part of their investment philosophy:

"My philosophy is to find companies that have good management so that we don't have to change those people [...] we don't invest in the company; we invest in the people." (Private equity investor – Company 1)

In the interviews multiple participants stated they don't associate design with a strategic function and decisions related to design are usually not discussed at the board level. They placed design in the 'non-essential toolbox'. These statements state the ways of operating of investors and business managers for a long time and their old school traditional thinking limits their understanding and deployment of design in their companies further reducing their capability to understand the value and use of design:

"they're (investors) so used to doing things in a certain way that there has been quite a lot of, like, pushback from new ideas" (Growth investor – Company 1)

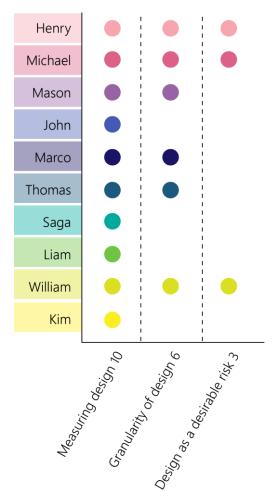
"Let's say people who have really old school thinking, they still put design or something (marketing) in a non-essential box and they don't think it's essential business things." (CEO -Company 3)

After analyzing and compiling this finding, it is observed that the role of investors and toplevel management is usually limited to strategic functions, and design in their perception is not considered a strategic asset, thereby reducing their understanding and participation towards it.

5.1.3 Discrepancies between investors and business managers' professional practices and their perceptions of design

The interviews showcased the professional practices that investors and business managers work with and the discrepancies in their perception of design. These professional practices combined with their current perceptions of design can have implications for design investments and communicating design value. This section will elaborate on the combination of these practices and the discrepancies in their design perception.

Table 7: Impact of the professional practices of the interviewees on their perception of design



- Investors work with quantifiable and measurable functions

Most of investor's daily work is associated with numbers, the profit and returns, company evaluations, pre and post investment operations, revenue profitability etc. are all quantitative functions that investors use to identify if an investment can bring profits for them or not. These are measurable properties that investors use to understand the market and their investments better. Similarly, the activities of business managers are also predominantly associated with quantifiable terms. Managers use management metrics to measure the functioning of a project and even teams:

"Investors love numbers, we live through numbers. It's how we look at companies, revenue profitability." (Private equity investor – Company 1)

"Quantifiably showing the value that you bring is really important in any sales process. [...] I think as investors, if I was making a decision on buying design services, I would want a pretty good business proposal" (CEO - Company 3)

Investors are interested in seeing analytics and for them to understand the value of a service, there should be analytical proof of the profits it was able to generate.

On the other hand, participants stated that design and the value design bring was hard to quantify or measure, multiple participants stated that for the board to be interested in a new project for the company they need to see the numbers associated with it. In multiple interviews investors mentioned how being able to measure the value of design quantifiably was important to understand their investments and measure growth. Through the following statement the investor provides a deeper meaning of how numbers assist investors to perceive value and if design cannot be explained in numbers it is considered a less important investment.

"Investors think it's (design) maybe one of those things that is kind of less important than profit and growth because if it was important, you would have the real hard numbers [...] If you can't put it into numbers, it's really difficult to get investors to understand the value" (Growth investor – Company 2)

Being able to quantifiably show the value a design investment can bring is required to get investors interested in the proposal.

- The need for granularity and specificity

The investors and company managers mentioned how they embrace granularity when it comes to investing and understanding the functioning of their companies. Their perception of a company's functioning does not come from umbrella terms but rather specific functions under that category. For example, when asked how their understanding of design can be influenced, a participant described the relation between talking in specificity and granularity is the norm for investors and makes it easier for them to understand and grasp:

"I like granularity so if you would speak about something in more specific terms, it would be easier to grasp because in our investments we have customer success as a different part then we have R&D as a different part which is then split up to user experience or the user interface. And then of course branding is then another part of marketing. I for sure think that if it would be more clear and helpful that we speak about design, but more in a granular level like I just mentioned" (Growth investor – Company 1)

This section argues that for the value of design to be understood, instead of saying design was able to improve the customer satisfaction or assisted in innovation, it should be broken down to exactly how it is being utilized and where is it being placed for example as an ethnographic tool to get on ground insights from customers or improving the performance of a product by merging the development with other studies and streams etc.

- Desired and undesired risks

Investing and taking risks are synonymous with each other. Investors take risks in their investments to increase the valuation of the company and try to navigate or use these risks to ensure profits during the selling phase. Regardless of the investment strategy investors try to invest in a proven business case which they can then scale, improve or maintain depending on their strategy to have a safe extrapolation of cash flow in the future. These business cases are created by measuring the profitability and growth of the company. Therefore, the risks are seen as desirable if the numeric can be quantified and predicted.

"Doing business is taking risks, but instead of blindly taking risks, we work out numeric and perceive the risks through reports" (Growth investor – Company 2)

If the investor or the board is not convinced of the profit or impact of a change in the business case, they view it as an undesired risk.

For some investors, the value of design was noted to be a risky investment. The reason as also mentioned in the sections above was the difficulty to measure and the ambiguity of the change it can bring.

"If you don't have proof of the value and metrics in check, they're (new owner/buyers) going to factor in a discount for the business because there's more risk [...] if all of this is well managed and done, then they can put a premium on the company because they can see there's no risk in this anymore. I expect design as well to be risky if its value cannot be proven" (Growth investor – Company 1)

It is therefore imperative to align and prove the value design brings to be as clear and understandable as possible to reduce the stigma of risk that it is associated with currently. Design is seen as an undesirable risk because investors and business managers can't easily see or prove that the increase in profits of a company is a result of design changes.

Participants also mentioned how Finland has a very risk-averse culture where investors think multiple times before investing, additionally they consider design projects and investing in major design services a risky investment, which further distances them from investing in design.

"Finland has a very Risk averse culture and I think that the service design projects are risky [...] the finish kind of like a culture is that you have you calculate 1st 10 times and then consider another 10 times then finally make a decision." (Private equity investor – Company 1)

- The Engineering history of Finland

Finland has been known to be a pinnacle of engineering feats in its history, with international companies like KONE, NOKIA, Fiskars, etc. Who have a respected product and customer base. Although interestingly in some interviews both investors and CEOs explained that most companies in Finland have limited design maturity and consider most Finnish companies to be predominantly engineering oriented and traditional. Since the context of this thesis is on medium-sized companies in Finland, now, this finding was highly relevant to be able to understand how Finland has an engineering-first culture and how that impacts the use of design. As per the participants due to the culture and history in Finland most investors and CEOs believe innovation, research and RnD are siloed functions specific to engineering,

and design is a final function to improve the aesthetics and usability of a product/service. This further impacts the attitude of investors and their investment criteria, an investor mentioned:

"In Finland design is often sort of undermined as a strategy. The mindset of the board members is more sort of engineering-first oriented, and they don't value design as much" (Private equity investor – Company 1)

5.1.4 Important gaps between design perceptions vs management roles and practices

The associations in Figure 6 also showcase multiple elements in each sub-category which have important gaps that influence or/and are a part of the other two. It can therefore be further argued that the practice - participation – perception of investors and business managers when combined creates unfavorable implications for making a design investment. Therefore, making changes to one element could have an overall effect in the cycle.

The gaps have been visualized in figure 7.

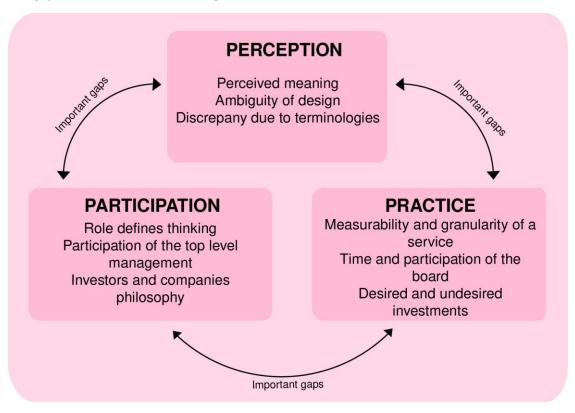


Figure 7: Gaps in Practice-participation-perception of investors and business managers create unfavorable implications for design investments

5.2 What do investors and business managers value during an investment and its influence on their perception of design

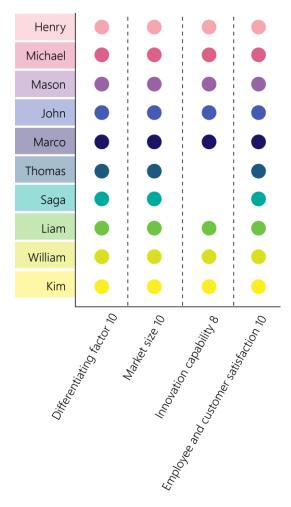
An investment cycle can be divided into three phases, before the investment, during ownership and the exit phase. The roles for investors and business managers change during these phases which also change what they consider most important. This section breaks down the three phases and explains what are the value generating elements in each phase and their implications on their perception of design.

5.2.1 Investment Criteria to assess investment opportunities

Findings from round one interviews define the meaning of investment criteria of investors. It has been repeated in this section in depth to give the reader a background.

When a company goes up for selling in the market, Investment criteria are the defined set of parameters used by financial and strategic investors to assess an investment opportunity. Most investors create a set of their own investment criteria through experience and practice. Based on the investment criteria backed by the due diligence report an investor can determine if they should invest in a company. Companies constantly try to improve their functions according to the Investment criteria of the investors to have a higher valuation and success in getting a new investment.

Table 8: Interviewees and their investment criteria



The findings in the round two interviews were able to derive what constitutes a general investment criterion for investors. Although the interview participants didn't explicitly specify how the investment criterion can have implications on their perception of design in all cases, the investment criteria section has still been noted as an important approach to value creation. This thesis argues that communicating design as a value creator in the investment criteria can have implications on the perception of design of investors and business managers. To give backing to this argument I have included an 'implication for design' section at the end of each investment criteria, this sub boxes describe how the current perception of design can limit its understanding in the investment criteria's.

The general investment criteria noted by the interviewees in round two interviews were:

- Differentiation from competition

For multiple investors, it was important to invest in a company that can differentiate itself within the market by its product, brand, strategy etc. It was seen to help create a competitive advantage which, if resonated with the market, creates a very potential and interesting investment target. Similarly, for constant development of their companies, management tries and creates differentiating advantages over their competition which then makes them stand out as investment opportunities for investors.

"Another important investment criterion is, how does the company differentiate itself? [...] That it has something that is quite unique, to differentiates itself or it has a strategy to become something that the others are not" (Private equity investor – Company 1) Implications for design – The current perception of design for investors and business managers limits their understanding of the different roles that design can assist in. If design can be positioned to provide a competitive advantage its role could be perceived as assisting the company in differentiating itself from the competition to the investors.

- Impact of the market size on an investment decision

For investors investing in medium-sized companies, market size is an important investment criterion where the market size was defined as having a yearly revenue of 5,000,000 Euros and a percentage of customers using their product. Market growth is also very important, which defines how big the market is and how it is growing. As investors are short-term owners of companies, they want to develop the company in very little time and try to invest in companies that have a good market growth rate.

"Market growth is always very important. [...] we want to be in areas that are not sort of a limited by market size." (Private equity investor – Company 1)

Implications for design – Investors perception of design is heavily influenced by the measurable value that design can create. Design value being hard to measure limits its association to improving the market growth rate and impacting the market size.

- Innovation capability of a company

Constant innovation and development of products and services were also considered an important investment criterion representing the ability of companies to deal with change and trying new possibilities. Investors mentioned that they like to invest in a business with good capability of innovation which can lead towards the growth of the company, although they are not involved in decision making towards innovation and consider it an operational feature:

"A proven business track and innovation pipeline is crucial for growth and for being on the top. And at the front line in the industry but I don't think we have any generic [...] advice for product innovation that we can give to the companies." (Growth investor – Company 1)

Implications for design – In the current perception of design for investors and business managers, they didn't relate design roles to influence the R&D and the innovation capability of a company. Therefore, design is not being considered as a value creator for improving the innovation capability of a company.

- Employee and customer satisfaction as an investment criterion

The effects of a good employee and customer satisfaction on the growth and profitability of a company have been established in practice and literature. Even in the interviews investors irrespective of their investment strategy, buyout/growth/private equity, pressed the importance of a good team and management as a function that can affect their investment. An investor summarized this insight by saying:

"We investors don't invest in the company; we invest in the people. Their skills and their know-how and, I think nothing is worse than starting to change the management" (Private equity investor – Company 1)

This further explains the role of the investor, where the investor is concerned with the strategic functioning of the company and relies on the management for the operational

functioning of the company. Also, depending on the investment strategy of growth investors who don't hold a majority share in the company, need to have a good dynamic with the company before investing in them to ensure their strategy will be considered by the company and the CEO. During pre-investment investors actively look at companies which have a good NPS (Net promoter score) score, this affects their investment decision and the premium they are willing to pay on the company. Even for business managers an important KPI (Key performance indicator) is employee and customer satisfaction. They usually measure this by metrics like ENPS (Employee Net promoter score) and CNPS (Customer Net Promoter score). The ENPS and CNPS show if customers are passionate about the services, you are providing them with and if they are in the center of your business from their perspective. Good customer and employee satisfaction is taken as an important innovation criterion by many investors.

"Biggest bottleneck for growth a lot of times is finding the right people, being able to recruit and retain talent, and that's where the real competition is. It's not finding customers; it's finding top talent employees [...] Employer branding is really important" (Growth investor – Company 1)

"I would want to emphasis on employee branding, think that's the most important part because the best people build the best companies, right. And the best culture. [...] we emphasis the companies with the best possible people to support the company in the future growth" (Growth investor – Company 2)

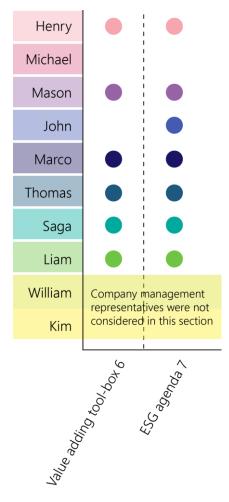
The interview questions for round two interviews didn't explicitly mention employee satisfaction and were focused more on customer satisfaction. Interestingly all interview participants themselves brought up the topic of good employee satisfaction and how can design influence the employee branding of the company. In some cases, quoted above, investors mentioned the main bottleneck for growth was not finding customers but instead finding and retaining top talent.

Implications for design – Four participants related design to improve the customer and employee satisfaction, in their terms they mentioned customer and employee branding to influence the customer and employee retention rate and improve the net promoter scores. This implication shows the current perception of design for investors and business managers includes designs being able to improve customer and employee satisfaction through branding.

5.2.2 Value creation after a new investment

After a new investment has been made in the company, there is a phase of new ideas and changes that the new owner might want to bring into the company. Some investors create action plans, which are created to formulate a strategy for the company to take for value creation.

Table 9: Number of investors interviewees and their value creating methods



- Value-adding toolbox used by investors and management

As part of this action plan investors introduce their 'value-adding toolboxes' to the new companies' management. Through the interviews multiple investors mentioned the suggestions they bring to companies after investment as a part of their 'value-adding toolbox'. Investors are constantly looking for new avenues and knowledge that can help them in value creation. They refer to them as tools. The content of this toolbox and its use was different for different investors, some investors mentioned they didn't use any tools, and instead rely on their previous experience and intuition to find new areas of creating value in a company.

"We don't just use quantifiable tools but instead also rely on intuition and experience" (Private equity investor – Company 1)

All interview participants agreed that design creates value. But the scope, domain and use of this value had varying answers. These answers were linked to the individual's perceived role of design which was further found to be derived from the experience, knowledge and education of the investor and company management representatives.

"The design investments are very difficult to measure. If I put 200,000 on a new branding or design, how do I know that the positive effects are because of the design and not because of something else? For design to be seen as a value creator I need to see the mathematical payback as proof of the investment" (Private equity investor – Company 1) "If the management and the board, and especially the main owner of a private equity company gets a good experience out of a design investment, then you get that into the toolbox of the private equity company. Hey, this is something how we can create even more value and we should look at these matters already when we review the company during the due diligence phase before we have acquired it." (Growth investor – Company 1)

Interestingly in the interviews, investors mentioned if design can be positioned as a tool for value creation it will be well received and might even become a part of investors 'toolbox'. Investors usually try to implement these 'toolboxes' in the early stages of their investment or in some cases even before an investment has been made to create value during the investment duration. This might help position design to be a part of investors value creation toolkit at the early stages of an investment. Further, the interview participants mentioned the return on a design investment needs to be measured to position design as a value creator for investors and business managers. They view this mathematical payback of the investment as proof of the invest.

Summarizing the two perspectives on how investors create their value-adding toolkit and how measuring design can position it as a value creator. It was inferred showing the value design can create acts as proof of return on the investment, this may influence the experience of the investor with investing in design, and further help add design to their value-adding toolkit for the next investments. This could help implement design as part of the due diligence phase and the action plan for an early stage.

- ESG (environmental, social, governmental) Policy as part of the action plan

Some investors explained the use of the ESG (environmental, social, governmental) policy and the action plan as tools used by them to start a dialogue after a new investment. The ESG policy means the Environmental, Social, and Governmental policy that many investors bring to companies as part of their toolkit. These policies are created on improving for example company emissions, improving environmental impact – improving customer and employee satisfaction – fixing and reframing according to government policies that can affect their companies.

"And then we have a strong ESG aspect in our funds. So, we really want to sell help our companies to set up for their ESG policy and the kind of numbers and figures they want to track" (Private equity investor – Company 1)

"We are supporting the sustainability development of the companies and therefore when we invest, we do an ESG assessment" (Growth investor – Company 2)

Although the use of these tools was mostly focused on creating a discussion and debate and not as fixed practices that companies should follow. Irrespective of using a toolkit or relying on experience or both, Investors agreed on the implementation of these changes should be at an early stage of the investment to create a discussion and a direction for the company to have an impact. The ESG agenda was found to be one of the most common 'tools' that investors introduced to a company as part of their agenda and the action plan. As part of the strategic roles of investors in the board, they sometimes also have these changes and policies as part of their agenda.

"Customer and employee satisfaction is implemented for the ESG agenda, [...] therefore one part to consider for the companies is also customer and employee satisfaction because that's

from the social point of the ESG agenda [...] by using employee branding and service design you could assist in improving the social aspect of the ESG agenda" (Growth investor – Company 2)

A few interviewees mentioned the use of employee branding and service design to assist in improving the social category of the ESG (Environmental, Social, Governmental) agenda. This could help position design to facilitate the tried and tested ESG agenda used extensively by investors, having implications on the understanding and belief of investors towards design.

5.2.3 Strategic decision making during the ownership phase

- Strategic decision making and implementing the action plan

During the operational phase the role of the investor is to assist in the strategic functioning of the company and assist in implementing the action plan. The investors and the board then decide on hiring new services to implement the changes or carry out internal changes to implement the action plan. Investors need to negotiate and plan how their services can make sure that the company is gaining value and challenge the board in making decisions to invest in new projects and services. Instead of trying to show the strategic importance of design through cases in which design services were isolated and then created value, it's important to position how design was able to influence a change in the value-adding toolkit of investors and the action plan. This creates an understanding of how these changes came to be from the strategic approach. This is resonated by statements like,

"If you see it (improvement due to design) is a clear problem area then it comes as part of the value creation plan or the board work and then we discussed that OK how can we improve? "(Growth investor – Company 1)

"At the top management, they are busy people. They don't have a lot of time to sort of study and read and go through the design areas. They need to see the investment and the payback of the investment. So, if there are any ways how you can the design offering in a way that creates investment into the future at it will pay back, we can encourage this top management to get add design in their strategy work" (Growth investor - Company 1)

Participants also mentioned how the top management of the company are not interested in design till the value design can create is not shown in a monetary form. Further design work can be accelerated in the strategic decision-making process if the return of investment can be proven to the investors.

- Customer and employee satisfaction as part of strategic board work

During ownership, a part of an investor's strategy is to improve the employee and customer satisfaction of the company. Investors consider employee satisfaction and customer satisfaction as a strategic function which is also reflected in the ESG agenda, where S stands for social goals. In the interviews, multiple investors mentioned how design can be used to improve their ESG policy and in general improve the customer and employee satisfaction metrics like the NPS score earlier discussed. An investor gave an interesting co-relation between how design can be positioned as a strategic function by aligning design with customer satisfaction which they considered an important part of the strategy,

"If you talk about the customers satisfaction, and what leads to customer satisfaction? Which is an important part of the strategy. Then of course, design must also be that as it can easily improve customer satisfaction" (Growth investor – Company 1)

Company managers also agreed that:

"The biggest bottleneck for growth a lot of times is finding the right people, being able to recruit and retain talent, and that's where the real competition is. It's not finding customers; it's finding top talent" (Growth investor – Company 2)

These metrics are then used by the current owners or companies to improve their products and services by an efficient and happy workforce and position themselves as a good employer and environment to work in to attract good talent.

5.2.4 Valuation of the company during the exit phase

- Positioning the company as a valuable investment

Investors are short-time owners of a company; they invest in companies and hope to sell them at a higher premium when their investment period ends. The selling phase or exit phase is as important as the buying phase in the investment lifecycle. In this phase the company negotiates its valuation to the new buyer, they do this by showing their growth potential through metrics, showcase how they are seen as a lucrative investment through the investment criteria of the new investor and showcase their company philosophy and culture. For example, an established and improved NPS is considered a good motivation for investors to invest in a company and is a part of most investors' investment criteria. By positioning and proving their company to have a good ENPS and CNPS score the current owner of the company can better negotiate to get an increased premium on the company and motivate multiple investors in the market to buy their company.

"Investing is basically three things, entry at the right price, being able to do value creation and then finding somebody who is willing to pay a premium and buy the business from you for a profit. If design or any service is able to influence these three things it becomes a value creator for us" (Private equity investor – Company 1)

Both the existing owner and the company management are actively participating in this phase, their motivations are to increase the premium during selling and establishing a 'good exit' which further corresponds to the CEO, management and investors reputation in the market. Investors and company management are constantly trying to find new avenues that can improve the valuation of their companies, some investors do this by creating a value-adding toolkit which they use to measure/bring changes post-investment. If design value can be shown to improve/influence any of these three phases of an investment cycle it can be aligned as a value creator for investors and business managers.

- Valuation of a company and how it's calculated

It is important to define how the valuation of a company is determined. An interesting quote by an investor explains how the valuation of a company has been established in their experience,

"It's (valuation of the company) really, it's a number. But how you form that number is not fixed. A lot of times it's also negotiation, competition on how many people want to buy it, some acquirers care more about the long-term focus of the company and maybe some buyers care less, it is also defined by the company's philosophy. So, if a company considers design as part of their philosophy, the investor has to take it into consideration in the valuation" (Private equity investor – Company 1)

This statement very holistically explains how a company's valuation is based on a cohesive negotiation on quantitative functions like profit and growth metrics, NPS, their investment criteria and on qualitative capabilities like competition in the market, personal focus of the buyer, their belief in the company's philosophy and culture and how is the current evaluation of the company being created. Therefore, if the company has design as part of their philosophy and its value can be proven to the next investor, it can assist in increasing the valuation of the company.

- Long-term investment and its effect on company valuation during exit

Most of the changes in the working of a company are aligned to be able to create profits, these are 'low-hanging fruits' which investors try to tackle first to quickly scale the companies, although there are investments which might extend the tenure of an investor and start showing profits in the future. Although the interview identified a theme explained through this excerpt

"There are a lot of things that we put into motion [...] the things that won't get done before we exit. But we will get the ball rolling and then we can show already when we sell that, we fixed this. And it's not yielding any gains yet, but in a few years it will, and then we can factor those in the future" (Private equity investor – Company 1)

This argues that investors do invest in activities that will yield value in the future even after their investment duration, provided the fact that these long-term investments will help them increase the valuation of the company in the eyes and calculations of the next buyer.

Although design investments can sometimes challenge this, many participants identified design not being considered as a part of the investment criteria of most investors, which further makes it hard to calculate how much independent role and value does design have in the valuation of a company:

"I think a lot of times decision makers think, we don't really need to spend money on this because it's not going to bring any value back [...] design is also sometimes considered as such a long-term investment [...] if you look at the short-term goals, then you will have probably the surface level design the maybe the logo, the aesthetics, the web page, the UI but core design functions take longer to establish" (Growth investor – Company 2)

This creates a paradox for long-term investing because if design, as a long-term investment, is not being considered to increase the valuation of a company during exit to the next buyer, the current buyer might not be interested in investing in design for the long mile as it won't help the current buyer in attaining profits from the investment. in some interview cases investors associated core design changes with a long-term investment.

Although investors are short-term owners of companies there are cases when projects/changes in the company extend the duration of their investments. In such cases, the investor must side with changes that are made for the growth of the company and not their personal profits. This is specific to different legislations. Investors usually don't invest in projects whose value would be realized after their tenure but incase if an investment can be proven to be shown for the betterment of the company and will show value after the

current investor's duration, they can be considered as increasing the valuation of the company. A company manager stated,

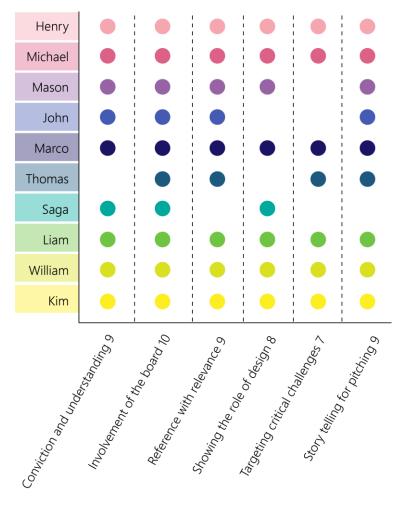
"An investor will only be part of investing in long-term design project if it can show value and payback at the point of sale." (Board member – Company 4)

Aside from the metrics investors must be sure that this long-term investment aligns with the investment philosophy of the next buyer for them to realize the valuation. Therefore, quantifiable metrics do help in proving if a proving if a long-term investment will be profitable but the new owner's investment philosophy can also be a deciding factor.

5.3 Methods that can assist in communicating design to investors and business managers

The 'methods' described in the cumulative scope of this finding were the ways that can assist the investor's and business managers' understanding of the value of design. The methods were found to co-relate to (1) Honesty and activity increases conviction (2) Reference with relevance increases familiarity and belief (3) Analytics and tangibility increases understanding (4) Showing the role of design in the process and how the value was created (5) Targeting critical challenges creates an effective proposal (6) Story telling assists in educating by developing interpretations. The themes are discussed in more detail below, providing illustrative quotes to substantiate them.

Table 10: Number of interviewees and their preferred methods of communicating design



5.3.1 Conviction for investing in design requires understanding

The informants mentioned that investing in any new service requires conviction. Building their understanding of a service makes the investors and business managers feel more comfortable in investing. They try to learn about new markets before investing and if the value of the service feels unclear, the service feels dishonest, and the project is not initiated:

"We learn and build our own conviction based on the information that you get all the time [...] But of course if you understand the market better, it's much easier to analyze and understand compared to if it's new market. For any sale/contract or project to be initiated by a company it is important to be clear and be able to communicate this value in its most core where possible, [...] if it feels unclear, then it feels dishonest and the same is true for design" (Growth investor – Company 1)

This has implications for understanding design, if design and the value it creates is considered unclear by the investors and business managers it limits their assurance in the investment and makes it feel dishonest. Therefore, there is a need for educating the investors and business managers on the value design can bring to their companies, which could help them in creating their own understanding of design.

5.3.2 Increasing the involvement of the board can influence their participation in design

Participants stated how implementing a new project requires participation and input from the responsible members of the board. If an activity has inputs by multiple members with varying roles, it increases the involvement of the board and has a higher chance of implementation and improvements.

"By activity, I mean that everybody who is part of the process gives their input. Also, whether it's design process or strategic process, if we have these multiple different opinions and perspectives in the process that really makes to some big improvements" (Growth investor – Company 1)

In the interviews, some participants also stated that companies are looking for collaborations to distribute their workflow and emphasize their main product. Even in the case of investors, they hire and even invest in service providers who can enable their portfolio companies to grow by providing multiple services and improving their operations flow. A participant stated:

"It (communication and service design agency) was a complete one-stop shop and I think that's a strength to have, [...] if you compile a similar type of an example when you pitch in. That I think could be a very strong thing." (Private equity investor – Company 1)

"Even if the CEO proposes something and nobody comments on it, on where's the actual improvement, how do we support the design because we have no idea on what the CEO is proposing, it does not get much traction in the board." (CEO – Company 3)

The CEO participant of the interview mentioned that the design proposal should be structured so it's understood by multiple participants of the board who can give comments and participate in the discussion. Distinctively in the case of a design project/decision, there can be multiple top-level managers from different disciples who can be targeted as potential

stakeholders to get a broader perspective and participation of the board to improve its chances of implementation.

5.3.3 Reference with relevance increases familiarity and belief for investing in design

It was found that Investors and business managers are actively looking for success stories in the market related to investing in new services as references to construct their own beliefs. Interchangeably a reference can be used to convince investors and business managers to believe in the value a new service can bring to their company. These 2 quotes by participants summarized the reference part of the finding:

"People want to see references. You can say whatever you want, but they don't believe it. Unless they see something. And I think people are very traditional in many ways that they want to see the reference. If you show that you have done something similar you have a kind of reference, and if the reference has a name. That's even more convincing." (Private equity investor – Company 1)

"We need design success stories as a reference [...] design success stories in Finland that the companies are openly talking about it and value they helped create" (Private equity investor – Company 1)

References pertaining to real world cases studies, that show profits due to value added by design can help leverage the capability and belief in the view of the investors and business managers.

Although according to the participants the references didn't hold much meaning unless they belong to industries and companies that were relevant to the company in question. Participants mentioned how investors and business managers tend to follow their peers in the industry and have a very limited capability in understanding a reference unless it's part of the same type of company.

"The management is always sort of following their peers in the industry. [...] A reference must be from the same peer group so it might make sense to build different example categories [...] sometimes they have very limited capability on that, so you must show a same or similar type of company" (Private equity investor – Company 1)

A participant further went on to define that example categories can be created on each industry which hold as a relevant reference for each category and can be tailored before presenting to a specific type of company in that industry.

5.3.4 Showing the role of design in the process and how the value was created

Participants mentioned that the existing way of pitching design is very boundless and almost vague, making it hard for them to understand how design was able to create value in a project. There is a need to specify which part of the process was design used and what was its role in creating value in a more particular, tangible, and clear way.

"If you can make it (design) more tangible, maybe more concrete by showing what exactly was your part and maybe somehow relate it to be understandable to business managers" (Growth investor – Company 1) This section builds on the granularity and measurability of design and shows how these can be explored for the value of design.

5.3.5 Targeting critical challenges creates an effective design proposal

Finally, participants mentioned that investors and top management don't have the time or interest to go through a general sales presentation and it does not create an impactful service proposal. If a service is being communicated to them, it should be targeted towards the most critical challenges they face in areas that might be interested in, and proposal should match and tackle those challenges. It was however noted that knowing the exact pain points of the company board in question is difficult, but the needs of the customer should be defined to an extent before approaching them. A participant also noted creating the proposal around a product might result in an impactful and relevant proposal, since the biggest sales effort and growth usually comes from the product side:

"Obviously it's hard to know what the pain points are, or the most critical challenges companies are facing, but the top management have really important things to do and therefore they do not wat to listen to a general sales presentation. [...] I think it would be really good idea to approach them with the most important or most challenging themes in what they are interested in, and create a design proposal matching that challenge or tackling that challenge" (Private equity investor – Company 1)

"The sales effort and the biggest growth [...] is coming from the product side. So, if organized around the product it's easier to develop the story and argument it" (Growth investor – Company 2)

Consequently, for the value of design to be communicated effectively, it needs to engage around the central pain points of the investors and company managers to be able to create an effective proposal.

5.3.6 Story telling assists in educating by developing interpretations of the meaning of design

Conceiving that the perception of design requires understanding and participation of the top-level management and investors, multiple informants pressed on educating the investors and company managers to be able to convince them of the value of design.

"The fact that the company board is usually made of businesspersons and CEO level people who don't understand design and don't know what it means [...] it requires a lot of education and helping them to understand what it is" (Growth investor – Company 2)

It was also found that most managers and investors don't have the time to be taught about design and the value it creates through educational institutions and instead rely on learning through practice and context.

Mindful of the need of education, multiple informants suggested that a story telling approach to deliver the content of the value being provided and the service being sold helps investors and company managers understand the value that is being provided in their own judgement and interpretation, especially in the ambiguous context of design. Provided the fact that the story structure content is backed by concrete references and quantifiable measurements it might be able to create a compelling proposal. These quotes shed light on how the participants view the relation between storytelling and communicating the value of design:

"For communicating design some numbers might be good to have, but I think a storytelling method is even stronger. But a part of the storytelling could be, of course, some concrete, quantifiable values" (Private equity investor – Company 1)

"I think the best way is always through the story telling. To have a situation where something has been done before, I'm sure that the design houses are able to tell stories about what they have created for other businesses and other situations. I think that is the very the best way of selling that in". (Private equity investor – Company 1)

When analyzing this finding under an integrative lens, the story telling approach will only be applicable as an effective method of communicating the value of design if it is able to integrate and navigate the findings discussed before.

6. Discussion

6.1 Sensemaking of the Findings

The themes from the three cumulative scopes discussed in the findings, (1) Perception of design and design value by investors and business managers (2) What do investors and business managers value during an investment and its influence on their perception of design and (3) Methods that can assist in communicating design to investors and business managers, showed findings like discrepancies between the investor values and practices and their understanding of design, the power of narratives in articulating an ambiguous term like design etc. These findings were opinionated and had undertones related to the effective communication of design, based on these opinions and their relation towards communicating the value of design the findings were distributed into enablers and hindrances.

6.1.1 Inhibitors for communicating the value of design to investors and business managers

Multiple findings from the interviews reflected specific opinions and practices of the participants which acted as impediments towards their understanding of design and design value and hindered the communication of the value of design. I have interpreted these first order concepts as hinderances which might affect the investors and business managers' view on understanding design value and therefore acting as inhibitors towards communicating the value of design. The inhibitors are showcased in table 11.

The table showcases the reason why these first order concepts are chosen as inhibitors and based on the reason how they act as inhibitors in communicating design value to investors and business managers.

Lastly, the inhibitors of communicating design value needed to be navigated /addressed by adding them or aligning them to be enablers accordingly to effectively communicate the value of design in the method. The last column in table 11 specifies how these inhibitors can be navigated to transform them into enablers for communicating the value of design.

First order Observed How does it inhibit the How to transform them Story telling concepts challenge communication of Design to enablers framewo chosen as value inhibitors rk elements How is Participants The limited view on what By effectively Overall Design related Design consists as a Design function communicating Design, outcome viewed by to a very limited further limits the perception educating investors and investors set of functions, of the value Design can business managers on and like aesthetics, create. This hinders the the value of Design, business web design ... interest and participation in changing their Design making it harder to managers perception, Aligning communicate the value of Design to be added to Design their professional practice, and increasing their participation The Interview The discrepancy caused by The term Design needs Outcome ambiguity participants multiplicity existing under to be very cautiously and were confused the word design and Design used in a proposal and multiplicity about what is as a stream confuses should be translated to of Design meant by the investors and business more specific and as a word Design, managers to understand its granular terms (where stream this confusion extant and use possible) that are was caused due understood by investors to the ambiguity and business managers and multiplicity surrounding Design terms and functions and their lack of participation and education on Design In the views of Investors and business The role and function of Foundati Design onal terms and the participants, managers don't relate Design in a proposal Design functions to be a part should be translated to element their the term Design combined with of established functions in a familiar terms used in synonymy

Table 11: Findings viewed as inhibitors for the communication of design and how can they be navigated

with other terms used by investors and business managers	the specific terminologies that exist in Design streams confuses the investors and business managers with pre-existing terminologies used by them in their industry and companies	company, this creates a problem for the business managers to associate Design with an activity they already have attributed some other stream to	the industry by investors and business managers to increase understanding of the service being proposed	
Participati on is limited to Strategic functions	What is a strategic function is determined by the philosophy of the investor and investors don't relate Design to being a strategic function	Design not being considered as a strategic function limits the participation and perception of investors and business managers	Design needs to be aligned to be seen as part of a company's strategic board work to accelerate it use and participation in the function of the company	Outcome s
Investor own experience s and knowledge can also define what they relate to as a value creator	The traditional ways of investing and business has created a block for accepting new ideas	Design is taken as a fad and jargon because of this old school thinking	Educating the investors and business managers is essential to change their perception of the value of Design	Outcome s
Investors and business managers work with quantifiabl e and measurabl e functions	Investors and business managers use metrics and quantifiable functions to gauge their investments and understand the	Design value being hard to measure and quantify, limits the participation and interest of investors and business managers in Design	Measuring and quantifying the value created by Design	Foundati onal element

The need for granularity and specificity	value of a service Investors and business managers like granularity and specificity to understand a company's functioning and the impact of a service	Design being pitched as an umbrella term inhibits the understanding of how and what value was created using Design	The role of Design in a process should be broken down and translated to granular understandable terms for the investors and business managers	Foundati onal elements
Desired and undesired risks	Investor's view investments which they can't measure as undesired risks	Due to the lack of measurability of Design value it considered as an undesired risk	Showing the measurable value created by Design can increase trust in the investment and align it as a desired risk	Outcome
The Engineerin g history of Finland	Finland has an engineering first culture strategically and investors are highly risk averse	Due to the engineering first culture in Finland, Design is considered as an accessory feature limiting investing and participation	By changing the perception of the investors and business managers by showing the value and measurability of Design it is possible to impact these predefined dispositions	Outcome
Investing in long term projects	Investors need to see the measurable value of a long- term investment before investment	Design value not being measured leads to it being considered in a non-valuable long-term investment	Showing the measurable value created by Design to align it as a valuable investment	Outcome
Investors need to understan d the service before investing	Investors try to build their own understanding in a service before investing in it, if the service feels unclear it feels dishonest	The lack of understanding of the roles and functions that a Design service can bring, makes the investors feel it's unclear and therefore inhibits them from investing it	Helping investors understand the role and value of Design in each project, will help them create their own understanding encouraging them to invest in Design	Outcome

6.1.2 Enablers for communicating the value of design to investors and business managers

Analyzing the findings there were opinions and practices of the participants which acted as enablers towards their understanding of design and design value and could further be utilized to effectively communicate the value of design. Table 12 shows the first-order concepts from the findings that act as enablers that might enable the investors and business managers to understand design value and therefore enable the communication of the value of design.

The table showcases the reason why these first order concepts are chosen as enablers and how do they can enable the communication of design.

Торіс	Observed enabler	How does it enable the communication of design value	Story telling framework elements
How does the company differentiate itself from its competitors	Investors are actively looking for companies which can differentiate themselves from the competition and have a good business case	Design if shown as a differentiator in creating a competitive advantage leverages it as a value creator in the investment criteria of the investors	Actionable cues
Impact of the market size on an investment decision	Investors usually invest in companies who have a growing market size or increase/improve the market size of their portfolio companyIf design can be shown to increase the market size of a company, it acts as a value creator in the investment criteria of the investors		Actionable cues
Innovation capability of a company	Depending on the type of industry and the investment some investors mentioned how the innovation capability of a company makes it a lucrative investment option	Highlighting the role design in the innovation and development capability of a company influences the perception of the value of design for investors and business managers	Actionable cues
Employee satisfaction as an investment criterion	An important investment criterion for investors is the employee satisfaction and a good company culture	Showing how design can improve the customer and employee satisfaction in metrics/NPS scores highlights the value it can bring towards a new /ongoing investment	Actionable cues
Value-adding toolbox used by investors and management	Investors usually have a set of tools/tactics they bring to companies to accelerate their growth, these toolboxes are then improved and iterated based on the personal experiences of the investor	If design value can be proved to the investors, they might add design services to their value adding toolkits. This will improve the use of design on a strategic front and at an early level	Outcome
ESG Policy as part of the action plan	The Environmental, Social, Governmental agenda used by investors is a tried and tested policy as part of their toolkit, the improvement in this policy	If design's role in improving the ESG agenda can be proved, it highlights its use in an existing tool used by investors in the action plan thereby	Actionable cues

Table 12: Findings viewed as enablers for the communication of design

	is considered valuable for the companies	increasing trust and understanding of the service	
Customer and employee satisfaction as part of strategic board work	Investors relate employee and customer satisfaction to strategic functions and discuss about them in the board	By showing how design can provide Value in improving the customer and employee satisfaction, it highlights its need in the board decision and helps communicate its value	Outcome
Positioning the company as a valuable investment	During exit the management and investors try and leverage their companies according to the investment criteria of the next investor to position it as a valuable investment	If design can be shown to improve the features which correspond to the investment criteria of the next buyer, it can help in better positioning it and get a better premium for the buyer	Outcome
Valuation of a company and how it's calculated	The company's valuation during the exit phase is not created by just number but instead is a negotiation between the buyer and owner	If design value can be shown to improve the valuation of a company through metrics it increases belief in the service and extends its use into the company's philosophy, increasing the company's valuation	Outcome
Increasing the involvement of the board and has a higher chance of implementati on	Increasing the participation of the board in the proposal helps create a discussion and increases chances of implementation	design proposals should be created to target multiple interests of the board to increase its chances of implementation	Considerati ons
Business managers tend to follow their peers in the industry	Business managers and investors tend to follow their peer companies as benchmarks and build on their experience of a service	Showing the value design was able to create in parallel relatable companies increases its understanding and trust for investors and management	Foundation al element
Specify which part of the process design was able to influence	Companies' management and investors want to see the specific role of a service in creating value in the existing functions of their companies	Showing the specific role of design in creating value in the existing functions of a company improves the understanding of its value and function	Actionable cues
A service should be targeted by learning about the critical challenges a company is facing	Companies are not interested in a general sales presentation	A proposal should be aimed at tackling the critical challenges that a company is facing for it to have an effective impact	Foundation al element

Educating the	Investors and company	The value of design can be	INTEGRATIV
investors and	managers need to understand	communicated by using a story	E METHOD
company	a service before they are	telling approach. This can create own	
managers	comfortable to invest in it,	understanding of the value of design	
through story	storytelling was found to be a	and get investors and business	
telling	suitable method to	managers interested	
	communicate this		
	understandable value in their		
	own perception		

6.1.3 Theoretical contributions

Comparing the findings form the investment criteria to Mozota's Four powers of design framework

This thesis contributes to and extends the four powers of design framework proposed by Mozota (Mozota, 2010). The investment criteria of most investors consist of investing in companies that differentiate themselves from the competition, have a good customer and employee culture, have a demonstrated innovation capability and a growing market these criteria have been compared to the four powers of design namely, design as a differentiator, design as good business, design as a transformer and design as an integrator in the next section:

- 1) Design as a differentiator: The four powers of design article define design as a source of competitive advantage on the market through brand equity, customer loyalty, price premium, or customer orientation can be actively involved in creating a differentiating advantage for a company (Mozota, 2010). The findings of their study come from research with the management of SME's and correspond to the insights found through this research. Design, if positioned as having the role of creating a competitive advantage by creating a differentiating factor, might develop its perception and accelerate its use in a company. Further, the importance of customer loyalty and their promoter scores is considered a fundamental investment criterion in the thesis findings and design as a transformer in the four powers of design framework. This strengthens the relation between the role of aligning design as a differentiation with effective communication of design value to investors and business managers.
- 2) Design as integrator: This section in the four power of design showcases design as a resource that improves new product development processes (time to market, building consensus in teams using visualization skills); design as a process that favors a modular and platform architecture of product lines, user-oriented innovation models, and fuzzy-front-end project management (Mozota, 2010). The thesis findings show the need to align design as a strategic function to improve participation and interest from the board and suggest elements to enable this shift from an operational function to a strategic function.
- 3) **Design as good business:** The 4 powers of design also constitute design as a source of increased sales and better margins, more brand value, greater market share, better return on investment (ROI); design as a resource for society at large (inclusive design, sustainable design)(Mozota, 2010). A growing market size was found to be

an important investment criterion before investing in a company and for increasing the valuation of the company during the selling phase.

4) Design as a transformer: Design processes are created on continuous iterations and encourage failing fast with quick mockups and prototyping with users (Kouyoumjian et al., 2022). This positions design as a resource for creating new business opportunities; for improving the company's ability to cope with change; or (in the case of advanced design) as an expertise to better interpret the company and the marketplace (Mozota, 2010). Depending on the type of investment strategy, the findings in this thesis linked the role of a company's innovation capability to investors investment criteria and further how positioning and explicitly communicating on how design can influence a company's innovation can position it as a value creator in the view of investors and business managers.

Although this thesis builds on the *Four powers of design framework* my research showed additional findings which can further improve the four powers of design framework.

Employee satisfaction as an investment criterion:

An integral finding through this thesis was the importance given to employee satisfaction and the ENPS (Employee net promoter score) as part of the investment criteria, the strategic board work and for increasing the valuation of the company. The four powers of design framework stated the role of customer satisfaction and loyalty for aligning design as a differentiator and a learning perspective through hiring high profile designers it does not explicitly state the role of employee branding and satisfaction. In the argumentation of this thesis, employee satisfaction and branding should be included in the four powers of design framework to better leverage the value of design and effectively communicate its value to investors and business managers. Figure 8 shows how an employee satisfaction perspective can be added to the customer value and learning perspective, this perspective extends on the importance given to employee satisfaction as part of the investment criteria and strategic importance as a function of strategic board work for investors and business managers. The extension proposes functions such as (1) Measuring and increasing the employee NPS (net promoter score), (2) Improving employee branding to increase employee retention rates and (3) Improving the employee satisfaction to position design as a strategic function.

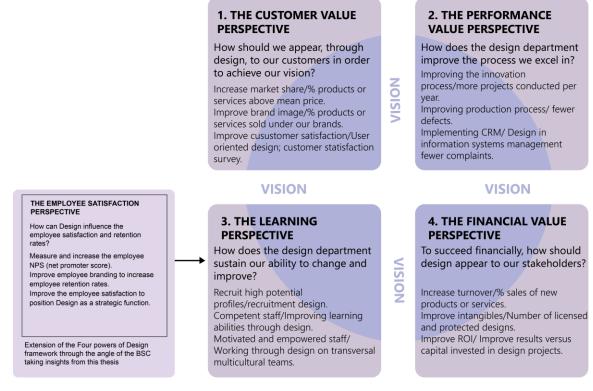


Figure 8: Proposed extension to the Four Powers of design framework, Source: Based on, Mozota, B., 2010. The Four Powers of design: A Value Model in design Management. Design Management Review, 17(2), p. 48

Developing perception through personal interpretation:

The goal in this thesis and the *Four powers of design Framework* is to effectively communicate the value of design by educating investors about how design influences the existing functions of a company.

In the *Four powers of design Framework* the value of design needs to be communicated using a model framework by corresponding different elements under the four powers of design. Although in the research for this thesis it was found that investors and business managers perceive models and tools as repackaging and as tools that lose relativeness after the implementing team has left the company. Therefore, making the tools redundant.

In contrast this thesis states, for the value of design to be effectively communicated, design value should be measured quantitatively and should develop the participants' understanding to explore the meaning and role of design in their own interpretation. By developing a more informed understanding the thesis aims to change the habitus and preconceived notions that investors and CEOs might have when it comes to design value. By using the storytelling approach, we can encourage and challenge the participant to imagine and learn the value through a planned proposal and create their own understanding of what the role of design was in the story. Therefore, utilizing an educational stance in communicating design value.

The findings and result of the study are based on an amalgamation of findings which relate to design being used to change the culture by influencing the practices of investors and business managers. This study builds on Carlgren & BenMahmoud-Jouini's (2021) which

shows the importance of utilizing both ways of impacting the culture and management innovations discussions for better implementation of design thinking/design.

Professional practices and the perception of design:

The focal point of the findings on the perception of design by investors and business managers highlighted the role of the professional practices of investors and business managers in forming this perception. This focus was backed in the literature review with studies done on (1) the difference between the education and knowledge of the designers and business professionals and its effect on the perception of design by forming a habitus (Cross, 1982; Bourdieu, 1980; Wacquant, 2005), (2) The findings also showed the importance of measuring and quantifying design value to communicate the value created by design, the design as a competitive advantage in start-up fundraising article calls for design value to be quantified, estimated in advance, measurable after the fact as it is based on business process and is being communicated to business professionals (Klenner et al., 2015).

Translation and granularity:

The findings in this thesis argue that design terms need to be translated to understandable and familiar terms used by investors and business managers, this reduces confusion around the multiplicity under design and effectively communicates its role and function for creating value. This was a reoccurring theme in many reviewed literatures which showed a focus given to communication and the language between designers and managers. The effects of using this language have also been tied to improving the narrative of a business plan, increasing belief and trust with investors (Klenner et al., 2015), creating a bigger impression on business managers and communicating strategy to own design teams (Mozota, 2010). The literature also showed a relation between the differences in education and professional practice and its impact on increasing the communication gap between designers and business managers. The convergence of unfacilitated/non-translated terms between design and business has been linked to creating tension and contradictions which limit the effective communication of design to business managers (Klenner et al., 2015; Bourdieu, 1980). This study extends the translation literation by complementing it with granularity, the findings state that for the effective communication of design the design terms in a proposal should not be pitched as umbrella terms and instead need to be broken down into its constituent functions and then translated into their counterpart terms used by investors and business managers in the industry.

6.2 Managerial Implications

6.2.1 Story telling framework for effectively communicating the value of design to investors and business managers

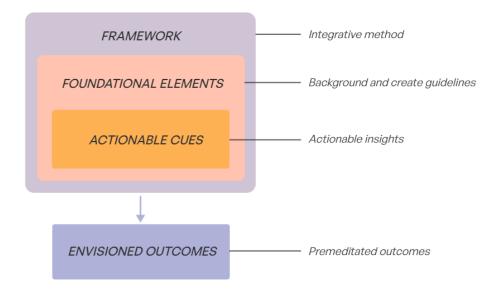
The proposed framework for the effective communication of design resembles an integrative method which can combine and utilize the enablers and the transformed inhibitors for communicating design value to investors and business managers.

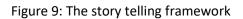
From the findings, it emerged that the storytelling approach was the most effective way of communicating a proposal to investors and business managers. The storytelling approach could also be seen as an integrative method which can integrate the enablers and the navigated inhibitors from the findings in a logical format. A story telling method can communicate the practical knowledge relevant for investors and business managers and

helps in educating them by developing their own interpretations and understanding of the value of design.

Therefore, the proposed storytelling method revolves around a 'script' that utilizes the findings to enable the communication of design. Scripts harness knowledge related to contexts by specifying possible connections between event types and harness socially shared assumptions and structure inference that are allowable in each context (Waters and Roisman, 2019). Scripts are higher-level constructs that capture general information about how certain tasks are to be accomplished (Albarracin et al., 2021). The script in this thesis is being used as a design element in the creation of the story telling framework. The story telling framework has been visualized in Figure 9. The next section describes how the findings have been utilized in the script to form the elements of this storytelling framework.

The last column of Tables 5 and 6 showcases the elements that these findings have been divided into. Namely, (1) Foundational elements, (2) actionable cues and (3) Outcomes.





6.2.2 Foundational elements

The findings chosen for the foundational elements act as a background and create guidelines for the story telling framework for the effective communication of design. These were:

- Measuring and clearly showing the value created by design Since investors and business managers professionally operate with quantifiable terms numbers, The lack of measurability of design value limits the interest and the importance given to it. Therefore, the value that design was able to create in a company/project should be clearly measured and quantified in the proposal.
- 2) Translating the design terms used in a proposal to understandable terms used professionally by investors and business managers – In order to communicate the effective value of design, A design proposal should not use ambiguous terms and use more translated terminologies that company representatives are familiar with professionally.
- 3) The role of design in a process should be broken down to granular understandable terms As per the insights from the literature review and the interviews it is a need

for to design to communicated from a vague and ubiquitous term to a more granular, understandable and specific activity which can be translated in the domain it is being applied to. The proposal should be able to indicate what was the exact role of the design service in a project and what were the functions it was able to impact.

- 4) Showing the value design was able to create in parallel relatable companies increases its understanding and trust for investors and management - Investors and business managers follow their peers in the industry and the relevance and relatability of a design proposal increase trust and understanding of the service being proposed.
- 5) A proposal should be aimed at tackling the critical challenges that a company is facing for it to have an effective impact A background research of the strengths and critical challenges that a company might be facing is able to create an effective proposal by narrowing down the services being offered.

6.2.3 Actionable cues

This element is utilized in the script to recognize situationally specific cues that indicate the appropriateness of enacting a script, Abelson terms this element as an "action trigger" (Schank and Abelson, 1977). In this framework, the findings that act as actionable insights are taken as action triggers or actionable cues in the proposal to align it according to the interests of the investors and business managers. The cues were derived from references and relevant projects done with similar companies. These are:

1) Aligning design to improve the investment criteria – Investors use their investment criteria to find potential lucrative companies to invest in during the buying phase and during the selling phase investors and company managers try to align their companies to the investment criteria of new buyers to increase the evaluation of the company. By showing the value design can create in the investment criteria it can improve the implementation of the design proposal and develop the perception of design as a value creator for investors and business managers in an investment. This is how design can be positioned in the 4 most widely established investment criteria.

- Design if shown as a differentiator in creating a competitive advantage By showing how design can create value by acting as a differentiator in the proposal, aligns it as a value creator in the investment criteria of investors and business managers, improving its communication and deployment.
- If design can be shown to increase the market size of a company Showing the impact of design in increasing the market size and potential in the proposal, aligns it as a value creator in the investment criteria of investors and business managers, improving its communication and deployment.
- Highlighting the role design in the innovation and development capability of a company Showing the impact of Desing on the innovation capability of the company aligns it as a value creator in the investment criteria of investors and business managers, improving its communication and deployment.
- Showing how design can improve the customer and employee satisfaction –
 Investors and business managers are constantly trying to improve the employee and customer satisfaction, if design can be shown to improve the metrics/NPS scores for employee and customer satisfaction it increases the value it can bring towards a

new /ongoing investment thereby improving its communication and deployment. Furthermore, accelerating the use of design from the customer and employee satisfaction perspective positions it to be a valuable part of the strategic operations of a company.

2) Showing the role of Desing in improving the ESG agenda – By showing how can design influence the ESG agenda used by the investors, helps position design as a value creator in the action plan and the value adding toolkit of the investors thereby hereby increasing trust and understanding of the design proposal on the board and accelerating its use in the early stages of an investment.

6.2.4 Outcomes

These are the premeditated outcomes that are intended from the storytelling script. An effective proposal for the communication of design to investors and business managers should assist in achieving these expected managerial implications:

1) Translation of design terminologies: The term design should be very cautiously used in a proposal by translating it to more specific and granular terms (where possible) that are understood by investors and business managers. This would help reduce the discrepancy caused by multiplicity existing under the word design and design as a stream.

2) Alignment between design and the strategic board work: Increasing the use and participation of the board in utilizing design at a strategic level assist in changing the perception of investors and business managers about the role and value of design.

3) Position design as a desired investment: Due to the lack of measurability of design value it is considered as an undesired risk by investors and business managers. Measurable value created by design increases trust in the investment and aligns it as a desired investment with predictable returns, reducing the risk stigma around design.

4) Change the view of design by investors in Finland: The engineering first culture in Finland, views design as an accessory feature which limits Finnish investors and business managers interest in investing and participation. This creates a perception which is due to how business managers have been operating professionally and their experiences. This creates a disposition and a false judgement on their perception of design to the extent that they believe it to be jargon and fancy words. By changing the perception of the investors and business managers by showing the value and measurability of design it is possible to impact these predefined dispositions.

5) Alignment between and design and a long-term valuable investment: design value not being measured with the predefined perception of design leads to it being considered as a non-valuable long-term investment which does not improve the company valuation during the selling stage. Showing the measurable value created by design aligns it as a valuable long-term investment with potential growth after a company has been sold.

6) Assist investors and business managers create their own conviction of design value: The lack of understanding of the roles and functions that a design service can bring, makes the investors feel it's unclear and therefore inhibits them from investing in it. The proposal should educate the investors and business managers on what roles design can be involved in through a relatable proposal with references. This helps in creating their own understanding

of the role and value of design. Although to educate the investors and company managers they need to first unlearn and broaden their known knowledge, which requires time, motivation, and participation from their end.

7) Alignment of design in the value adding toolkit: Even though business professionals live through numbers they are also very receptive to new ideas and their own intuition. Investors usually have a set of tools/tactics they bring to companies to accelerate their growth, these toolboxes are then improved and iterated based on the personal experiences of the investor. Design shown as a value creator to the investors, would impact in adding design services to their value-adding toolkits at an early stage of the investment for it to have a considerable impact during their investment period.

8) Alignment between design and customer and employee satisfaction can highlight it as a strategic asset: Investors relate employee and customer satisfaction to strategic functions and discuss them on the board. The proposal should show how design provides value in improving customer and employee satisfaction, highlighting its need in the board's decision making and communicating its value.

9) Design as part of the investment criteria: During exit the management and investors try and leverage their companies according to the investment criteria of the next investor to position it as a valuable investment. The investment criteria of an investor are not set and can change depending on their own philosophy and how much a company internally prioritizes its value. If design can be shown to improve the functions of a company and be a part of the company's philosophy while also corresponding to the investment criteria of the next buyer, it can help in better positioning it and getting a better premium for the buyer further impacting its value in view of the investors and business managers.

10) Design increasing the valuation of a company: The goal of an investment is to improve the company and sell it at a higher margin. Design value should be shown to improve the valuation of a company through metrics which increases belief in the service and extends its use into the company's philosophy.

7. Limitations and future research

This qualitative research bridges a gap between personal perception, practice and professional experiences and their impact on effectively communicating the value of design. Although there are multiple types of investment strategies used by investors that can influence their priorities in an investment. For example, compared to a majority owner a growth investment strategy prioritizes a lucrative working business plan and doesn't include major changes as part of their investment plans. Since the relation of investment strategies and investor roles was not a direct part of this thesis, not all types of investment strategies were looked at and it has been noted as a possible metric which can have effects on the results of the thesis. Due to the possibility for further linkages, future studies would be helpful to investigate these potential directions, this would increase the scope of the thesis, reduce bias in creating a universal solution for all investment strategies and possible validate this research.

The data gathered from the interviews was based on retrospective/speculative interviews and does not include any connections to observing any actual design pitches. Pentagon design did provide confidential material on their pitches but that has not been added in the thesis due to its confidentiality. This acts as a limitation in the study as findings from observing and interviewing participants during/after a design proposal could give valuable information.

Further, the data is based on mostly cross-sectional (one-off) interviews with most investors, except for one investor who was also the advisor for this thesis. Data from longitudinal follow-up interviews with the participants could help in observing how investor perceptions of design can evolve over time. This can be taken as a potential metric in future research.

Since the story telling framework to effectively communicate the value of design is based on educating the investors and business managers though their own understanding and interpretation of the design proposal, it requires participation and personal motivation to be able to expand their current perception of design to make communication of design value easier.

It was found that the time given to new companies pitching their services to a company with a new investment is very limited and there is mostly an hour or two provided to pitch the proposal. This might create a limitation because for the effective communication of the value of design, the proposal should explain and educate the investors and business managers to build their own understanding of the value of design. Therefore, this time limitation should be considered while creating the proposal.

The storytelling framework is also dependent on providing relatable references from projects done with companies which are similar to the company to which the proposal is being pitched. This requires the design service provider to have successful projects with these relatable companies, which is not always possible.

This thesis provides a study on a novel method of pitching design services through the story telling framework for Pentagon design. It needs to be better formulated and tailored according to the expertise and clientele of Pentagon design, which can be conducted by creating mock tests and pilots to improve the framework. The research assumes that a new investment acts as a catalyst for change in a company and the new investor and company managers are interested in actively seeking out new services that can improve the functioning and value generating capability of the company. Additional research and pilot trials of this framework are required to confirm this assumption. Finally, the choice of using a blend of inductive and deductive thematic analysis as the method for coding and analysis was done to limit my own bias as a designer and introduce me to the new domain of investing. This qualitative study might be impacted by using other types of methods and using a larger set of informants. I would encourage any future research on this study to incorporate these suggestions and advance the topic.

As a next step testing this proposal in a pitch would be beneficial to see how it is being received by the participants, discussions on formulating this and assisting Pentagon's sales team on this proposal are in process after the thesis. Although in the initial phases of the thesis, I did receive confidential material on the current pitching proposals of Pentagon design, which was used as an off the thesis reference to compare the results, it is encouraged to further evaluate and compare this result with multiple other traditional pitches, this would be helpful to identify the additions and shortcomings that this proposal style might have.

8. Conclusion

The research conducted under this thesis provides a deeper insight into the professional dispositions of investors and business managers and its impact on their perception of design. By taking the sociology perspective into the research, the study expands on the ways of thinking of investors and business managers and how it can be influenced by taking insights from their professional and practical interests. This formulates a novel perspective on the relation between the perception of design and its impact on effectively communicating the value of design. Further, the study identifies how these perceptions related to design were created and suggests ways to develop/improve these perceptions by navigating design as a value creator for improving the professional functions of an investor and business manager during an investment cycle.

The study argues that a story telling approach is the most effective way to communicate design value to investors and business managers, the story telling approach is backed with the findings sections which provide the elements of a script that backs the story telling approach and develops and framework. The framework acts as an integrative method which combines the core findings (which are used as enablers) to effectively communicate the value of design. These include giving relevant references from industries that a design consultancy has worked with and translating design terms to understandable and granular terms that investors and business managers are familiar with it. The result of this study aims to educate the investors and business managers of the value of design by helping them develop their own interpretations through the proposal. Therefore, the title of the thesis was chosen to be 'If you want to sell design, don't sell design', but instead translate it, measure it, break it down, and prove it with examples.

I believe that this thesis can have productive implications for Pentagon design for pitching their design services to companies where a recent investment has been made. Furthermore, I invite new studies to utilize the findings from this thesis to investigate new associations between design perception and communicating its value to other stakeholders across different industries.

9. Reference list

Albarracin, M. et al. (2021) A variational approach to scripts, Frontiers in Psychology, 12. Available at: <u>https://doi.org/10.3389/fpsyg.2021.585493</u>.

Ansari, S. M., Fiss, P. C., & amp; Zajac, E. J. (2010). Made to fit: How practices vary as they diffuse. Academy of Management Review, 35(1), 67-92. doi:10.5465/amr.2010.45577876

Bagno, R.B., Salerno, M.S., and da Silva, D.O. (2017) Models with graphical representation for innovation management: a literature review. R&D Management, 47, 637–653.https://doi.org/10.1111/radm.12254

Bettiol, Marco, and Stefano Micelli. (2014). The Hidden Side of design: The Relevance of Artisanship. Design Issues 30 (1): 7– 18

Beverland, M.B., Wilner, S.J.S., and Micheli, P. (2015) Reconciling the tension between consistency and relevance: design thinking as a mechanism for brand ambidexterity. Journal of the Academy of Marketing Science, 43, 5, 589609. https://doi.org/10.1007/s11747-015-0443-8

Björklund, Tua, Hanna Maula, Sarah Soule, and Jess Maula. (2020). Integrating Design into Organizations: The Coevolution of Design Capabilities. California Management Review 62(2): 100–24. https://doi-org.libproxy.aalto.fi/10.1177/0008125619898245

Bourdieu, P. (1980). The Logic of Practice. Stanford, Stanford University Press.

Braun, Virginia & Clarke, Victoria. (2006). Using thematic analysis in psychology. Qualitative Research in Psychology. 3. 77-101. 10.1191/1478088706qp063oa.

Braun, V. and Clarke, V. (2012) Thematic Analysis., APA handbook of research methods in psychology, Vol 2: Research designs: Quantitative, qualitative, neuropsychological, and biological., pp. 57–71. Available at: <u>https://doi.org/10.1037/13620-004</u>.

Briselli, J. (2022) The value of design is holding you back, design Museum Everywhere. Design Museum magazine Issue 02q. Available at:

<u>https://designmuseumfoundation.org/the-value-of-design-is-holding-you-back/</u> (Accessed: October 20, 2022).

Brown, T. (2008). Design Thinking. Harvard Business Review 86 (6): 84–92.

Brown, T. (2009). Change by design: How design Thinking Transforms Organizations and Inspires Innovation. New York: Harper Business.

Brown, T. and Martin, R. (2015) design for Action. Harvard Business Review 93 (9): 57-64.

Canato, A., Ravasi, D., & amp; Phillips, N. (2013). Coerced practice implementation in cases of low cultural fit: Cultural change and practice adaptation during the implementation of Six sigma at 3m. Academy of Management Journal, 56(6), 1724-1753. doi:10.5465/amj.2011.0093

Carlgren, L., Elmquist, M., and Rauth, I. (2016) The challenges of using design thinking in industry experiences from five large firms. Creativity and Innovation Management, 25, 344–362. <u>https://doi.org/10.1111/caim.12176</u>

Carlgren, L., & amp; BenMahmoud-Jouini, S. (2021). When cultures collide: What can we learn from frictions in the implementation of design thinking? Journal of Product Innovation Management, 39(1), 44-65. doi:10.1111/jpim.12603

Chatman, J. A., & amp; Jehn, K. A. (1994). Assessing the relationship between industry characteristics and organizational culture: How different can you be? Academy of Management Journal, 37(3), 522-553. doi:10.5465/256699

Cousins, B. (2018) Design thinking: organizational learning in VUCA environments. Academy of Strategic Management Journal, 17, 1–18.

Cross, N. (1982) Designerly ways of knowing, design Studies, 3(4), pp. 221–227. Available at: <u>https://doi.org/10.1016/0142-694x(82)90040-0</u>.

Dell'Era, C., Magistretti, S., Cautela, C., Verganti, R., & amp; Zurlo, F. (2020). Four kinds of design thinking: From ideating to making, engaging, and criticizing. Creativity and Innovation Management, 29(2), 324-344. doi:10.1111/caim.12353

Detert, J. R., Schroeder, R. G., & amp; Mauriel, J. J. (2000). A framework for linking culture and improvement initiatives in organizations. The Academy of Management Review, 25(4), 850. doi:10.2307/259210

Edwards, J.A. and Lampert, M.D. (1993) Talking data: Transcription and coding in discourse research. Hillsdale, NJ: Lawrence Erlbaum Associates.

Frith, H., & Gleeson, K. (2004). Clothing and embodiment: Men managing body image and appearance. Psychology of Men & Masculinity, 5, 40–48. doi:10.1037/1524-9220.5.1.40

Fu, N., Flood, P.C., Bosak, J., Rousseau, D.M., Morris, T., and O'Regan, P. (2017) Highperformance work systems in professional service firms: examining the practices-resourcesuses- performance linkage. Human Resource Management, 56, 329– 352. <u>https://doi.org/10.1002/hrm.21767</u>

Gruber, M., De Leon, N., George, G., & amp; Thompson, P. (2015). Managing by design. Academy of Management Journal, 58(1), 1-7. doi:10.5465/amj.2015.4001

Heskett, J. (2005) design: A very short introduction. Oxford: Oxford University Press.

Johansson- Sköldberg, U., Woodilla, J., and Çetinkaya, M. (2013) Design thinking: past, present and possible futures. Creativity and Innovation Management, 22, 121–146

Kaplan, R. and Norton, D., (1992). The Balanced Scorecard—Measures that Drive Performance. [online] Harvard Business Review. Available at: https://hbr.org/1992/01/the-balanced-scorecard-measures-that-drive-performance-2 [Accessed 7 September 2022].

Klenner, N., Gemser, G. and Karpen, I., (2021). Entrepreneurial ways of designing and designerly ways of entrepreneuring: Exploring the relationship between design thinking and effectuation theory. Journal of Product Innovation Management, 39(1), pp.66-94.

Klenner, N., Hartz-Olsson, L. and Capron, B., (2015). Design as a competitive advantage in start-up fundraising. Journal of design, Business & amp; Society, 1(2), pp.163-182.

Klein, K. J., & amp; Sorra, J. S. (1996). The Challenge of Innovation Implementation. The Academy of Management Review, 21(4), 1055. doi:10.2307/259164

Knight, E., Daymond, J., and Paroutis, S. (2020). Design- led strategy: how to bring design thinking into the art of strategic management. California Management Review, 62, 30–52. https://doi.org/10.1177/00081 25619 897594

Kouyoumjian, G., Sheppard, B., Sarrazin, H. and Dore, F., (2022). The business value of design. [online] mckinsey.com. Available at: https://www.mckinsey.com/business-functions/mckinsey-design/our-insights/the-business-value-of-design [Accessed 7 September 2022].

Liedtka, J. (2010). In defense of strategy as Design. Creating Desired Futures, 295-312. doi:10.1515/9783034611398.295

Liedtka, J. (2015). Perspective: Linking design Thinking with Innovation Outcomes Through Cognitive Bias Reduction. Journal of Product Innovation Management 32 (6): 925– 38

Liedtka, J. (2018). Why design Thinking Works. Harvard Business Review 96 (5): 72-9.

Liedtka, J. (2020). Putting technology in its place: Design thinking's social technology at work. California Management Review, 62, 53–83. https://doi.org/10.1177/00081 25619 897391

Liedtka, J. and Kaplan, S. (2019). How design thinking opens new frontiers for strategy development. Strategy and Leadership, 47, 3–10. https://doi.org/10.1108/SL- 01- 20190007

Love, E. G., & Amp; Cebon, P. (2008). Meanings on multiple levels: The influence of field-level and organizational-level meaning systems on diffusion. Journal of Management Studies, 45(2), 239-267. doi:10.1111/j.1467-6486.2007.00739.x

Lozeau, D., Langley, A., & amp; Denis, J. (2002). The corruption of managerial techniques by organizations. Human Relations, 55(5), 537-564. doi:10.1177/0018726702055005427

Luomaranta, J., (2021). 6 areas of strategy that benefit from design – Solita. [online] Solita

Magistretti, S., Ardito, L., and Petruzzelli, A.M. (2021a) Framing the micro foundations of design thinking as a dynamic capability for innovation: reconciling theory and practice. Journal of Product Innovation Management, 1–23. <u>https://doi.org/10.1111/JPIM.12586</u>

Meinel, M., Eismann, T.T., Baccarella, C.V., Fixson, S.K., and Voigt, K.I. (2020) Does applying design thinking result in better new product concepts than a traditional innovation approach? An experimental comparison study. European Management Journal, 38, 661–671. <u>https://doi.org/10.1016/j.emj.2020.02.002</u>

Micheli, P., Perks, H., & amp; Beverland, M. B. (2017). Elevating design in the organization. Journal of Product Innovation Management, 35(4), 629-651. doi:10.1111/jpim.12434

Micheli, P., Wilner, S.J.S.S., Bhatti, S.H., Mura, M., and Beverland, M.B. (2019) Doing design thinking: conceptual review, synthesis, and research agenda. Journal of Product Innovation Management, 36, 124–48. https://doi.org/10.1111/jpim.12466

Moultrie, J., Clarkson, P., & Probert, D. (2007). Development of a design Audit Tool for SMEs. Journal Of Product Innovation Management, 24(4), 335-368.

Mozota, B., (2010). The Four Powers of design: A Value Model in design Management. Design Management Review, 17(2), pp.44-53.

Nagaraj, V., Berente, N., Lyytinen, K., and Gaskin, J. (2020) Team design thinking, product innovativeness, and the moderating role of problem unfamiliarity. Journal of Product Innovation Management, 37, 297–323. <u>https://doi.org/10.1111/jpim.12528</u>

Nahapiet, J. and Ghoshal, S. (1998) Social capital, intellectual capital, and the organizational advantage. Academy of Management Review, 23, 242–266

Nakata, C. and Hwang, J. (2020) design thinking for innovation: composition, consequence, and contingency. Journal of Business Research, 118, 117–128. <u>https://doi</u>.org/10.1016/j.jbusres.2020.06.038

Noble, Charles H. (2011). On Elevating Strategic design Research. Journal of Product Innovation Management 28 (3): 389–9

Patel, S. and Mehta, K. (2017) Systems, design, and entrepreneurial thinking: comparative frameworks. Systemic Practice and Action Research, 30, 515–533. https://doi.org/10.1007/s1121 3-016-9404-5

Rindova, V., & Martins, L. (2021). Shaping Possibilities: A design Science Approach to Developing Novel Strategies. Academy Of Management Review, 46(4), 800-822. doi: 10.5465/amr.2019.0289

Reymen, I., Berends, H., Oudehand, R., and Stultiëns, R. (2017) Decision making for business model development: a process study of effectuation and causation in new technology-based ventures. R&D Management, 47, 595–606. https://doi.org/10.1111/RADM.12249

Robbins, P. and Fu, N., (2022). Blind faith or hard evidence? Exploring the indirect performance impact of design thinking practices in R&D. R&D Management

Roth, K., Globocnik, D., Rau, C., and Neyer, A. (2020) Living up to the expectations: the effect of design thinking on project success. Creativity and Innovation Management, 29, 667–684. https://doi.org/10.1111/caim.12408

(https://www.dmi.org/general/custom.asp?page=designValue)

Seidel, Victor P., and Sebastian K. Fixson. (2013). Adopting design Thinking in Novice Multidisciplinary Teams: The Application and Limits of design Methods and Reflexive Practices. Journal of Product Innovation Management 30: 19–33.

Simon, H.A. (1993). Strategy and organizational evolution. Strategic Management Journal, 14(S2): 131-142.

Sarasvathy, S. (2021). Ask for it: A practice-based theory of venturing design. Journal Of Business Venturing design, 1(1-2), 100008. doi: 10.1016/j.jbvd.2022.100008

Sarasvathy, S. (2021). Sarasvathy's principles for effectuation – Innovation and entrepreneurship in education.

Schank, R. C., and Abelson, R. P. (1977). Scripts, Plans, Goals, and Understanding. Hillsdale, MICH: Laurence Erlbaum.

Subramaniam, M. and Youndt, M.A. (2005) The influence of intellectual capital on the types of innovative capabilities. Academy of Management Journal, 48, 450–463. https://doi.org/10.5465/amj.2005.17407911 Venkataraman, S., Sarasvathy, S.D., Dew, N., & Forster, W.R. (2012). Reflections on the 2010 AMR decade award: Whither the promise? Moving forward with entrepreneurship as a science of the artificial. Academy of Management Review, 37(1): 21-33

Wacquant, L. (2005) Habitus. International Encyclopedia of Economic Sociology. J. Becket and Z. Milan. London, Routledge.

Waters, T., and Roisman, G. I. (2019). The secure base script concept: an overview. Curr. Opin. Psychol. 25, 162–166. doi: 10.1016/j.copsyc.2018.08.002

Westcott, M. et al. (2013) The DMI design value scorecard: A new design measurement and Management Model, design Management Review, 24(4), pp. 10–16. Available at: https://doi.org/10.1111/drev.10257.

Appendix:

Appendix 1A-C

Appendix 1A: Perception of design and design value by investors and business managers: Additional evidence

Second	First order	Selected quotes
order	concepts	
themes		
Perception	Design	design is some nitty gritty marketing jargon and there is no
of the	perceptions	substance behind it [] design is just some nice words
meaning of	of investors	because they really don't understand it.(CEO – Company 3)
design	and business	
	managers	When I think about design, I mostly of course think about
		what's the user experience and so forth and only the
		customer-facing part (Growth investor – Company 2)
	The	"What do you mean when you say design? design is a big
	ambiguity	thing, and it has a lot of [] subsections there, so I think it
	and	would be easier if we talk about something more specific.
	multiplicity	So, when you say companies are not using design, it's
	of design	because they don't know where to start" (Growth investor –
		company 1)
	Design terms	"My main initial reaction is that maybe it's not spoken as
	and their	design, right? So, when I think about innovation and
	synonymity	creating a competitive edge it goes more toward RnD and
	with other	engineering and more of the strategic role [] but that's
	terms	just maybe because we never speak about it like design
		<i>terms</i> [] <i>but more in an industry level</i> " (Growth investor –
		Company 1)
		"You should consider not using the word design because it
		gives the wrong idea and people might think you are talking
		about Marimekko fabrics" (Private equity investor –
		Company 1)
design	Investors	"The investors look at kind of the North Star metrics [] our
terms and	and top-level	job is not to look at the day-to-day activities. But do we hit
their	management	under the North Star metrics and strategic decisions and
synonymity	roles are	then, of course, it goes to the management [] then we
with other	usually	help create the value creation plan and they delegate it"
terms	limited to	(Private equity investor – Company 1)
	strategic	

	functions during ownership	"Negotiation and financial discussions or if there could be a merger [] that type of strategic discussions, I'm actively involved in. [] when we decide to sell the company is basically based on my recommendation of the timing and how we would do that. I'm then managing that negotiation and process as well to find a new owner for the company" (Private equity investor – Company 1)
	Investor own experiences and knowledge can also define what they relate to as a value creator	"Everything is put into financials for the top-level management to understand. [] that's an investment, it will have a payback time in three years and it's worth doing it. Otherwise, you will be just sort of throwing your hands in the air and making promises that nobody knows will happen or not." (Growth investor – Company 2) "they're (investors) so used to doing things in a certain way that there has been quite a lot of, like, pushback from new ideas" (Growth investor – Company 1)
		"Let's say people who have really old school thinking, they still put design or something (marketing) in a non-essential box and they don't think it's essential business things." (CEO - Company 3)
Investors and business managers' professional practices and its impact on their perception of the value of design	Investors work with quantifiable and measurable functions	"Investors love numbers, we live through numbers. It's how we look at companies, revenue profitability." (Private equity investor – Company 1) "Quantifiably showing the value that you bring is really important in any sales process. [] I think as investors, if I was making a decision on buying design services, I would want a pretty good business proposal" (CEO - Company 3) "Investors think it's (design) maybe one of those things that is kind of less important than profit and growth because if it was important, you would have the real hard numbers [] If you can't put it into numbers, it's really difficult to get
	The need for granularity and specificity	investors to understand the value" (Growth investor – Company 2) "I like granularity so if you would speak about something in more specific terms, it would be easier to grasp because in our investments we have customer success as a different part then we have R&D as a different part which is then split up to user experience or the user interface. And then of course branding is then another part of marketing. I for sure think that if it would be more clear and helpful that we speak about design, but more in a granular level like I just mentioned" (Growth investor – Company 1)

Desired and undesired risks	"Doing business is taking risks, but instead of blindly taking risks, we work out numeric and perceive the risks through reports" (Growth investor – Company 2)
	"If you don't have proof of the value and metrics in check, they're (new owner/buyers) going to factor in a discount for the business because there's more risk [] if all of this is well managed and done, then they can put a premium on the company because they can see there's no risk in this anymore. I expect design as well to be risky if its value cannot be proven to me." (Growth investor – Company 1)
The Fractional states	"In Finland design is often sort of undermined as a strategy.
Engineering history of Finland	The mindset of the board members is more sort of engineering-first oriented, and they don't value design as much" (Private equity investor – Company 1)
	"Finland has a very Risk averse culture and I think that the service design projects are risky [] the finish kind of like a culture is that you have you calculate 1st 10 times and then consider another 10 times then finally make a decision." (Private equity investor – Company 1)

Appendix 1B: What do investors and business managers value during an investment: Additional evidence

Cocood and an	First and an	Colortad suctor
Second order	First order	Selected quotes
themes	concepts	
Investment	Differentiation	"Another important investment criterion is, how does
Criteria to	from	the company differentiate itself? [] That it has
assess	competition	something that is quite unique, to differentiates itself or
investment		it has a strategy to become something that the others
opportunities		<i>are not</i> " (Private equity investor – Company 1)
	Impact of the	"Market growth is always very important. [] we want
	market size on	to be in areas that are not sort of a limited by market
	an investment	<i>size."</i> (Private equity investor – Company 1)
	decision	
	Innovation	"A proven business track and innovation pipeline is
	capability of a	crucial for growth and for being on the top. And at the
	company	front line in the industry but I don't think we have any
		generic [] advice for product innovation that we can
		give to the companies. (Growth investor – Company 1)
	Employee	"We investors don't invest in the company; we invest in
	satisfaction as	the people. Their skills and their know-how and, I think
	an investment	nothing is worse than starting to change the
	criterion	management" (Private equity investor – Company 1)

		"Biggest bottleneck for growth a lot of times is finding
		the right people, being able to recruit and retain talent,
		and that's where the real competition is. It's not finding
		customers; it's finding top talent employees []
		<i>Employer branding is really important"</i> (Growth
		investor – Company 1)
Value	Value-adding	"We don't just use quantifiable tools but instead also
creation	toolbox used by	rely on intuition and experience" (Private equity
after a new	investors and	investor – Company 1)
investment	management	
	ESG	And then we have a strong ESG aspect in our funds. So,
	(environmental,	we really want to sell help our companies to set up for
	social,	their ESG policy and the kind of numbers and figures
	governmental)	they want to track (Private equity investor – Company
	Policy as part of	1)
	the action plan	
		We are supporting the sustainability development of
		the companies and therefore when we invest, we do an
		ESG assessment. (Growth investor – Company 2)
		Customer satisfaction is implemented for the ESG
		agenda, [] therefore one part to consider for the
		companies is also customer and employee satisfaction
		because that's like that's maybe from the social point of
		view. (Growth investor – Company 2)
Strategic	Strategic	<i>"If you see it (improvement due to design) is a clear</i>
decision	decision	problem area then it comes as part of the value
making	making and	creation plan or the board work and then we discussed
during the	implementing	that OK how can we improve? "(Growth investor –
ownership	the action plan	Company 1)
phase		
	Customer and	<i>"If you talk about the customers satisfaction, and what</i>
	employee	leads to customer satisfaction? Which is an important
	satisfaction as	part of the strategy. Then of course, design must also
	part of strategic	be that as it can easily improve customer satisfaction"
	board work	(Growth investor – Company 1)
		"The biggest bottleneck for growth a lot of times is
		finding the right people, being able to recruit and retain
		talent, and that's where the real competition is. It's not
		finding customers; it's finding top talent" (Growth
		investor – Company 2)
Valuation of	Positioning the	<i>"Investing is basically 3 three things, entry at the right</i>
the company	company as a	price, being able to do value creation and then find
during the	valuable	somebody who is willing to pay a premium and buy the
exit phase	investment	business from you for a profit"(Private equity investor –
		Company 1)
L		

Valuation of a	"It's (valuation of the company) really, it's a number.
company and	But how you form that number is not fixed. A lot of
how it's	times it's also negotiation, competition on how many
calculated	people want to buy it, some acquirers care more about
	the long-term focus of the company and maybe some
	buyers care less it is also defined by the company's
	philosophy. So, the value is different for different
	buyers." (Private equity investor – Company 1)
Long-term	"There are a lot of things that we put into motion []
investment and	the things that won't get done before we exit. But we
its effect on	will get the ball rolling and then we can show already
company	when we sell that, we fixed this. And it's not yielding
valuation	any gains yet, but in a few years it will, and then we can
during exit	factor those in the future" (Private equity investor –
	Company 1)
	<i>"I think a lot of times decision makers think, we don't</i>
	really need to spend money on this because it's not
	going to bring any value back [] design is also
	sometimes considered as such a long-term investment
	[] if you look at the short term short term goals, then
	you will have probably the surface level design the
	maybe the logo, the aesthetics, the web page, the UI
	but core design functions take longer to establish"
	(Growth investor – Company 2)
	"An investor will only be part of investing in long-term
	project if it can show value and payback at the point of
	sale." (Board member – Company 4)

Appendix 1C: Methods that can communicate design to investors and business managers: Additional evidence

Second order	First order	Selected quotes
themes	concepts	
Conviction	Investing	"We learn and build our own conviction based on the
requires	requires	information that you get all the time [] But of course
understanding	conviction and	if you understand the market better, it's much easier
	understanding	to analyze and understand compared to if it's new
	If a value feels	market. For any sale/contract or project to be initiated
	unclear it feels	by a company it is fairly important to be clear and be
	dishonest	able to communicate this value in its most core where
		possible, [] if it feels unclear, then it feels dishonest."
		(Growth investor – Company 1)
Involving the	Implementing a	"By activity, I mean that everybody who is part of the
board during	new project	process gives their input. Also, whether it's design
the proposal	requires	process or strategic process, if we have these multiple
	participation	different opinions and perspectives in the process that
	and input from	

	the responsible members of the board Involving more members increases the chances of implementation of the service	really makes to some big improvements" (Growth investor – Company 1) "It (communication and service design agency) was a complete one-stop shop and I think that's a strength to have, [] if you compile a similar type of an example when you pitch in. That I think could be a very strong thing." (Private equity investor – Company 1)
Reference with relevance increases familiarity and belief	Business managers are actively looking for success stories in the market	"People want to see references. You can say whatever you want, but they don't believe it. Unless they see something. And I think people are very traditional in many ways that they want to see the reference. If you show that you have done something similar you have a kind of reference, and if the reference has a name. That's even more convincing." (Private equity investor – Company 1) "We need success stories as a reference [] Success stories in Finland that that the companies are openly talking about it and value they helped create" (Private equity investor – Company 1)
	References don't feel applicable if they are not relevant to the clients	"The management is always sort of following their peers in the industry. [] A reference must be from the same peer group so it might make sense to build different example categories [] sometimes they have very limited capability on that, so you must show a same or similar type of company" (Private equity investor – Company 1)
Showing the role of design in the process and how the value was created	The role of design in a process needs to be specified to understand the value it creates	"If you can make it (design) more tangible, maybe more concrete by showing what exactly was your part and maybe somehow relate it to be understandable to business managers" (Growth investor – Company 1)
Targeting critical challenges creates an effective proposal	A service proposal should be targeted towards the most critical challenges of the client	"Obviously it's hard to know what the pain points are, or the most critical challenges companies are facing, but the top management have really important things to do and therefore they do not wat to listen to a general sales presentation. [] I think it would be really good idea to approach them with the most important or most challenging themes in what are interested in, and create a proposal matching that challenge or tackling that challenge" (Private equity investor – Company 1)

		"The sales effort and the biggest growth [] is coming from the product side. So, if organized around the product it's easier to develop the story and argument it" (Growth investor – Company 2)
Story telling assists in educating by developing interpretations	Educating investors and business managers in design is required to communicate its value	"The fact that the company board is usually made of businesspersons and CEO level people who don't understand design and don't know what it means [] it requires a lot of education and helping them to understand what it is" (Growth investor – Company 2)
	Story telling as a method assists in developing interpretations	"For communicating design some numbers might be good to have, but I think a storytelling method is even stronger. But a part of the storytelling could be, of course, some concrete, quantifiable values" (Private equity investor – Company 1)
	The content should include references, concrete results and value the service can provide	"I think the best way is always through the story telling. To have a situation where something has been done before, I'm sure that the design houses are able to tell stories about what they have created for other businesses and other situations. I think that is the very the best way of selling that in". (Private equity investor – Company 1)

Appendix 2: Interview Questionnaire and guide

Assumptions to be validated, based on research and preliminary interviews:

- 1. Language and terminology: Design and its subsets are interconnected with the business domain, although while having the same output its terminologies and processes differ greatly from business and investment terms. When design is communicated to the management of a company its ambiguity and language might make them confused and eventually uninterested/intimidated. Therefore, there is a need to re-articulate the terminology and translate it to terms the management is comfortable with and interested in. It can also be stated parallel to the design term, but the entry term should be maintained to be a term the managers are familiar with. This is backed by the quote "if you want to sell design, don't sell design" in my preliminary interviews.
- 2. Visualizing the effects of investing in design with a dynamic tool: Design as a value is hard to communicate quantitatively. There is enough data that shows the growth potential that design has created in companies but putting an exact number on it is usually not easy. This creates a paradox as most CEOs and management rely on risk analysis and quantitative measures before investing in new projects/changes for their companies. To bridge this gap, my research has shown the need for a dynamic provocative, and interactive presentation tool that shows an estimated growth if a company invests in design. This tool is based on the BSC (balanced scorecard) tool that most companies and managers use. The

tool will be created on the business terms and terminologies as stated in the language and terminology assumption. The advantages of this tool are that we create an interactive, provocative, and compelling argument that is based on their scores on how design can improve their company. Making the management have more trust in what design value is being added and a transparent investigation in the working of their own company. How this works: Identify a company in the same industry as the client company that has invested in design and has a good design maturity, we can then deconstruct their company's performance in different subsets of the BSC model and compare their growth before and after investing in design. This enables us to find a growth pattern and a possible percentage across a time bracket. We then use this percentage/pattern to create an algorithm for a tool that is based on the BSC model backed by the 4 powers of design. The BSC model has further subsets that can influence the tool based on the percentage algorithm. During a pitch, the design agency shows this dynamic tool as part of the pitch while interacting with the client. As the interaction based on business terminology proceeds, we add the scores they give their company in different subsets and add them to the dynamic model. Eventually, we show how their business can grow if we add these features to the dynamic model in a visualization. The advantages of this tool are that we create an interactive, provocative, and compelling argument that is based on their scores on how design can improve their company. And the management has more trust in what design value is being added and a transparent investigation in the working of their own company.

- 3. A PEI wants to bring changes to the company and acts like a catalyst where design consultants can pitch design.
- 4. Most relevant time for starting to make the most of design holistically is sometime during the first couple of years after the fund has made the investment and joined the company.
- 5. SMEs wish to get very concrete ideas and understanding quickly about the benefits and what's in it for them.
- 6. PEI would invest in long term projects which extend their tenure in a company.

Interview participants and CONTROL VARIABLES:

CEOs of SME's

- 1. Of companies with design investments in the past
- 2. Of companies without any design investments in the past.

Private equity investors who have invested in a company.

Small Medium sized companies

A company where a recent investment has been made (not a hard variable for the interview but would give a real case scenario)

Interview Style: Semi-structured interview

Duration: 60 minutes

Interview questions for investors:

Research Objective

Are there any factors that can improve/accelerate the use of design in a SME after an investment has been made?

Themes:

Opening and knowing about them and their company

When did you invest/own the company?

Till when is your tenure in the company?

Behavior and attitudes (dynamics in the company and relations):

When it comes to taking decisions in the company, how are the decisions taken? What is your role as an investor in these decisions?

Did you have any ideas/changes that you wanted to bring to this new company? How were they received by the company?

Investing in a company (before and after)

What were the investment criteria that you chose before investing in a company. (Please feel free to use as many traditional business and investment terms for this answer)

After investment, did you create an action plan to be followed with this company? How much time did it take to create this plan? If you remember, what were the main changes that were created as part of the action plan?

How did you and the management decide on this action plan? How did you find newer areas of development for your company?

Design and its use

In the action plan did you consider improving upon domains like customer satisfaction, brand image and product innovation? Can you elaborate on this with an example?

What are the factors that can help accelerate the use of design in a company? Also, what are the factors that hinder it?

Language of communication

In your opinion how can the value that design brings be effectively shown to the management of a company by an external agency?

OPEN DISCUSSSION

Interview questions for CEOs of a company:

Research Objective

Are there any factors that can improve/accelerate the use of design in a SME after an investment has been made?

Themes:

Opening and knowing about them and their company

When did you get the last investment in your company?

Behavior and attitudes (dynamics in the company and relations):

When it comes to taking decisions in the company, how are the decisions taken? What is your role as the CEO in these decisions?

Did the PEI bring some new changes to the company after they joined? What were those? How were they reciprocated by you and others? What is their position in the company?

Investing in a company (before and after)

How do you make your company look more lucrative to future investors?

What are the investment criteria that you measure before investing in new projects/changes in your company?

After investment, did you create an action plan to be followed with this company? How much time did it take to create this plan? If you remember, what were the main changes that were created as part of the action plan?

How did you find newer areas of development for your company?

Design and its use

In the action plan did you consider improving upon domains like customer satisfaction, brand image and product innovation? Can you elaborate on this with an example?

What are the factors that can help accelerate the use of design in a company? Also, what are the factors that hinder it?

Language of communication

In your opinion how can the value that design brings be effectively shown to the management of a company by an external agency?