



What are the key factors and characteristics essential for effective decision-making in design projects, including the role of design ROI and the characteristics of a successful design leader?

UNIVERSITY OF LAPLAND

FACULTY OF ARTS AND DESIGN

ARTO MIESKOLAINEN

MASTER'S DEGREE PROGRAMME IN SERVICE DESIGN

MASTER'S THESIS

57 PAGES, 3 ANNEXES

SPRING 2023



LAPIN YLIOPISTO
UNIVERSITY OF LAPLAND

University of Lapland

Faculty: Faculty of Art and Design

The title of the pro gradu thesis: What are the key factors and characteristics essential for effective decision-making in design projects, including the role of design ROI and the characteristics of a successful design leader?

Author: Arto Mieskolainen

Degree programme: Master's Degree Programme in Service Design

Type of the work: Pro gradu- thesis

Number of pages: 57 Pages + 3 Annex

Year: Spring 2023

ABSTRACT

The purpose of this study was to understand the key characteristics that are essential when making decisions on design projects. The research aimed to answer the question of what are the most important considerations for successful design projects. To achieve this, a mixed-methods approach was used, including a literature review, benchmark studies, and interviews. The data was collected through a combination of online and offline methods.

The study was conducted using a social constructivism approach, with the researcher acknowledging the potential influence of their own biases and perceptions on the data collection and analysis. Triangulation was used as a method of validation, with data collected from multiple sources and multiple methodological approaches. The researcher also reflected on their own role in the study and acknowledged the potential effects of their own professional experience.

The study found that understanding the project's benefits, determining design requirements, and using key performance indicators to measure success, teamwork, and confidence in the designer's skills are some of the key characteristics essential for successful design projects. The importance of design ROI was frequently emphasized as a key factor when deciding on a design project. Additionally, it was found that a successful design leader should have a solid understanding of the business and its commercial issues, possess the ability to manage projects and lead a team, have a sensitivity to human characteristics, and have the ability to develop a design strategy.

Keywords: Design Thinking, Leadership, Design Management, Design ROI, Decision Maker

Lapin yliopisto

Tiedekunta: Taiteiden tiedekunta

Työn nimi: Minkälaiset tekijät ja ominaisuudet ovat olennaisia tehokkaaseen päätöksentekoon suunnitteluprojekteissa, mukaan lukien suunnittelun ROI:n rooli ja menestyksekkään suunnittelujohtajan ominaisuudet?

Tekijä: Arto Mieskolainen

Koulutusohjelma: Palvelumuotoilun monialainen maisteriohjelma

Työn laji: Pro gradu -tutkielma

Sivumäärä, liitteiden lukumäärä: 57 sivua, 3 liitettä

Vuosi: Kevät 2023

TIIVISTELMÄ

Tutkimuksen tarkoituksena oli ymmärtää muotoiluprojektien päätöksenteon kannalta olennaisia ominaisuuksia. Tämä saavutettiin käyttämällä monitieteellistä lähestymistapaa, johon kuului autoetnografinen päiväkirja, vertailututkimukset ja haastattelut. Tieto kerättiin yhdistämällä verkko- ja offline-menetelmiä.

Tutkimus toteutettiin sosiaalisen konstruktivismin tieteenfilosofisella näkökulmalla, ja tutkija myöntää puolueellisuuteensa, ammatillisen kokemuksensa ja näkemystensä vaikutuksen tiedon keruuseen ja analyysiin. Tiedon vahvistamiseen ja tutkimuksen validiteetin kasvattamiseen käytettiin triangulaatiota, jossa tieto kerättiin useista lähteistä ja useista metodologisista lähestymistavoista.

Tutkimus todensi, että muotoilun hyödyt, suunnitteluvaatimukset ja tärkeiden suorituskykyindikaattorien käyttäminen menestyksen, tiimityön ja suunnittelijan taitojen arvioimiseen ovat tärkeitä ominaisuuksia onnistuneiden muotoiluprojektien osalta. Muotoilun ROI:n tärkeys korostui usein päätöksenteossa. Lisäksi tutkimus todensi, että menestyksekkään muotoilujohtajan tulisi ymmärtää yrityksen liiketoimintaa ja sen kaupallisia lainalaisuuksia, hallita projekteja ja johtaa tiimiä, olla herkkä ihmisten erilaisille persoonallisuuspiirteille ja kyetä kehittämään muotoilustrategia.

Avainsanat: Muotoiluajattelu , Johtajuus, Design Management, Design ROI, Päätöksenteko

TABLE OF CONTENT

1	INTRODUCTION	7
1.1	WHY AREN'T ORGANISATIONS MAXIMIZING THEIR VALUE-GENERATION EFFORTS?	7
1.2	RESEARCH CONTEXT: DECISION MAKERS IN IN-HOUSE AND AGENCY ROLES. FINLAND. SENIOR LEVEL.....	8
1.3	ORGANISATIONAL DEVELOPMENT THROUGH DESIGN AS THE PHENOMENON IN FOCUS	9
1.4	RESEARCH OBJECTIVE: UNDERSTANDING THE INTERSECTION OF DESIGN, LEADERSHIP AND FINANCIAL CONSIDERATIONS.....	10
1.5	RESEARCH QUESTION(S)	10
2	PREVIOUS AND EXISTING RESEARCH.....	12
2.1	FROM GIVING FORM TO THINKING WITH DESIGN.....	12
2.1.1	<i>Why design matters?</i>	13
2.1.2	<i>Design definition and business contribution for this study</i>	14
2.2	HOW TO MEASURE DESIGN	14
2.2.1	<i>Exclusions in this study</i>	16
2.2.2	<i>Design + ROI = Design ROI (dROI)</i>	17
2.3	SUCCESSFUL DESIGN LEADERSHIP – THE KEY TO UNLOCKING THE POWERS OF DESIGN.....	20
2.3.1	<i>Who leads design?</i>	21
2.3.2	<i>Eight archetypes of a successful quality management leader</i>	23
2.3.3	<i>A leadership decision – how are they made?</i>	25
2.4	RESEARCH GAP: THE DESIGN VALUE IMPACT AND DECISION SUPPORT INFORMATION NEEDS OF LEADERS AND THE SUCCESSFUL CHARACTERISTICS OF A DESIGN LEADER – IS THERE A WINNING COMBINATION?	25
3	RESEARCH METHODS	26
3.1	CONSTRUCTIVIST PARADIGM AT THE CORE.....	26
3.2	NARRATIVE STUDY WITH A PRACTICE-BASED APPROACH	26
3.3	DATA COLLECTION METHODS USED	27
3.3.1	<i>Thematic interviews with inductive analysis</i>	27
3.3.2	<i>Benchmark studies</i>	28
3.3.3	<i>Autoethnographic Field Journal</i>	29
3.4	DATA COLLECTION FOR THIS STUDY.....	30
3.4.1	<i>Why use interviews as a dataset?</i>	30
3.4.2	<i>Plan for the thematic interview data collection</i>	31
3.4.3	<i>Benchmarking other relevant studies as a dataset</i>	33
3.4.4	<i>Plan for the benchmarking dataset collection</i>	33
3.4.5	<i>Autoethnographic Field Journal as a dataset</i>	34
3.4.6	<i>Plan for the Autoethnographic Field Journal</i>	34

4	PRESENTATION OF STUDY RESULTS	35
4.1	DATA COLLECTION SUMMARY	35
4.2	FURTHER ANALYSIS OF DATASETS.....	35
4.2.1	<i>Data Collection for the interviews.....</i>	35
4.2.2	<i>Interview Participants</i>	36
4.2.3	<i>Interview data analysis: From codes to analysis in three phases.</i>	37
4.3	BENCHMARK STUDIES.....	42
4.3.1	<i>Presenting McKinsey Design Index (MDI).....</i>	42
4.3.2	<i>Presenting Design Management Institute Index (DMI) Scorecard.....</i>	43
4.3.3	<i>Integrated results of the benchmark studies</i>	43
4.4	FINDINGS FROM THE AUTOETHNOGRAPHIC FIELD JOURNAL.....	44
4.5	ANALYSIS OF ALL OF THE DATASETS	44
5	DISCUSSION.....	45
5.1	WHAT IS THE MEANING OF THIS STUDY TO ME AND FOR MY WORK?.....	45
5.2	WHAT IS THE NOVELTY VALUE OF THIS RESEARCH?.....	46
6	CONCLUSIONS OF THE STUDY.....	47
6.1	SUMMARY OF THE RESULTS FROM ALL OF THE DATASETS.....	47
6.2	RESEARCH RESULTS VERIFICATION AND VALIDITY.....	47
6.2.1	<i>Reflecting on the researcher-effects</i>	47
6.2.2	<i>Were there any answers found?</i>	48
6.2.3	<i>Quality and validity of the research</i>	49
6.3	SUGGESTIONS FOR FUTURE RESEARCH	49
7	BIBLIOGRAPHY	51
8	ANNEXES.....	57
8.1	THEMATIC INTERVIEW QUESTIONS	57
8.2	MCKINSEY COMPANY REPORT (2018).....	57
8.3	THE DESIGN MANAGEMENT INSTITUTE, DESIGN VALUE INDEX SCORECARD	57

LIST OF TABLES

TABLE 1. 10 CATEGORIES TO MEASURE DESIGN SUCCESS (LOCKWOOD, 2009B).....	16
TABLE 2. THE FOUR POWERS OF DESIGN (BORJA DE MOZOTA, 2006, P. 45).....	22
TABLE 3. THE EIGHT ARCHETYPES OF QUALITY MANAGEMENT LEADERS (OAKLAND ET AL., 2021, P. 51).....	24
TABLE 4. INTERVIEWEE INTRODUCTIONS	37
TABLE 5. CATEGORIES IDENTIFIED FROM THE CODES.....	38
TABLE 6. TOP 10 INDIVIDUAL RELEVANT CODES ACCORDING TO OCCURRENCE IN DATA.	39
TABLE 7. TOP 5 CODES PER TOP CONCEPT.	40
TABLE 8. CODES WITH ASSOCIATED CONCEPT PRESENT IN EVERY INTERVIEW.	40
TABLE 9. MDI THEMES AND DESIGN ACTIONS (SHEPPARD ET AL., 2018).	43

LIST OF FIGURES

FIGURE 1. FRAMEWORK REPRESENTING DIMENSIONS IN EVALUATING DESIGN (WHICHER ET AL., 2010).	17
FIGURE 2. DESIGN ROI HYPOTHESIS. (PITKÄNEN, 2013).....	18
FIGURE 3. THE DANISH DESIGN LADDER(THE DANISH DESIGN COUNCIL, 2001).....	21
FIGURE 4. THE DESIGNENCE MODEL: "THE FOUR POWERS OF DESIGN - A VALUE MODEL IN DESIGN MANAGEMENT" (BORJA DE MOZOTA & VALADE-AMLAND, 2020).	22

1 INTRODUCTION

1.1 Why aren't organisations maximizing their value-generation efforts?

In today's fast pacing and complex world with ever-evolving changes in customer behaviour and expectations, it is crucial for any organisation, public or private, to stay in lockstep with the changing times. Organisational success is generally measured by the value and profit produced. From the multitude of studies conducted, we know that organisations utilising design and design thinking extensively, are creating better shareholder value and performing better compared to organisations which do not (Borja de Mozota, 2006; Dell'Era et al., 2010; Heskett, 2008; Moultrie & Livesey, 2009; Sheppard et al., 2018; Westcott et al., 2013).

Moisander & Stenfors (2009) argued that the current tools at organisations' disposal have failed to meet the needs of organisations to engage people working in that organisation and identify users' needs in development processes (Moisander & Stenfors, 2009). Elsbach and Stigliani (2018) have noted in their study how more and more companies have started to adopt Design Thinking practices. Companies' reason for this is to improve customer centricity, increase customer loyalty and create better brand recognition (Elsbach & Stigliani, 2018). To begin the journey of implementing Design Thinking practices in an organisation is no small task. From my own experience after years of working in business development and brand management roles, the most successful methods to begin the transformation are from bottom-up (small pilot somewhere in the lower echelons of the organisation) or top-down (where a C-level executive enables and adopts the role of a sponsor of the transition).

Therefore, understanding the way and what is needed for design projects to get greenlighted by a business leader or a client representative is paramount for every designer. To me personally, it's also equally important to understand the characteristics of a good design leader, as this is the direction that is professionally the most interesting to me.

My thesis contributes to the existing research by increasing the understanding of individual leaders' decision-making informational needs, especially concerning Design ROI (dROI) and the design leaders' characteristics when deciding to go ahead with a design project or not. Though no leader is the same, as humans, they share certain behavioural traits to do with characteristics and risk-

taking abilities. By understanding these traits and the need for supporting information better, future designers and organizational development professionals will be able to address better and engage the leaders in their respective organisations. Here it's necessary to note that a business leader and a design leader are understood to be different people throughout this study, even though, in reality, these roles might have some overlap.

To me personally, this topic is fascinating. It sits at the intersection of Design, Leadership and Business. I can see the immense opportunity the proper adoption of Design Thinking can bring to any organisation. The more designers and design leaders can "speak the same language with the corner office", the more traction their proposals will get, and the more business value will be generated for the organisation.

During my Master's degree studies, I've been exposed to and involved in various academic and professional design projects. I've been especially fascinated and interested in the ideation and innovation processes based on the commonly created understanding of the current reality. I have witnessed the high feasibility level of the prototypes produced when utilizing Design Thinking through Service Design processes. I could foresee how the value for the respective organisations was and will be generated, also on a systemic level. We also know from multiple academic studies that organisations which utilize Design Thinking are making more money (Björklund et al., 2018; Borja de Mozota, 2003, 2006; Green & Harrison, 2016; Greenthal et al., n.d.; Hertenstein et al., 2005; Heskett, 2008). So why aren't leaders deciding to start utilizing Design Thinking in their organisations at full speed? What do they need to support their decisions to start a design project? What role do financial considerations play in all this? What kind of characteristics should a successful design leader have? I'm fascinated to find answers to these questions.

1.2 Research context: Decision makers in in-house and agency roles. Finland. Senior level.

In this study, I aim to understand what is needed to support individual leaders' decision to start utilizing Design in their organisation and what role the financial considerations and the characteristics of design leaders play in all of this. As Design Thinking is one method to implement Design itself (Camacho, 2016), in the context of this study, I'll use the more holistic term of 'Design' to encompass all of the design benefits and activities. As there are various ways to be a leader, I aim

to understand what information these types would need to support their decision-making for a design project and what characteristics are associated with a successful design leader. I'm especially interested in seeing how the financial considerations, if any, are present during this deliberation, as with any design project, the economic risks and benefits can be considerable. The research context is geographically limited to Finland and senior-level leaders in in-house or agency roles in small or medium-sized businesses (SMEs). I will discuss these further in chapter three.

This thesis unfolds as follows. First, I start with framing the research problem. After this, I'll introduce, define and explain the core tenets related to this study, along with the critical research questions I'm aiming to get answered.

In chapter two, I'll cover the relevant existing research on this phenomenon and set forth the concepts and linguistic topography necessary for this study. Chapter three explains my research philosophy, methods, and reasoning behind their selection. In chapter four, I will present my research results, first from each of the three datasets separately and then synthesising all the data accrued in one summary. The conclusions of this study are presented in chapter five, and more significant implications, especially to the design community, are discussed in the chapter six, the final chapter of this study.

1.3 Organisational development through design as the phenomenon in focus

In this study, I link together two of my primary areas of interest, Design Value and Leadership. I can see the enormous possibilities and improvements adopting Design Thinking can deliver for any organisation, private or public. During my Master's Degree studies, I've constantly asked and challenged our lecturers, visiting lecturers and various company representatives about how was the first step taken for adopting Design Thinking in their respective organisations. I found out that their responses corresponded with my own experience of how organizational change starts. Usually, from my own experience, change starts either from down-up or top-down, the first meaning that usually a specific team or individual experiments and adopts a new way of working successfully. Latter means that a person in a leadership role begins to be or is already heavily supportive of the transformation, and due to the clout they hold and the resources they can allocate, the project is confirmed. Eventually, the new process or way of working is implemented.

1.4 Research objective: Understanding the intersection of Design, Leadership and Financial considerations

The value of this study is in the documentation of the decision-making informational needs of the interviewed leaders and in the understanding of what kind of supporting information needs there are. In-house and agency roles are addressed separately in data collection, as they can vary significantly. By linking, validating and expanding my study results to existing Design ROI knowledge, I hope this work enables and inspires all designers and design leaders to understand better how to approach business leaders, as representatives from client organisations or within their own. Furthermore, understanding how to address the financial considerations and design leader characteristics in their respective organisations while increasing the design maturity is also a desirable outcome of this study. To get Design and Design Thinking on the leadership agenda – one must speak the “leadership language”.

Financial considerations always play a significant part in every decision made in any organisation. Therefore, I feel it’s necessary to further examine the link between design and business value. This study will focus on the most common and widely used financial approach for measuring the impact and business value of new and improved processes, products and services. According to Rico (2005), this approach is known as the Return on Investment model (ROI), where the simple arithmetic ratio of benefits to costs is measured in the applicable currency. If the return of the benefits measured outnumbers the costs and expenses, profits are generated, so the value of the investment, cost savings and efficiencies are achieved (Rico, 2005). As the ROI model only measures the benefits and costs, in this research, we’ll focus mainly on these when applying this model to design activities.

1.5 Research question(s)

In this thesis and study conducted, my main research objective is to understand what the key factors and characteristics that are essential for effective decision-making for design projects, including the role of design ROI and the characteristics of a successful design leader are. Thus also enabling the journey towards Design Maturity in their respective organisations. I also aim to identify and understand what characteristics are seen as essential for a successful design leader and what role financial considerations have in this process, and how they link with Design ROI elements.

This research is conducted as a narrative study. As a researcher, I am interested in the reality and the narratives of the realities of the leaders who have been or contributed towards a situation where a decision to start the journey towards Design maturity was made. The setting for this research consists of interviews with leaders from various industries who have made decisions concerning design projects. Additional views are leveraged from the studies conducted in the private sector. Also, autoethnographic materials were utilized.

In this study, I examine what the experienced interviewees list as information needs and what role considerations for the Design ROI play in these decisions. Furthermore, views are analysed based on their experience of the successful design leader characteristics. I will then analyse the results using an inductive narrative analysis method to produce the main narratives from the results. These then will be connected with the characteristics that the interviewed leaders described a successful design leader should have. Ultimately, I aim to have a clear and prioritized list of informational elements required for design pitches to succeed from an in-house and agency point of view and a prototype of the main characteristics of a successful design leader. Hopefully, these results will help future designers get their projects off the ground and advance their careers.

My main research question is:

What are the key factors and characteristics essential for effective decision-making in design projects, including the role of design ROI and the characteristics of a successful design leader?

My additional research questions are:

What role, if any, do dROI considerations have in this decision?

What characteristics should a successful design leader have?

2 PREVIOUS AND EXISTING RESEARCH

2.1 From giving form to thinking with design

Design has existed for as long as we humans have. Since the dawn of humanity, we have been driven by curiosity and innovation. The academic debate on when design appeared as a discipline range from prehistoric times to the early years of the Industrial Age in the turn of the 17th and 18th century (Heskett, 2019; Read, 1944). Design as a concept is "*a purposeful behaviour which is targeted towards certain goals and to the creation of solutions*" (Matthews & Wrigley, 2017). In the designer community, design is seen as something we all can take part in. "*We all can, and do, design and what we can learn to design better*" (Lawson, 2006).

The academic effort to understand what and how designers think has been around for decades. For example, Schön (1983) studied this in the field of education and Lawson (2006) in the field of architecture, and they both reflected and described how designers think (Lawson, 2006; Schön, 1983). Lawson (2006, p. 56) states, "*the design process includes formulating, moving, representing, evaluating and reflecting*".

Tim Brown and Barry Katz (2009) describe design thinking as "*a discipline that uses designer's sensibility and methods to match people's needs with what is technologically feasible and what a viable business strategy can convert into customer value and market opportunity*" (Brown & Katz, 2009, p. 86). According to Thomas Lockwood, design thinking is "*applying a designer's sensibility and methods to problem-solving, no matter what the problem is ... a methodology for problem solving and enablement*" (Lockwood, 2009a, p. 11). In recent years, design thinking has become a key ingredient in company strategies while moving away from just product and process design (Bucolo & Matthews, 2010; Carlopio, 2009).

Design and design thinking has been popularized especially by the work, stories, cases, studies and examples by design firms like IDEO while they have been working on problem-solving and new product development during the last decades (Brown, 2008; Brown & Katz, 2009; Hargadon & Sutton, 1997). Brown (2008) frames design thinking with innovation as a human-centred approach. The human-centred approach includes ideation, inspiration, and implementation as equally cyclical

and iterative processes. It also includes prototyping, encouraging people to think, using stories, and cultivating inspiring and inclusive cultures (Brown, 2008).

Veryzer & Borja de Mozota (2005, p. 130) define design holistically from the perspectives of objects, processes and services by taking into consideration their life cycles.

“Design is a creative activity whose aim is to establish the multi-faceted qualities of objects, processes, services and their systems in whole life cycles. Therefore, design is the central factor of innovative humanisation of technologies and the crucial factor of cultural and economic exchange.”

(Veryzer & Borja de Mozota, 2005, p. 130)

2.1.1 Why design matters?

In the modern business environment, design has grown in significance as businesses realize the benefits of making design investments to stand out from the competition, attract new customers, and retain existing ones. However, although the value of design is becoming more widely acknowledged, there is still no agreement on the best way to measure design activities' return on investment (ROI) (Björklund et al., 2018). Because of this disagreement, it is challenging for businesses to defend their investments in design and for designers to prove the worth of their efforts. However, there is growing evidence that design has a favourable impact on economic growth. For example, in 2005, Hertenstein et al. claimed that design has a positive effect on companies' financials, yet they had not been able to identify or isolate the processes by which this happens (Hertenstein et al., 2005).

In more recent years, scholars and practitioners have worked to assess the effects of design at both the micro and macro levels in global comparison studies (Green & Harrison, 2016; Heskett, 2008; Koivisto et al., 2019; Pitkänen, 2013; Whicher et al., 2011). Even The European Commission has recognised that *“companies that invest in design tend to be more innovative, more profitable and grow faster than those who do not”* (Commission Staff Working Document, 2009, p. 2). These studies provide clear evidence of a positive connection between design and business value.

2.1.2 Design definition and business contribution for this study

Every experience, everything and every service that is produced and used has design at its core. Academics and practitioners view design as a company's most important competitive edge in the modern economy (Brown & Katz, 2009; Bryson & Rusten, 2010; Kelley, 2005; Martin & Martin, 2009; Plattner et al., 2010). Their combined studies demonstrate the importance of the design process, design thinking, and designed goods and how they significantly enhance global and domestic competitiveness. Yin et al. (2011) identified one of the critical factors contributing towards business success as design (Y. Yin et al., 2011).

Design in business can have various roles. It is described as the act of conceptualizing, planning, and creating goods and services, systems, brands, or environments that benefit people or organizations (Gajendar, 2003), as the interface between consumer behaviour and product development (Bryson & Rusten, 2010), and as an innovation process (Brown & Katz, 2009; Kelley, 2005; Martin & Martin, 2009; Whicher et al., 2011). The value of design is frequently expressed in terms of the function it plays as a process, product, service, individual, policy, or aspect of business competitiveness (International Council of Societies of Industrial Design, 2005). Design also impacts all three levels of an organisation – Strategic, tactical and operational (Borja de Mozota, 2003).

For this study, a “holistic” view of design is adopted. “Holistic” design refers to design in its broadest meaning, including financial and strategic aspects in addition to the visual ones. The aesthetic remains essential, despite the warning against viewing design as purely ornamentation (Guo, 2010, p. 7). It is good to note here that *design thinking* is part of the overall concept of *design*.

2.2 How to measure design

Thomas Lockwood had, in 2010, developed a framework to measure the value of design. He has identified ten categories where design contributes towards business. All that is needed are the measurements to quantify the design impact (Lockwood, 2010a). Next, I will present an adaptation of his results:

The ten categories of this framework to measure design are:

Category	Description
1. Purchase influence/emotion	Design may promote premium pricing, sway consumer preferences, and increase product sell-through. Additionally, it may enhance the emotional bond between a client and a brand.
2. Enable strategy/enter new markets	Design may have valuable contributions through its capacity to support company goals or penetrate new markets. For example, when evaluating the two electronics manufacturers, Sony and Panasonic, it should be noted that Sony loves to innovate and is recognized as a design-driven corporation, whereas Panasonic tends to follow trends and is more of a design follower. Both companies have annual revenues of around \$62 billion, but Sony is estimated to have a \$12 billion brand value and a brand rating of #26 - three times that of Panasonic. This is due to the importance of design strategy and the incorporation of design into business strategy.
3. Build brand image and corporate reputation	For instance, Apple makes approximately half the profit Dell makes, but it does so with only a third of the revenue, making it far more lucrative. Also, winning designs help build a company's reputation and brand image.
4. Improve time to market and development processes	Design may be evaluated using time-to-market and process metrics. Finding the ideal balance between successful design and process efficiency is crucial. Creating design standards, or at the very least design guidelines, is a typical strategy to do this. This increases design flexibility by allowing the brand to show creativity while providing guidelines for designers to work within, preventing them from having to create the wheel from scratch for each new project.
5. Design return on investment (ROI)/cost savings	According to studies, businesses that were assessed as having good design performed better on almost all financial metrics from both a statistical and practical standpoint as well as from a management and operational one.
6. Enable product and service innovation	The key to success is having a thorough understanding of your target audience, which you can use to develop the ideal customer experience and then craft each customer touchpoint to enhance that experience.

7. Increase customer satisfaction/develop communities of customers	Customers not only participate in design but also carry out some of its functions. This is highly effective, sticky, and appealing. Professional designers occasionally need to let clients participate.
8. Design patents and trademarks/create intellectual property	Considering how much you would lose if it were stolen is a way to determine how much design contributed. By ensuring thorough IP protection, refraining from violating others' IP rights, and integrating IP-building activities into design processes, strategies that aim to increase the return on investment (ROI) of design work may be isolated and are of considerable value.
9. Improve usability	There are several techniques for identifying, evaluating, and enhancing design based on usability. The success of user navigation is frequently examined to assess the usability of an interface design with observation, click-through and/or interviews.
10. Improve sustainability	We must all strive to assess design in regard to its ability to better the world and the lives of individuals. We all have a responsibility to use inclusive, environmentally friendly, and responsible design techniques. We all need to contribute since the creative economy is more environmentally friendly; designers and design managers have a big say in this.

Table 1. 10 categories to measure design success (Lockwood, 2009b).

2.2.1 Exclusions in this study

As discussed earlier, this study takes a “holistic” view of design. Whicher et al. (2010) have created levels of Design Evaluation. In their model, design is evaluated at micro- and macro levels in relation to the organisation being in the private or public sector (Figure 1). Also, Pitkänen et al. (2013) have identified similar levels of division in their work (Pitkänen, 2013). In this study, I will focus only on the individual companies in the private sector of the micro level (Figure 1, quadrant 1).

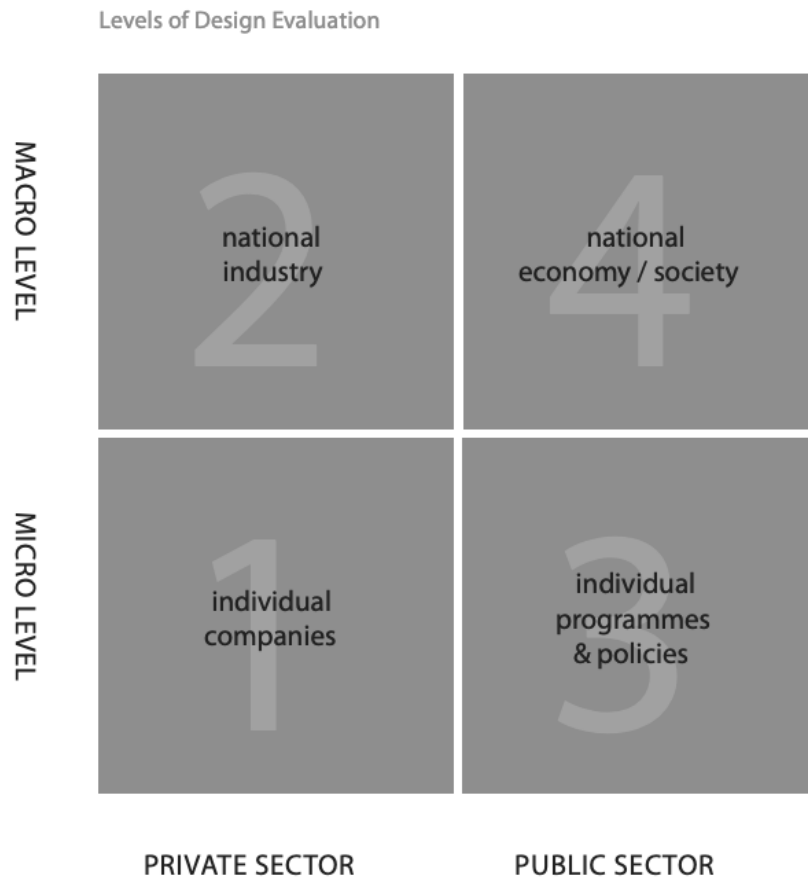


Figure 1. Framework representing dimensions in evaluating design (Whicher et al., 2010).

2.2.2 Design + ROI = Design ROI (dROI)

Despite all of the research introduced before, there are no generally agreed metrics or models for design's impact and correlation to business performance. In 2013 a Finnish research team launched a project to explore this topic further. This project was initiated by The Finnish Design Business Association (FDBA), Aalto University and the Finnish Funding Agency for Technology and Innovation (Tekes).

For this study, I'll use the same broad definition of design ROI as Pitkänen et al. (2013) used in their Design ROI project. They defined design as 1) a competence, 2) a process, 3) a service, 4) an outcome (Pitkänen, 2013, p. 18).

Pitkänen et al. (2013) have, as part of their publicly funded project, produced a complete framework for recognizing the value of design with a focus on the design action-derived cash flow (Pitkänen, 2013).

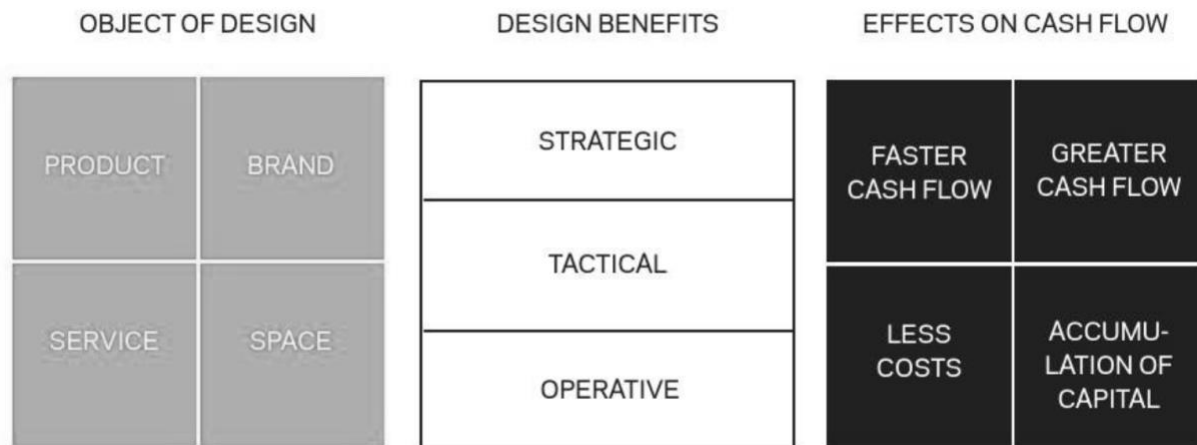


Figure 2. Design ROI hypothesis. (Pitkänen, 2013)

Angéle Beausoleil (2012) has prepared an extensive literature review of the role of design in business ROI. She gives the following examples of design performance measuring models in chronological order:

- The *Product Archeology Approach* (Ulrich & Pearson, 1998) measures design performance through an analysis of physical products, cost estimation and manufacturing environment. The approach references the cost of the industrial design products, a theoretical model combined data collected through observation in the marketplace of an artefact's design attributes that drive costs with public financial data.
- *The Design Ladder* (The Danish Design Council, 2001) evaluates design and economic benefits through a linear regression analysis model, measuring the economic effects of design against the effects of other factors, such as company size and the number of staff university graduates, etc. *The Design Ladder* is now being adopted as a performance tool by other European countries, including Austria, Ireland, Sweden and Switzerland.
- The *Design as Element of Innovation* model (Candi, 2005) provides a basis for isolating and evaluating design along three dimensions, visceral, behavioural and reflective design, to evaluate its performance in operationalising a firm's activities, methods and efforts.
- The *structural equation model* (Chiva & Alegre, 2009) provides a methodological contribution to design management's role in enhancing a firm's performance, as observed through Italian and Spanish ceramic tile industries.

- The *Design Structure Matrix* (Clarkson & Eckert, 2010) is a modelling tool that connects the product to systems and components and/or people to project teams and has a great bearing on an organization's operations efficiency and effectiveness. It is an adopted ROI method within the engineering design-oriented sectors such as aerospace, automobile, architecture and construction.
- The *European Innovation Scoreboard* model (Hollanders & van Cruysen, 2009) measures a country's performance of creativity and design using 35 indicators. The scoreboard ranks Sweden and Denmark as Europe's top-performing design-led innovative countries, while Bulgaria, Poland and Romania are ranked the lowest.
- The *ten ways to measure design's success* model (Lockwood, 2009b) proposes a framework for effectively measuring the value of design through success criteria. The success criteria include purchase influence, building brand image, improved time to market, securing new markets and creating valuable intellectual property.
- The *Five Milestone Model* (Kesler & Kates, 2010) measures outcomes against the organizational design process, which includes smart, practical judgments rooted in a business case, supported by facts, and often developed through a series of tested hypotheses and is typically crafted in a roadmap format.
- *Digital Dividends* (Vinodrai, 2011) is a dROI model for cultural economies whereby both cultural and economic value is generated through a "design dividend" for a city-region.
- *Design for X* (DfX) (Canada. Industry Canada. et al., 2011) is an approach to product design and development directed at maximizing the production requirements demands (such as assembly, quality, disassembly, manufacturability, safety and environment friendliness) while simultaneously minimizing costs. *Design for Environment* (DfE) is an applied example of DfX for firms seeking to meet changing consumer preferences with a concern for the environment.
- The *Design Performance Measurement model* (Yin et al., 2011) measures key factors of success and failure of a new product development process, such as market share, investment return rate, and customer feedback. The tool supports a design manager's method to measure and improve collaborative design performance and development, the design team's strengths and weaknesses, team communication, and suitable responsive actions.

(Beausoleil, 2012)

As we can note from the list above, there are few models in existence that can help in evaluating the value and measurement of design impacts at macro- and micro-levels. Here, it is good to note that there are different methods for different levels of design evaluation (Figure 1).

2.3 Successful design leadership – the key to unlocking the powers of design

In the modern world we all live in, market demands shift rapidly, and customer needs change quickly. This calls for quicker abilities to adapt strategies and to evolve from companies who wish to still stay in business (Laitinen, 2000). The way any organisation reacts and responds to the change in customer demand is decided eventually by the leadership of the organisation. The ability to recognize and suggest what will the organisation's response to this change be, is usually within the leadership team, Chief Executive Officer (CEO) or the Board of Directors. In some cases, the board itself has to take action and decide on a new, more customer-centric strategy for the organisation to execute.

The ability and maturity to implement Design Thinking in an organisation can be measured with a tool called The Design Ladder, devised by the Danish Design Council (The Danish Design Council, 2001). This tool helps leaders to identify and decide the ambition level for the organisation when starting to utilise Design Thinking. If the concept is completely new, the leaders can see the transformation journey waiting ahead.

The Design Ladder

The Design Ladder was developed by the Danish Design Centre in 2001 as a communicative model for illustrating the variations in how companies use of design.

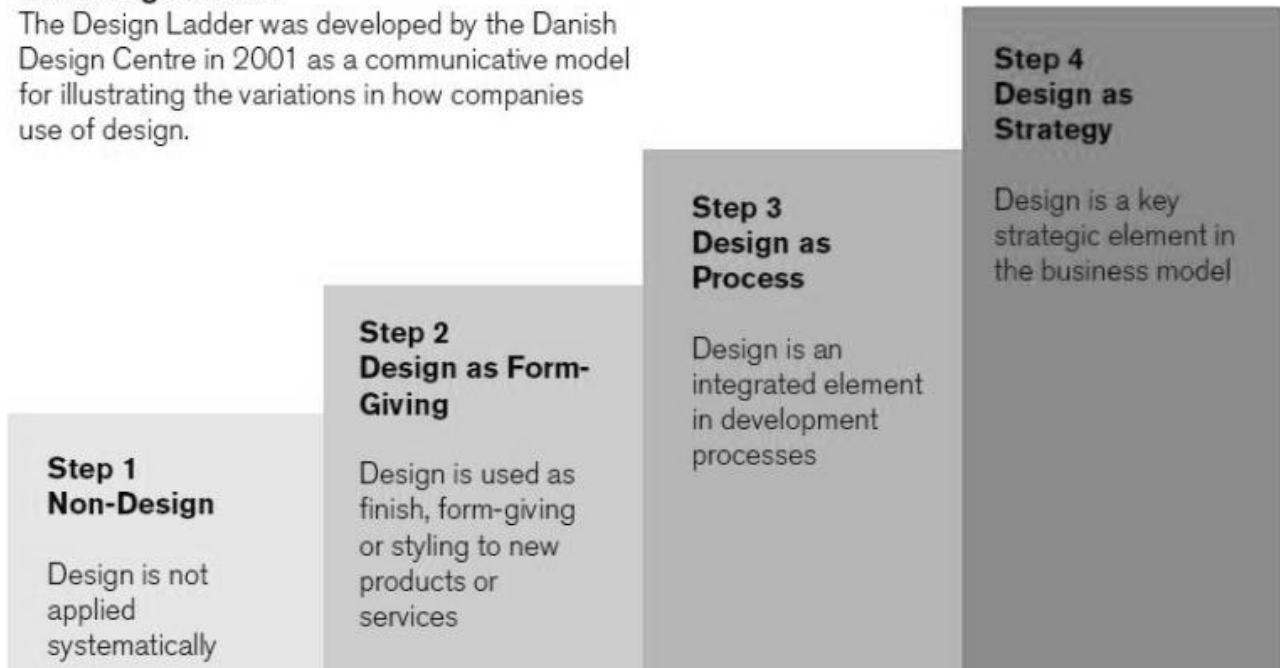


Figure 3. The Danish Design Ladder(The Danish Design Council, 2001).

2.3.1 Who leads design?

The President of the Design Management Institute, Mr Thomas Lockwood, PhD, states the differences between design management and design thinking as follows:

“Generally, design management and leadership lie in the area of integrating design into business and in continuous development and improvement, whereas design thinking is more akin to a front-end innovation process and strives for more-radical improvements.” (Lockwood, 2010b, p. 5).

One of the main definitions of design management in the design industry is from Birgitte Borja de Mozota (2006). She has defined four roles for design management as follows:

1. Design as a differentiator: Design as a source of competitive advantage on the market through brand equity, customer loyalty, price premium, or customer orientation	3. Design as a transformer: 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
2. Design as an integrator: 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 favours a modular and platform architecture of product lines, user-oriented innovation models, and fuzzy-front-end project management	4. Design as good business: 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)

Table 2. *The four powers of design* (Borja de Mozota, 2006, p. 45).

She later on revised this model with Steinar Valade-Amland (2020) to the following:



Figure 4. *The Designence Model: "The Four Powers of Design - a Value Model in Design Management"* (Borja de Mozota & Valade-Amland, 2020).

There are two roles where design exists; internal and external. Either we manage design, have designers, run design projects and maximise the benefits of design within our own organisation, or we are design professionals working externally to organisations while contracted to help. Hence, designers work either inside an organisation or support an organisation from the outside. The first mentioned is usually considered as an “in-house role” and the latter as an “agency”, “consultancy” or “freelancer” role. As for the designers, the realities, resources and cultures are very different depending on which type of organisation they belong to. Understanding the realities which these designers work under is of the highest importance for the person leading them. Björklund et al. (2019) found in their study that in-house designers concentrated on efficiency and advancement (or lack thereof), whereas design consultants focused on the level of support and learning from colleagues (T. Björklund & van der Marel, 2019).

2.3.2 Eight archetypes of a successful quality management leader

As I have previously discussed, the benefits of utilizing design and design thinking across any organisation are irrefutable. When looking into the top levels of an organisation, it’s essential to understand what kind of archetypes of people there are making decisions. Understanding this allows designers and design leaders to better build connections and further their projects. Different kinds of leaders need different types of information to support their decision-making. In their book “Total quality management and operational excellence”, Oakland et al. (2021) list the following archetypes of leaders:

The quality advocate	Articulates a clear vision for quality as a strategic imperative that supports the organisation to broader aims and objectives. Develops and implements strategies to maximise the contribution of the quality profession within the organisation.
the stakeholder advocate	act as the conscious in the organisation, making interventions whenever necessary to ensure customer and stakeholder requirements are addressed
the systems thinker	looks across business functions and hierarchies to promote a holistic view of the organisation and its requirements

the fact-based thinker	promotes a culture of decision-making based on factual evidence and the measurement of performance
the quality planner	advocates the principle of planning for quality to prevent potential problems with product and service quality
the quality coach	develops knowledge of quality principles and capability in quality tools, techniques and approaches throughout the organisation
the quality motivator	motivates and empowers others to take accountability for achieving and improving standards of performance
the quality collaborator	works with all internal and external stakeholders to resolve issues associated with organisation performance and delivery of quality products/services

Table 3. The eight archetypes of quality management leaders (Oakland et al., 2021, p. 51).

From these eight roles, Oakland et al. (2021) have identified three core roles, which are “The Fact-based Thinker”, “The Planner”, and “The System Thinker”. According to them, these three fundamental roles give quality professionals the tools they need to promote advanced planning for quality, management by fact rather than opinion, and an organisational system-wide perspective. According to them, the ability to see quality throughout the value chain by taking a holistic view of the organisation is one, if not the only, opportunity available to the quality profession. Oakland et al. (2021) suggest that end-to-end quality, or seeing the big picture, makes it easier to recognise the intricate interdependencies that underlie today's quality management challenges. Senior management's primary responsibility is developing and implementing business models that create value. Quality professionals can assist with problems that affect senior managers and therefore enhance their value and influence at the top table by applying a systems thinking method to their work (Oakland et al., 2021).

Leaders can also use design thinking and the service design process to manage and reduce risk. The risk of the business failing and providing its clients with inappropriate solutions is decreased when the solution generated by service design projects is based on genuine and documented customer needs and the cooperative development of the solution (Koivisto et al., 2019).

2.3.3 A leadership decision – how are they made?

It is also important for designers and design leaders to understand how decisions are made. That is the way they can then try to influence them, advance their projects and help the entire organisation to adopt design thinking into their ways of working. Let's step into the board room for a minute in an effort trying to understand how decisions are made there.

This is quite a widely researched topic. For example, we know that the situation itself where the leader is making the decision affects the decision greatly (Vroom & Jaago, 2007) and that the organizational dimensions and effects are considered (Tushman & O'Reilly III, 1996). However, quite interestingly, it is unclear how leaders perceive or interpret the leadership situations they are in (Lord & Hall, 2005).

In the current leadership studies, there are two main paradigms when it comes to studying leader cognition (Mumford et al., 2007). The first one is trying to explain how leaders think in general, whereas the second one, the most critical one to the leader's performance, is trying to understand how leaders think about crises or change events (Baer, 2003). According to Marta et al. (2005) and Judge et al. (2004), cognition may ensure leader performance, but only under particular circumstances. They've identified five critical conditions that appear to operate in shaping the need for cognition among leaders: 1) choice optimization, 2) complexity and ambiguity, 3) novelty, 4) resource accessibility, and 5) lack of social/structural support (Judge et al., 2004; Marta et al., 2005). It will be interesting to see how these will manifest themselves, if at all, in my own research

2.4 Research gap: The design value impact and decision support information needs of leaders and the successful characteristics of a design leader – is there a winning combination?

From what has been presented previously, it is clear that there exists a space in the scientific community where the three themes of this study intersect. The value of design, communicated in the ROI relatable ways and metrics, combined with identifying the most suitable design leader characteristics to oversee and ensure this delivery, is yet undiscovered. In other words, what kind of a design leader is seen as the best-suited person to deliver and communicate, especially the financial impacts of design investments?

3 RESEARCH METHODS

3.1 Constructivist paradigm at the core

This is a qualitative research study with an inductive approach. In terms of science-philosophical perspectives, the social constructionist worldview serves as the foundation for my study. The constructivist worldview's central tenet is that there are few absolute facts and no pre-existing knowledge. Instead, depending on their own universe of experience and observations, people and communities rebuild perspectives and interpretations of reality. The goal of constructionist research is to comprehend the positional and situational character of phenomena rather than to develop generalizable, universal knowledge. The constructionist worldview also acknowledges that reality is not static in nature and that knowledge is always being updated and modified (Burr, 2015; Creswell & Creswell, 2017).

The constructivist approach also accounts for the fact that the researcher has a crucial role in their own study, contributing their own underlying assumptions and initial beginning points (Mir & Watson, 2000). Because of this, and according to the constructivist viewpoint, the research itself is a social creation; therefore, I don't need, and in essence I can not, to aim for complete objectivity when conducting a study. The researcher's (my) perspectives and the information gathered were combined to create this study.

3.2 Narrative study with a practice-based approach

My study is also a narrative study. According to Bruce et al. (2016), the narrative research methodology emphasizes scientific study around stories and narratives. The philosophical, linguistic, and literary foundations of narrative study are found in these fields (Bruce et al., 2016). According to them, the central argument in the narrative approach is that the stories people create about their world and reality are the targets of academic attention. The construction of stories, as well as efforts to interpret research data in a narrative style, are all included in the narrative research strategy (Bruce et al., 2016).

I chose the narrative approach for my study because I really want to encompass the “realities, experiences and interpretations around the decision-making situations and the characteristics of a good design leader.

Because my study focuses on the actions, experiences, doings, situations and thinking of the leaders, the underlying context and phenomena need to be understood. According to Orlikowski (2010), the phenomenon of organisational change and the adjacent activities are understood through practices. Wanda Orlikowski maintains that practice theory can be interpreted in three different ways: as an empirical study of how individuals behave in organisational contexts; as an analysis of the connections between individual actions and the social structures that surround them; and finally, as a philosophical study of the constitutive function of practices in the creation of social reality (Orlikowski, 2010). While acknowledging these three premises, my study is particularly interested in the behavioural factors that support or inhibit design project decision-making in the organizational setting.

3.3 Data Collection Methods Used

3.3.1 *Thematic interviews with inductive analysis*

Thematic interviews were conducted with experts in the field of management and design. According to Puusa et al. (2020), in a thematic interview, it's assumed that the interviewees share similar experiences or views of a process or a phenomenon. They maintain that it is paramount that the researcher has acquainted himself or herself with the relevant articles, phenomena and concepts of the themes in preparing for the interviews. The aim of a thematic interview is to gain a deeper understanding and insight into the phenomenon being studied. The idea is that both the researcher and the interviewee speak the 'same language', meaning acronyms, special vocabulary and terminology (Puusa et al., 2020). This way, there can be truly some additional layers to the theories that might manifest themselves. The interview situation itself is very relaxed and non-formal, as the focus is on allowing the interviewee to explain their experiences and thoughts in their own words and in an order and style of their choosing. Puusa et al. (2020) state that it is important that the researcher interjects as little as possible, except when the interviewee struggles to keep talking. In these cases, the researcher can encourage the interviewee to continue talking by asking further questions in relation to the theme at hand (Puusa et al., 2020)

As my research strategy, in an effort to make sense of my data, I'll introduce an inductive approach and reasoning to the analysis process. According to David Thomas: *"The purposes for using an inductive approach are to (a) condense raw textual data into a brief, summary format; (b) establish*

clear links between the evaluation or research objectives and the summary findings derived from the raw data; and (c) develop a framework of the underlying structure of experiences or processes that are evident in the raw data.” (Thomas, 2006, p. 237). The general inductive approach offers a set of systematic and simple-to-follow methods for assessing qualitative data that can result in accurate and true conclusions. Furthermore, Thomas (2006) states that the general inductive technique offers a clear, basic method for drawing conclusions in the context of a particular assessment of research questions, even though it is not as effective as some other analytical strategies for theory or model creation (Thomas, 2006).

In the study conclusions and discussion, I then compare the results of my study to the theoretical framework presented in chapter 2. My aim is to identify what elements hold true here and will create a user-friendly listing of my results.

3.3.2 Benchmark studies

In other relevant research conducted by McKinsey Company and The Design Management Institute, an effort was made to develop a design impact measurement system. They both approached the challenge along their individual paths and ended up creating individual indexes for measuring the business value and the impact of design in Fortune 500 companies. These are called McKinsey Design Index (MDI) and The Design Management Index, respectively (Sheppard et al., 2018; Westcott et al., 2013).

My study results will be reflected against these two major studies of the design industry in an effort to identify and map similarities and priorities to the information needs indicated by my interviewed experts, with the core themes of these indexes. My hypothesis is that there will be quite many correlations. I will also be able to identify what is missing, and the value of this entire thesis is right here. I will endeavour to produce a thematic listing of the information needed to support the design project decision-making, which is based on my expert interviewees’ experiences and on the industry standards, which all future designers can utilise in their efforts to promote their design projects.

3.3.3 Autoethnographic Field Journal

According to Puusa et al. (2020), there are three different kinds of autoethnography. One is evocative autoethnography, and the second one is analytical autoethnography. The first one trusts the power of stories and storytelling, and they emphasise the emotions and feelings of the research along with bodily experiences. The second one distance itself so little bit from the evocative approach and has a carrying idea that the researchers' own experiences, ideas and observations are at the core of this approach (Puusa et al., 2020).

Learmonth & Humphreys have introduced a third kind of autoethnography that combines elements from the evocative and analytical approach, which means there are emotional aspects of a living story, along with concrete and true experiences, made into theories. This is called dual-autoethnography by Mark Learmonth and Michael Humphreys from Durham university (Learmonth & Humphreys, 2012). When you introduce a critical theory to mirror and discuss personal stories, it is called critical autoethnography (Holman Jones, 2016). My “field journal” is an analytical autoethnography.

John Bolton (2010) states that the reliability and credibility of any autoethnographic approach arise from the reflexivity in the researcher's notes. The difference between reflection and reflexivity, according to him, is that: *“Reflection is a state of mind, an ongoing constituent of practice, not a technique, or curriculum element. Reflective Practice can enable practitioners to learn from experience about themselves, their work, and the way they relate to home and work, significant others and wider society and culture. It gives strategies to bring things out into the open and frame appropriate and searching questions never asked before.”* (Bolton, 2010, p. 3)

According to Riikka Högbacka and Sanna Aaltonen (2015), there are three dimensions of reflexivity. The first one is to do with how the researcher reflects him- or herself as a researcher of the research and what is the nature of this relation. Everything is reflected in the position of the researcher's interests and assumptions. What are the true intentions and assumptions following the researcher while conducting the research, how did the researcher's physical body feel and what emotions and feelings were present (Aaltonen & Högbacka, 2015). According to them, these are all key questions and issues when it comes to autoethnography, and the reflexivity applied.

The second area of reflexivity is to reflect on the data, the approaches and the theories used and adapted (Aaltonen & Högbäck, 2015). They state that the idea is to be conscious of the limitations of the study and how the methods to produce the data and approach to topics actually end up influencing what is called knowledge. The third reflective approach, according to Aaltonen & Högbäck (2015), is to do with the entire field of science and of society. This means that the position of the researcher needs to be contemplated in relation not only to the research process itself but to society as a whole (Aaltonen & Högbäck, 2015). They state that it is paramount that the reflexivities conducted by the researcher are not added or altered afterwards in any way, nor are the research reports re-written in an effort to make them look better. The autoethnographic researchers are openly present throughout the research process. This means that the researcher can use these reflections as a form of analysis and also as a form of thought and thinking transcribed, which enables to challenge him- or herself to research further (Aaltonen & Högbäck, 2015).

Puusa et al. (2020) state, along with Aaltonen & Högbäck (2015), that ethical considerations are at the core of the reflective credibility reflections. It is considered to be ethically suspicious if the researcher uses very objective language and therefore distances himself or herself from the topic of research or the researcher talks on behalf of other people (Aaltonen & Högbäck, 2015). Furthermore, according to them, in the centre of autoethnography are epiphanies, the moments, experiences and realisations, which halt the researcher to a still and generate emotions. The challenge is to describe these moments in a way readers can also relate to them (Aaltonen & Högbäck, 2015; Puusa et al., 2020).

3.4 Data Collection for this study

3.4.1 *Why use interviews as a dataset?*

According to Koskinen et al., interviews are usually the best way to collect data on interpretations, perspectives and meanings people associate and have on a specific phenomenon or issue (Koskinen et al., 2005; Pessoa et al., 2019). The research question of this study concerns a highly complex and conceptualised world of design. It is beyond my ability to so simplify complex concepts into a questionnaire that would make any kind of sense to the respondent or that wouldn't take hours to

complete that I could get any kind of pertinent data for my study. This excludes, in my opinion, most of the qualitative research data collection methods.

Thus I decided to use interviews as my main data collection method, and I also decided to conduct the interviews over a live video call instead of a phone or, for example, email interview. The reason for this is that the real-time connection enables a dialogue to happen and for me, as a researcher, to ask participants to elaborate or describe something they've said further. I wanted to make sure that I had maximized our potential for a diverse and informational conversation to serve my interview purposes, so I followed the recommendation of Tuomi et al. (2013), and I sent the interview questions to participants beforehand, to allow them to familiarise themselves with the research themes (Tuomi & Sarajärvi, 2013). Here I took a calculated risk that the participants might "pre-orient" themselves somehow differently to the themes or create an "advance framework" of thoughts before the actual interviews. Here it is good to note that my research questions are embedded in my themes for the interviews.

However, I know how busy they all are and how full of complex issues and situations any given day in their professional life is, so to have a clear theme for the interview, with an additional orientation question, really helps to ground the participants to the interview moment of their day.

The participants for the interviews I will invite to participate from my own professional networks, to represent both high and low ends of design maturity in their respective organisations as well as having in-house and agency roles. This way, I can maximise the diversity of the data collected from them.

3.4.2 Plan for the thematic interview data collection

I had some difficulties in choosing the most suitable interview method for my purposes. According to Puusa et al. (2020), the benefits of a thematic interview are the methodological assumptions, where it's assumed that the interviewees have experienced a similar experience or issue, which is the focus of the study being conducted. It's also assumed that the researcher has familiarized him- or herself with the core principles, processes, structures, concepts and tenets of the themes set forth in the research question(s) (Puusa et al., 2020). Thematic interview session is very informal

and loosely structured. According to them, I, as the researcher, will set out just the major themes for discussion and then, if needed, asks more directional follow-up questions to keep the interview on its track. This method also allows the researcher to drill deeper into interesting topics and/or themes appearing during the interview without jeopardising the pre-defined structure of the interview (Puusa et al., 2020).

I eventually chose to conduct my interviews as thematic interviews. The reason for this is that according to Tuomi et al. (2013), thematic interviews highlight the interpretations and the definitions participants are giving to the themes being researched while also enabling the themes to be collaboratively defined and agreed upon with the researcher (Tuomi & Sarajärvi, 2013).

Due to the lack of commonly shared terminology and clearly defined concepts essential to my study, as previously discussed in chapter two, it became clear that thematic interviews would allow more clarity and mutually agreed terminology definitions to be used during the interview discussions. This way, I can eliminate possible misunderstandings and assumptions from both sides of the participants and increase the accuracy of the data collected. For this reason, I decided to use thematic interviews as a method in this study.

The thematic interviews with the experts were conducted and recorded over Microsoft Teams. The interviewees were sent the research questions of this study before the interview session as the topic and theme for our meeting. It was up to the participants to familiarize themselves with them if they so chose. I did my best to create an atmosphere of trust and listening in the interview situation. The experts interviewed were anonymised due to the highly sensitive nature of the information, experiences and events discussed. By allowing the interviewees to participate anonymously, we can focus on discussing the themes freely and accurately.

There were only four main themes and/or questions prepared and presented by the researcher. The themes for the interviews are based on the theoretical framework introduced in chapter two. The first question was designed to capture the interviewee's relevant background information. The second question was to orient and ground the participant's focus and thoughts to the moment at hand and around the concept of design. This second question also allows me, as the researcher, to

gauge the level of design maturity and understanding of the interviewee so that I can adjust the terminology and conceptual approach accordingly during the following discussion.

The third question was also the main research question of this study. According to the style and themes rising from the interviewee, I adjusted my follow-up questions.

The fourth and final question was an effort to capture the characteristics and the essence of a “good design leader” based on the views and experiences of the interviewee. The themes and questions used can be found in Annex 1.

3.4.3 Benchmarking other relevant studies as a dataset

The value of design has been researched somewhat extensively, and yet the business performance and contribution aspects of design remain fuzzy, as discussed in chapter two. There are two major studies conducted by private organisations that looked into and mapped out the design-related success factors of selected Fortune 500 companies having a high design maturity level compared to the control group of a low or non-existent level of design maturity. With this knowledge and understanding, these research organisations then produced a Key Performance Indicator (KPI) to indicate the relationship between design maturity and higher business performance as the result of their individual studies. I’m especially interested in the driving factors and the similarities behind these two KPIs. These studies will be presented in the next chapter in more detail.

3.4.4 Plan for the benchmarking dataset collection

This method allows me to utilise these studies to enrich my own research data. They will also provide an international, large corporate view of reality for me to reflect on my interview results. This way, if I can identify similar themes and/or success factors between these two data sets, I can be quite certain what the core elements for the informational needs to support decision-making on design projects are. My plan is basically to analyse and cross-check how my interview respondent’s answer themes correlate with these “index-drivers” themes. By having additional datasets for my research, I’ll also enable better triangulation of results, thus improving the validity of this entire study.

3.4.5 *Autoethnographic Field Journal as a dataset*

To further enrich my research data and material, I have been writing an autoethnographic researcher's "field journal" throughout this entire process. Autoethnography can offer a unique point of view to this research, as discussed in paragraph 3.3.3. This dataset will also support the triangulation method, thus contributing towards the overall validity and credibility of this study.

3.4.6 *Plan for the Autoethnographic Field Journal*

This autoethnographic "field journal" will be kept in written form as a Microsoft Word file. I have made notes and contributions to this throughout the study duration. Methods of input were typing and dictation via speech recognition. Any physical notes were attached to the points of the time they were recorded. The entire field journal was comprised in chronological order.

4 PRESENTATION OF STUDY RESULTS

4.1 Data collection summary

My data consists of three data sets, which are first analysed separately in the following paragraphs, and then in the last paragraph, a synthesis of the results is presented. This data collection method has maximized my data diversity, allowing better credibility and more credible triangulation.

My first set of data comes from thematic interviews conducted during the months of November and December 2022. Second is a benchmark data set, which consists of relevant industry studies conducted by private organisations. Benchmarking as a method is used to enable “true north” thinking, as identifying the common factors in these studies reveals the needed evidence of what the companies, who have high design maturity, have done to enable business success. Decision-making at the organisational and design levels requires the use of evidencing as it advances learning and change. (Foglieni et al., 2019). These benchmark studies have independently produced design business value measurement systems identified among the global Fortune 500 companies. These measurements have then been converted into “design value indexes”, which reveal the monetized returns on design and the required drivers enabling that. By identifying the drivers behind these indexes, a “true north” of the business value creation can be revealed. The third set of data comes from the autoethnographic field journal of the researcher.

4.2 Further analysis of datasets

4.2.1 Data Collection for the interviews

The interviews were conducted during November and December of 2022. There are four interviews in total. All participants were discovered and invited to participate from my own professional network representing in-house roles and agency roles. The aim of the interviews was to gather a holistic understanding of the information needs from within organisations and from the agency side supporting their client organisations. Findings presented in this study are based on all of these interviews and, more specifically, from the code groups of “Benefits”, “Design Leader Characteristics”, “KPIs”, and “What is Needed”, as these four groups were the main units of analysis.

4.2.2 Interview Participants

The combined experience in the fields of design and/or management of these participants was 96 years. All of the interviews were conducted as recorded video meetings in Microsoft Teams and with the expressed full consent of the interviewee, and there were no technical problems or disturbances in the recordings. All ethical guidelines put in place by the governing university were followed.

All interviewees received the topic of the interview (themes), privacy and research data statements along with the details of the researcher (me), thesis supervisor and the university to which the thesis will be presented. The research data was saved to a secure cloud folder managed by the University of Lapland, and access to the folder was given only to the researcher and the thesis supervisors, along with any other parties the Faculty of Arts Science Board stated that needed access. After my graduation, these files will be transferred and archived as encrypted files in a secured file on my personal cloud service provider.

Participant	Role	Experience in years	Description
n1, Female	In-House	27	Strategy Director in an unlisted large-sized company in the magazine publishing industry. Company revenue 144 MEUR (12/2021), based in Helsinki. Extensive experience in various leadership and management roles in smaller and larger companies.
n2, Female	In-House	27	Head of joint design and corporate customer experience department in stockmarket listed large multinational telecoms corporation, with over 10 billion euros in market capitalization. Extensive experience in internal process, customer experience and quality management. Pioneered internal adoption of Design Thinking and Service Design.
n3, Male	Agency	25	Currently CEO of an unlisted SME-sized Design Agency based in Helsinki. Holds a PhD in UX. Founded multiple

			start-ups, incl. internal ones. Extensive experience in Design Management and Design Leadership.
n4, Female	Agency	16	Head of Business of an unlisted SME-sized Design Agency based in Helsinki. Holds a Master's Degree in Design. Extensive experience in Design Value, Design ROI (dROI) and Design Management.

Table 4. Interviewee introductions

4.2.3 Interview data analysis: From codes to analysis in three phases.

4.2.3.1 Phase 1: Descriptive Coding

In analysing qualitative data with the thematic analysis method, using coding as a tool is essential (Harding, 2018). First, the audio track of each interview was extracted and uploaded to the qualitative research analysis software (QAS) of Atlas.ti. The desktop version of 22 for Mac was used to further analyse these audio recordings. Each audio recording was then coded utilizing the inductive and descriptive coding methods. In inductive coding, the codes are not already in existence before the coding starts; rather, they are created along the progressing analysis. Each descriptive code is a specific thematic concept or a noun (Saldaña & Saldaña, 2013). The aim of this study is to have an open mind to the data, thus enabling the appearance of phenomena and codes organically. After the first round of coding there, the total amount of codes identified across all interview data was 185.

4.2.3.2 Phase 2: Concept Coding

In the second round of coding, I also mapped similarly themed codes together following the method of Concept Coding (Saldaña, 2016). This way, codes form a concept of that particular theme or phenomenon. One specific segment of audio data can have multiple codes attached to it, as the interview is happening in multiple “meta” levels simultaneously; therefore, Concept Coding helps to add meaning to the codes (Saldaña & Saldaña, 2013).

After the second round of coding, there were a total of 10 code groups identified that emerged from the Concept Coding. These categories are presented in Table 5 (in alphabetical order).

#	CONCEPT NAME	DESCRIPTION	CODES
1	Background Education	To do with the background education of the interviewee.	7
2	Benefits	Benefits of design	4
3	Best practices	Best practices in utilising design	3
4	Design leader characteristics	The characteristics of a successful design leader	35
5	Design	Various methods and tools of design	11
6	Job Role	Historical and present employment history	28
7	KPI	Key Performance Indicators related to design	33
8	Not Wanted	Results of design that were not wanted	6
9	Professional Background	Historical and present roles held	9
10	What is needed	Information needed for decision making	49
	Total		185

Table 5. Categories identified from the codes

Some of the concepts were not relevant to this study, as they only contained background or data out of the scope of this study; therefore, they were disregarded. These disregarded concepts (Table 5) are 1, 5, 6, and 9. After this process of eliminating non-relevant concepts, we are left with the relevant concepts of 2, 3, 4, 7, 8 and 10.

4.2.3.3 Phase 3: Explanation building

Pattern-matching, explanation building, time-series analysis, and programme logic models are the four most popular analytic techniques, according to Yin (1994). In a particular type of pattern-matching called explanation building, the data from a case study is analysed by creating an explanation for the case or instances. Iteratively developing a set of causal connections or an explanation for the event under study is the process of explanation construction, which generates hypotheses (Yin, 2009). On the basis of theories or earlier data, an initial proposal is built.

I then sorted this revised conceptualised code listing to identify the top 10 relevant codes present, with associated concepts and occurrences, across all of my interview data. The results of this sorting are presented in table number 6 in the order of occurrence.

TOP 10 INDIVIDUAL RELEVANT CODES		Occurrences
1	Benefits: Future business opportunity estimation	9
2	KPI: ROI (how & time achieved)	7
3	KPI: Growth opportunity estimates	6
4	What is needed: listed benefits	6
5	Benefits: Concrete	5
6	Design leader characteristics: Business oriented	5
7	KPI: costs	5
8	KPI: Euros	5
9	Not wanted: Reduced profits	5
10	What is needed: Existing Design Need Identified	5

Table 6. Top 10 individual relevant codes according to occurrence in data.

When I further analysed the top 4 concepts present in Table 6, I discovered the top 5 codes in each concept. These are presented in Table 7.

TOP 10 INDIVIDUAL CODES PER CATEGORY					
Rank	Benefits	Occurrence		Rank	Design leader characteristics
1	Future business opportunity estimation	9		1	Business oriented
2	Concrete	5		2	Has commercial understanding
3	Clear	3		3	Project management skills

4	Straightforward	1		4	Sensitivity to human characteristics	4
5	-	-		5	Ability to build a design strategy	2
Rank	KPI	Occurrence		Rank	What is needed	Occurrence
1	ROI (how & time achieved)	7		1	Listed benefits	6
2	Growth opportunity estimates	6		2	Existing Design Need Identified	5
3	costs	5		3	KPIs	5
4	Euros	5		4	Trust in the designer's ability to help	5
5	Service process improvement	4		5	Collaboration	4

Table 7. Top 5 codes per top concept.

There were only four codes that all of the interviewed experts mentioned. These are presented in Table 8. These are especially interesting to me, as these are the most relevant ones for the study, as all of the experts have mentioned these.

CODES PRESENT IN ALL INTERVIEWS	
1	KPI: Euros
2	KPI: ROI (how & time achieved)
3	KPI: Service Process Improvement
4	What is needed: KPIs

Table 8. Codes with associated concept present in every interview.

From this data presented, following the explanation-building method, we can make the following deductions in relation to my research question(s):

What are the key factors and characteristics that are essential for effective decision-making in design projects, including the role of design ROI and the characteristics of a successful design leader?

Based on this dataset, the following codes imply that "listed benefits," "Existing Design Need Identified," "KPIs," "Trust in designers' ability to help," and "Collaboration" are required to support decision-making for a design project. These codes indicate that in order to decide on a design project, it is critical to have a proper grasp of the benefits the project will bring, the design requirements that must be met, and the key performance indicators (KPIs) that will be used to assess success. In order to assist decision-making, it is also crucial to collaborate and have confidence in the designer's abilities. Additionally, "What is needed: KPIs" code associated with all interviews suggests that having quantifiable goals and measurements is crucial for decision-making.

What role does design ROI have in all of this?

The code "ROI (how & time achieved)" indicates that Return on Investment (ROI), which assesses the effectiveness of an investment, is significant in the decision-making process for the design project. Furthermore, "Growth opportunity estimates" and "costs" imply that the project's effect on future business and its cost are crucial factors to take into consideration. Additionally, from the codes present in all interviews, "KPI: Euros" implies the importance of the company's financial performance. According to "KPI: Service Process Improvement," the design project should also concentrate on enhancing the firm's service process since it may directly affect the performance of the organisation.

What characteristics should a successful design leader have?

A successful design leader should have a firm understanding of business and commercial considerations as well as the skills to manage projects and lead a team, as indicated by the codes "Business oriented," "Has commercial understanding," "Project management skills," and "Sensitivity to human characteristics." A design strategy should be able to be built, and they should be sensitive to human traits. A design leader needs to possess each of these qualities in order to successfully lead a team and carry out the project's objectives. The codes "KPI: Euros," "KPI: ROI (how & time achieved)," and "KPI: Service Process Improvement" present in all interviews further imply that a

successful design leader should also have a clear understanding of financial and performance metrics, as well as the capacity to measure and improve these metrics.

4.3 Benchmark studies

4.3.1 Presenting McKinsey Design Index (MDI)

To provide a benchmark for this study, I have chosen to include a major study conducted specifically about the value of design within the design industry. In 2018, McKinsey Company did an extensive study of the financial success of 300 organisations on the Fortune 500 list of companies which used design in their operations. They found that companies which utilised design were rewarded, on average, with 32% better revenues and 52% better total returns to shareholders compared to their industry counterparts. McKinsey identified four major themes that drive this success and 12 design actions organisations are required to do to reach the top 25% in the consequently created McKinsey Design Index (MDI). The MDI measures the correlation between design maturity and financial impact (Sheppard et al., 2018).

The following is a summary of the four McKinsey Design Index (MDI) themes and design actions:

Analytical leadership	Create a bold, user-centric strategy
	Embed design in the C-suite
	Employ design metrics
Cross-functional talent	Nurture top design talent
	Convene cross-functional teams
	Invest in design tools and infrastructure
Continuous iteration	Balance qualitative and quantitative user research
	Integrate user, business, competitor and technological research
	Test, refine, repeat. Fast!
User experience	Start with the user, not the spec
	Design a seamless physical, service and digital user experience

	Integrate with third-party products and services
--	--

Table 9. MDI Themes and design actions (Sheppard et al., 2018).

4.3.2 Presenting Design Management Institute Index (DMI) Scorecard

The 2013 launch of the design management index monitors the value of a portfolio of publicly listed businesses that adhere to predetermined design management standards (Westcott et al., 2013). It keeps track of how their design investments have changed the value of their shares over a ten-year period in relation to the S&P index as a whole. Companies in the Index must fulfil the following six requirements in order to be included:

-
- 1) Design operates at scale across the enterprise.
 - 2) Design holds a prominent place on the company organizational chart and either sits on the leadership team or directly reports to a leadership team member.
 - 3) Experienced executives manage the Design function.
 - 4) Design sees a growing level of investment to support its growing influence.
 - 5) Design enjoys senior leadership support from the top tier of the organization.
 - 6) The company has been publicly traded on a U.S. exchange for the last ten years and thereby adheres to GAAP accounting rules.

(Westcott et al., 2013, p. 2)

4.3.3 Integrated results of the benchmark studies

The importance of design, and design operations, in a company's business success, is emphasised in both of the previously presented benchmark studies. One of the major similarities between the two benchmark studies previously presented is the emphasis placed on the value of design in business operations and the necessity of a strong user-centric focus in ensuring business success. Both studies also stress the significance of having seasoned executives overseeing the design function and that design needs to be well-established and given priority in the organisational structure of the business. The design function should be incorporated into the company's leadership team as well.

4.4 Findings from the autoethnographic field journal

After analysing and summarising the autoethnographic field journal, I discovered from the four interviews done and after my personal reflexive efforts that there was a connection between design maturity and the requirement for design ROI figures. While companies with less experience tend to concentrate more on the expenses and financial advantages of design, those with more experience and maturity in the use of design tend to focus more on how design activities and projects are linked to strategic goals and key performance indicators. I also discovered that the viewpoints of in-house and agency design efforts were comparable, with both emphasising the development of long-term relationships and trust to enable distinct financial performance measures. I also discovered that Finland's financial accounting regulations have an effect on how businesses regard design projects as investments, as they enable the recurring depreciation of investments only for software and equipment acquisitions. Overall, I discovered that the key areas of focus for decision-making in design projects include design maturity, key performance indicators, financial return on investment, service process improvement and project management skills.

4.5 Analysis of all of the datasets

It is apparent from the analysis of all the datasets that various aspects are required to facilitate decision-making for a design project. Understanding the project's benefits, addressing current design requirements, and applying key performance indicators to measure success are some of these factors. Making informed decisions also involves collaboration and confidence in the designer's skills. Making decisions also relies on having goals and metrics that can be measured.

The significance of design ROI as a key consideration when making decisions for a design project was emphasised throughout the datasets. The benchmark studies emphasise the importance of evaluating an investment's return on investment and the project's influence on future revenue and expenses. Furthermore, this data emphasises the need to take into account the company's financial performance and process improvements for its operations. An effective design leader must also possess a solid comprehension of business and commercial aspects, the ability to manage projects and lead a team, sensitivity to human traits, and the capacity to develop a design strategy.

5 DISCUSSION

This study shows that all of my datasets highlight the importance of business acumen, clarity in design value statements and strategy contributions, as well as the need for a business-oriented and human-centric leader. Especially the first mentioned is in line with what Pitkänen et al. (2013) found in their study of the Finnish Design market that the design agencies involved in the study named the principal obstacle of applying design, being the unclear connection between the design investment and financial impact. The design agencies involved in the study also mentioned that their potential clients felt that the benefits of design services were too vague and too expensive. It was also mentioned that the agencies clients did not feel that design services were at all significant or added any value to the businesses. Pitkänen also recognized that there were problems in justifying the purchase of design services to management (Pitkänen, 2013). Furthermore, Thomas Lockwood (2010) and Birgitte Borja de Mozota (2006) have presented similar findings to do with design value and communicating them successfully (Borja de Mozota, 2006; Lockwood, 2010b).

What I found interesting was the similarity of this study with Björklund et al. (2018) when considering the requirements or how information needs correlate with the design maturity of the organisation. In organisations with low design maturity, short-term financial gains are more emphasised, and in more mature organisations, the design value delivery focus is more on the strategic and KPI contributions (Björklund et al., 2018).

5.1 What is the meaning of this study to me and for my work?

The core idea for this thesis has been present in my studies ever since day one. I have struggled immensely with first recognising and pinpointing the actual area of interest to me before I could even proceed with my efforts in defining it for the purposes of this study. I have always known that my final thesis would have something to do with understanding the financial contributions and value of design, but I was only able to clearly define this area once this thesis process began.

In my introduction chapter, I've presented my aim to understand more about the landscape where designers, or design leaders, struggle to get their projects green-lighted. Specifically, I've focused on increasing my understanding what it comes to the areas of design impact, financial contributions and leader characteristics. In my opinion, I have been able to answer my research questions, and

I've provided various datasets for evaluations and analyses. The study of all the datasets shows that numerous factors are needed to make decisions for a design project easier. These include recognizing the project's benefits, adhering to the demands of the present design efforts, and using key performance indicators to gauge and later report progress and success. Working together and trusting in the designer's abilities to deliver is also necessary for making informed decisions. Having measurable objectives and measurements while linking the expected contributions to the larger strategy is a must for decision-making to happen.

5.2 What is the novelty value of this research?

This study suggests that the financial considerations should be addressed as early as possible when pitching for a design project. Especially the KPIs of design ROI, growth opportunity estimates and costs should be addressed at the level of specific Euro-estimates if possible. There were no exceptions to this between in-house or agency roles. However, this applies to situations in organisations with low levels of design maturity, as the connection to the intangible design impacts and contributions is yet unfamiliar and not experienced.

When dealing with an organisation with more design maturity, it's especially important to map the expected benefits of the design project to the organizational KPIs and overall strategy. It is also beneficial to identify and clearly state the existing design need and the implications of not addressing it.

In all cases, the underlying theme was the trust in the designer's abilities to deliver. My study also clearly states that the characteristics of a successful design leader are expected to be understanding the commercial business realities of the proposed design project and of the organisation itself, having sensitivity to human characteristics and having the ability to build a design strategy. Also, strong project management skills are a must.

This understanding will be highly beneficial to me personally, as I'm planning a designer career exactly in this area. Based on this study, I would also suggest some basic financial and business studies for all designers.

6 CONCLUSIONS OF THE STUDY

6.1 Summary of the results from all of the datasets

In conclusion, the dataset analysis has provided a considerable understanding of the key characteristics that are essential when making decisions on design projects and therefore provided me with an answer to the research question. Understanding the project's benefits, determining design requirements, and using key performance indicators to measure success, teamwork, and confidence in the designer's skills are some of these considerations. The benchmark studies also emphasise how crucial it is to consider the company's financial success and the improvement of its service processes as important variables and sources for success metrics. The importance of design ROI is frequently emphasised across all datasets as a key factor when deciding on a design project. Additionally, it is essential for a successful design leader to have a solid understanding of the business and its commercial issues, possess the ability to manage projects and lead a team, have a sensitivity to human characteristics, and have the ability to develop a design strategy.

6.2 Research results verification and validity

According to Flick et al. (2004) qualitative research, triangulation can be used as a method of validation of a particular study. In triangulation, the research issue or phenomenon is observed at least from two different viewpoints. This is usually achieved by utilizing multiple methodological approaches to data collection (Flick et al., 2004). I have collected the data for this study by using three different methods, as previously discussed. The triangulation results of all my datasets are presented in chapter 4.5.

6.2.1 Reflecting on the researcher-effects

This study was conducted with social constructivism as the core tenet. In social constructivism, it is accepted that the researcher himself or herself is an irrevocable part of the study conduction and thus present in the findings (Burr, 2015). I, as a researcher, have made every effort to remain neutral and unbiased throughout the entire research. But I do acknowledge that my own perceptions and biases are present here. I made decisions during the interviews to focus on certain narratives that I felt were interesting and relevant to this study. I have written this thesis in English, even though 1/3 of my datasets (the interviews) were conducted in Finnish, thus translating the relevant language according to the best of my abilities and dictionaries. I hold the Certification for Proficiency (CPE) in

the English Language from Cambridge University, which is the highest certification available in the world for non-native English speakers equating to the Common European Framework of Reference for Languages to the level of C2 (highest). Yet I fully accept that I have exercised my own judgement in translating specific words and/or concepts from the interviews to this thesis. However, I see these translation decisions having only a minute effect on the data, as they mostly were semantic issues within an existing concept.

I am personally also highly interested in the intersection of design, leadership and the value these produce together. I accept that this has had an impact on where I've focused my interests when conducting the literature review in chapter 2. In this study, I have made every effort to justify my selections and decisions to use the references I have used. Furthermore, I acknowledge that my own professional experience in working with Business Development has had an effect on this study. These are the emotional effects present, especially during the autoethnographic field journal data collection. These reflections are in line with the method of reflexivity, where the researcher conducts a self-aware analysis of their own role and influence on data collection and analysis (Aaltonen & Högbacka, 2015; Finlay, 2002).

6.2.2 *Were there any answers found?*

I have discovered in this research the essential elements for ensuring successful design project decisions. The significance of design ROI as a key consideration when making decisions for a design project was emphasised throughout the datasets. The benchmark studies emphasise the importance of evaluating an investment's return on investment and the project's influence on future revenue and expenses. Furthermore, this data emphasises the need to take into account the company's financial performance and process improvements for its operations. An effective design leader must also possess a solid comprehension of business and commercial aspects, the ability to manage projects while leading a team, sensitivity to human traits, and the capacity to develop a design strategy. These are mostly in line with the ten categories of design measurements by Thomas Lockwood, presented in chapter two (Lockwood, 2009b). However, Lockwood also mentions the improvements to sustainability and usability along with participatory design along with the end customers, which are not present in my datasets. This leads me to conclude that the comprehension of how design produces value is very much tied to financial metrics and performance

measurements. Personally, I hope that in the future, the sustainability aspect of all design efforts will increase in importance.

When reflecting on my study results with Birgitte de Mozota's (2006) four roles of design management, where design is utilized as 1) differentiator, 2) integrator, 3) transformer and 4) good business, I can see their similarity to my study results (Borja de Mozota, 2006). My study especially emphasises the business success and new business opportunities aspects of these four roles.

In chapter two, I also presented the model from Marta et al. (2005) and from Judge et al. (2004) for leader cognition. In their model, there are five critical conditions that appear to operate in shaping the need for cognition among leaders making decisions: 1) choice optimization, 2) complexity and ambiguity, 3) novelty, 4) resource accessibility, and 5) lack of social/structural support (Judge et al., 2004; Marta et al., 2005). Especially the "choice optimization", "complexity and ambiguity", and "resource accessibility" were also identified by my expert interviewees to be present in the decision-making situations. A design leader should therefore make an effort to pay attention to addressing these subliminal conditions.

6.2.3 *Quality and validity of the research*

I have been completely transparent in my research plan, in choosing my methodologies and approaches, along with the data collection for this study. All of my choices have been justified and explained to the best of my abilities. I have constructed this thesis in such a way that it is clear to the reader what has been done, how and why. According to Auerbach et al. (2003), these are the key to coherency in qualitative research (Auerbach & Silverstein, 2003).

6.3 *Suggestions for future research*

What was interesting to me was the comparison of the design ROI to the world of Return-on-Marketing-Investments (ROMI). This was also mentioned by one of my expert interviewees. In the measurement of ROMI, similar challenges to design ROI exists, especially when defining the contributions and impacts to be specifically derivatives of marketing or design effort. In the world of marketing, it is widely recognised that everything the organisation does or says is considered marketing (Kotler et al., 2005). In my view, a similar claim can be made about design.

In organisations with lower design maturity, according to my experience, exists a confrontational setting, as it comes to which “department” has been the contributor to a specific success in business. Was the success due to the ingenious marketing efforts or due to the participatory design project? Personally, I would say that it doesn’t matter; they both contribute towards the same bottom line. Therefore, I can see this intersection of marketing and design to be a great area for future research.

7 BIBLIOGRAPHY

- Aaltonen, S., & Högbäck, R. (2015). *Umpikujasta oivallukseen. Refleksiivisyys empiirisessä tutkimuksessa*. Tampere University Press.
- Auerbach, C., & Silverstein, L. B. (2003). *Qualitative data: An introduction to coding and analysis* (Vol. 21). NYU press.
- Baer, J. (2003). Evaluative thinking, creativity, and task specificity: Separating wheat from chaff is not the same as finding needles in haystacks. In *Critical creative processes*. (pp. 129–151). Hampton Press.
- Beausoleil, A. (2012). *The Role of Design in Business ROI: a Literature Review*.
- Björklund, T. A., Hannukainen, P., & Manninen, T. (2018). Measuring the impact of design, service design and design thinking in organizations on different maturity levels. *ServDes2018-Service Design Proof of Concept Politecnico Di Milano*, 12.
- Björklund, T., & van der Marel, F. (2019). Meaningful Moments at Work: Frames Evoked by In-House and Consultancy Designers. *The Design Journal*, 22(6), 753–774. <https://doi.org/10.1080/14606925.2019.1655179>
- Bolton, G. (2010). Reflective practice: an introduction. *Reflective Practice: Writing and Professional Development*, 1–24.
- Borja de Mozota, B. (2003). *Design management : using design to build brand value and corporate innovation*. Allworth Press. <http://www.loc.gov/catdir/toc/ecip049/2003020913.html>
- Borja de Mozota, B. (2006). The four powers of design: A value model in design management. *Design Management Review*, Vol. 2(2). www.dmi.org
- Borja de Mozota, B., & Valade-Amland, S. (2020). *Design: Thinking, Leading, and Managing by Design*.
- Brown, T. (2008). Design Thinking. *Harvard Business Review*, 86(6), 84–92. <https://search.ebscohost.com/login.aspx?direct=true&db=bsh&AN=32108052&site=ehost-live>
- Brown, T., & Katz, B. (2009). *Change by design : how design thinking transforms organizations and inspires innovation*. HarperBusiness.

- Bruce, A., Beuthin, R., Sheilds, L., Molzahn, A., & Schick-Makaroff, K. (2016). Narrative Research Evolving: Evolving Through Narrative Research. *International Journal of Qualitative Methods*, 15(1), 160940691665929. <https://doi.org/10.1177/1609406916659292>
- Bryson, J., & Rusten, G. (2010). *Design economies and the changing world economy: Innovation, production and competitiveness*. Routledge.
- Bucolo, S., & Matthews, J. (2010). Using a design led disruptive innovation approach to develop new services: Practicing innovation on times of discontinuity. *Proceedings of the 11th International CINet Conference: Practicing Innovation in the Times of Discontinuity*, 176–187.
- Burr, V. (2015). *Social constructionism*. Routledge.
- Camacho, M. (2016). David Kelley: From Design to Design Thinking at Stanford and IDEO. In *She Ji* (Vol. 2, Issue 1, pp. 88–101). Tongji University Press. <https://doi.org/10.1016/j.sheji.2016.01.009>
- Canada. Industry Canada., Design Exchange (Firm), Canadian Manufacturers & Exporters., & Canadian Electronic Library. (2011). *Design for Environment: Innovating to Compete*. Industrie Canada.
- Candi, M. (2005). *Design as an Element of Innovation: Evaluating Design Emphasis and Focus in New Technology-Based Firms*.
- Carlopio, J. (2009). Creating strategy by design. *Design Principles and Practices: An International Journal*, 3(5), 155–166.
- Chiva, R., & Alegre, J. (2009). Investment in design and firm performance: The mediating role of design management. *Journal of Product Innovation Management*, 26(4), 424–440.
- Clarkson, J., & Eckert, C. (2010). *Design process improvement: a review of current practice*.
- Commission Staff Working Document. (2009). *Design as a driver of user-centred innovation*.
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.
- Dell'Era, C., Marchesi, A., & Verganti, R. (2010). Mastering technologies in design-driven innovation. *Research-Technology Management*, 53(2), 12–23.
- Elsbach, K. D., & Stigliani, I. (2018). Design Thinking and Organizational Culture: A Review and Framework for Future Research. *Journal of Management*, 44(6), 2274–2306. <https://doi.org/10.1177/0149206317744252>
- Finlay, L. (2002). “Outing” the Researcher: The Provenance, Process, and Practice of Reflexivity. *Qualitative Health Research*, 12(4), 531–545. <https://doi.org/10.1177/104973202129120052>

- Flick, U., Kardorff, E. van, Steinke, I., Hildenbrand, B., Willems, H., Bergmann, J. R., Lindner, R., Nadig, M., Reichmayr, J., Wolff, S., Lincoln, Y. S., Fleck, C., Hitzler, R., Eberle, T. S., Denzin, N. K., Soeffner, H.-G., Marotzki, W., Bude, H., Honer, A., ... Jenner, B. (2004). *A companion to qualitative research*. SAGE.
- Foglieni, F., Segato, F., Sangiorgi, D., & Carrera, M. (2019). Evaluating co-production in mental health services as a support for co-design activities. In *Service Design and Service Thinking in Healthcare and Hospital Management* (pp. 189–209). Springer.
- Gajendar, U. (2003). Taking care of business: A model for raising business consciousness among design students. *IDSANational Education Conference*, 10–12.
- Green, S., & Harrison, D. (2016). *Understanding design impact: a new framework for understanding the potential of design and enhancing future professional practice*. <http://bura.brunel.ac.uk/handle/2438/13055>
- Greenthal, J., Tsiros, M., Roggeveen, A., & Levignon, A. (n.d.). *ROI of Design-Value of Retail Customer Experience*.
- Guo, L. (2010). Product Design and Financial Performance. *Design Management Journal*, 5(1), 5–19. <https://doi.org/https://doi.org/10.1111/j.1948-7177.2010.00010.x>
- Harding, J. (2018). *Qualitative data analysis: From start to finish*. Sage.
- Hargadon, A., & Sutton, R. I. (1997). Technology brokering and innovation in a product development firm. *Administrative Science Quarterly*, 716–749.
- Hertenstein, J. H., Platt, M. B., & Veryzer, R. W. (2005). The Impact of Industrial Design Effectiveness on Corporate Financial Performance*. *Journal of Product Innovation Management*, 22(1), 3–21. <https://doi.org/https://doi.org/10.1111/j.0737-6782.2005.00100.x>
- Heskett, J. (2008). Creating Economic Value by Design. *International Journal of Design*, 3(1), 71–84. www.ijdesign.org
- Heskett, J. (2019). Industrialization and Design. *The Social Design Reader*, 101.
- Hollanders, H., & van Cruysen, A. (2009). Design, creativity and innovation: a scoreboard approach. *Pro Inno Europe, Inno Metrics: Holanda*, 1–36.
- Holman Jones, S. (2016). Living bodies of thought: The “critical” in critical autoethnography. *Qualitative Inquiry*, 22(4), 228–237.
- International Council of Societies of Industrial Design. (2005). *Definition of Design*.
- Judge, T. A., Colbert, A. E., & Ilies, R. (2004). Intelligence and leadership: a quantitative review and test of theoretical propositions. *Journal of Applied Psychology*, 89(3), 542.

- Kelley, T. (2005). *The ten faces of innovation: IDEO's strategies for beating the devil's advocate & driving creativity throughout your organization*. Currency.
- Kesler, G., & Kates, A. (2010). *Leading organization design: How to make organization design decisions to drive the results you want*. John Wiley & Sons.
- Koivisto, M., Säynäjäkangas, J., & Forsberg, S. (2019). *Palvelumuotoilun bisneskirja*. Alma Talent.
- Koskinen, I., Alasuutari, P., & Peltonen, T. (2005). *Laadulliset menetelmät kauppatieteissä*.
- Kotler, P., Wong, V., Saunders, J., & Armstrong, G. (2005). *Principles of marketing* (4th European ed). Pearson Education.
- Laitinen, E. K. (2000). Long-term Success of Adaptation Strategies: Evidence from Finnish Companies. *Long Range Planning*, 33(6), 805–830.
[https://doi.org/https://doi.org/10.1016/S0024-6301\(00\)00088-1](https://doi.org/https://doi.org/10.1016/S0024-6301(00)00088-1)
- Lawson, B. (2006). *How designers think*. Routledge.
- Learmonth, M., & Humphreys, M. (2012). Autoethnography and academic identity: Glimpsing business school doppelgängers. *Organization*, 19(1), 99–117.
- Lockwood, T. (2009a). *Design thinking : integrating innovation, customer experience and brand value*. Allworth Press. <http://www.loc.gov/catdir/enhancements/fy1006/2009026966-b.html>
- Lockwood, T. (2009b, October 5). *Ten Ways to Measure Design's Success - Bloomberg*.
<https://www.bloomberg.com/news/articles/2009-10-05/ten-ways-to-measure-designs-success>
- Lockwood, T. (2010a). Design Value: A Framework for Measurement. *Design Management Review*, 18(4), 90–97. <https://doi.org/10.1111/j.1948-7169.2007.tb00099.x>
- Lockwood, T. (2010b). The Bridge Between Design and Business. *Design Management Review*, 21(3), 5–5. <https://doi.org/10.1111/j.1948-7169.2010.00072.x>
- Lord, R. G., & Hall, R. J. (2005). Identity, deep structure and the development of leadership skill. *The Leadership Quarterly*, 16(4), 591–615.
- Marta, S., Leritz, L. E., & Mumford, M. D. (2005). Leadership skills and the group performance: Situational demands, behavioral requirements, and planning. *The Leadership Quarterly*, 16(1), 97–120.
- Martin, R., & Martin, R. L. (2009). *The design of business: Why design thinking is the next competitive advantage*. Harvard Business Press.
- Matthews, J., & Wrigley, C. (2017). Design and design thinking in business and management higher education. *Journal of Learning Design*, 10(1), 41–54.

- Mir, R., & Watson, A. (2000). Strategic management and the philosophy of science: the case for a constructivist methodology. *Strategic Management Journal*, 21(9), 941–953. [https://doi.org/https://doi.org/10.1002/1097-0266\(200009\)21:9<941::AID-SMJ141>3.0.CO;2-D](https://doi.org/https://doi.org/10.1002/1097-0266(200009)21:9<941::AID-SMJ141>3.0.CO;2-D)
- Moisander, J., & Stenfors, S. (2009). Exploring the Edges of Theory-Practice Gap: Epistemic Cultures in Strategy-Tool Development and Use. *Organization*, 16(2), 227–247. <https://doi.org/10.1177/1350508408100476>
- Moultrie, J., & Livesey, F. (2009). International Design Scoreboard: Initial indicators of international design capabilities. *Institute for Manufacturing, University of Cambridge*. [Http://Www. Ifm. Eng. Cam. Ac. Uk/Ctm/Idm/Projects/Scoreboard. Html](http://www.ifm.eng.cam.ac.uk/Ctm/Idm/Projects/Scoreboard.html).
- Mumford, M. D., Friedrich, T. L., Caughron, J. J., & Byrne, C. L. (2007). Leader cognition in real-world settings: How do leaders think about crises? *The Leadership Quarterly*, 18(6), 515–543. <https://doi.org/https://doi.org/10.1016/j.leaqua.2007.09.002>
- Oakland, J. S., Oakland, R. J., & Turner, M. A. (2021). *Total quality management and operational excellence : text with cases* (Fifth edition). Routledge, Taylor & Francis Group.
- Orlikowski, W. J. (2010). Practice in research: phenomenon, perspective and philosophy. *Cambridge Handbook of Strategy as Practice*, 2, 23–33.
- Pessoa, A. S. G., Harper, E., Santos, I. S., & Gracino, M. C. da S. (2019). Using Reflexive Interviewing to Foster Deep Understanding of Research Participants' Perspectives. *International Journal of Qualitative Methods*, 18, 1609406918825026. <https://doi.org/10.1177/1609406918825026>
- Pitkänen, A. (2013). Design ROI-measurable design. *Helsinki: Tekes and Aalto University*.
- Plattner, H., Meinel, C., & Leifer, L. (2010). *Design thinking: understand–improve–apply*. Springer Science & Business Media.
- Puusa, A., Juuti, P., & Aaltio, I. (2020). *Laadullisen tutkimuksen näkökulmat ja menetelmät*. Gaudeamus.
- Read, H. (1944). *Art and industry : the principles of industrial design* (2nd ed). Faber and Faber.
- Saldaña, J. (2016). *The coding manual for qualitative researchers* (3rd edition). Sage Publications.
- Saldaña, J., & Saldaña, J. (2013). *The coding manual for qualitative researchers* (2nd ed). Sage.
- Schön, D. A. (1983). *The reflective practitioner : how professionals think in action*. Basic Books.
- Sheppard, B., Sarrazin, H., Kouyoumjian, G., & Dore, F. (2018, October 25). *The business value of design*. McKinsey Quarterly. <https://www.mckinsey.com/capabilities/mckinsey-design/our-insights/the-business-value-of-design>

- The Danish Design Council. (2001). *The Design Ladder: Four steps of design*.
https://issuu.com/dansk_design_center/docs/design-ladder_en
- Thomas, D. R. (2006). A general inductive approach for analyzing qualitative evaluation data. *American Journal of Evaluation*, 27(2), 237–246.
- Tuomi, J., & Sarajärvi, A. (2013). *Laadullinen tutkimus ja sisällönanalyysi* (10., uud. laitos). Tammi.
- Tushman, M. L., & O'Reilly III, C. A. (1996). Ambidextrous organizations: Managing evolutionary and revolutionary change. *California Management Review*, 38(4), 8–29.
- Ulrich, K. T., & Pearson, S. (1998). Assessing the importance of design through product archaeology. *Management Science*, 44(3), 352–369.
- Veryzer, R. W., & Borja de Mozota, B. (2005). The impact of user-oriented design on new product development: An examination of fundamental relationships. *Journal of Product Innovation Management*, 22(2), 128–143.
- Vinodrai, T. (2011). Understanding Canada's evolving design economy. In *Handbook of creative cities*. Edward Elgar Publishing.
- Vroom, V. H., & Jaago, A. G. (2007). The role of the situation in leadership. *American Psychologist*, 62(1), 17–24. <https://doi.org/10.1037/0003-066X.62.1.17>
- Westcott, M., Sato, S., Mrazek, D., Wallace, R., Vanka, S., Bilson, C., & Hardin, D. (2013). The DMI Design Value Scorecard: A New Design Measurement and Management Model. *Design Management Review*, 24(4), 10–16. <https://doi.org/https://doi.org/10.1111/drev.10257>
- Whicher, A., Raulik-Murphy, G., & Cawood, G. (2010). Evaluating Design - Workshop Introduction. In *SEE workshop 'Evaluating Design and Innovation Policies'*.
- Whicher, A., Raulik-Murphy, G., & Cawood, G. (2011). Evaluating design: Understanding the return on investment. *Design Management Review*, 22(2), 44–52.
- Yin, R. K. (2009). How to do better case studies. *The SAGE Handbook of Applied Social Research Methods*, 2(254–282).
- Yin, Y., Qin, S., & Holland, R. (2011). Development of a design performance measurement matrix for improving collaborative design during a design process. *International Journal of Productivity and Performance Management*, 60(2), 152–184.
<https://doi.org/10.1108/17410401111101485>

8 ANNEXES

8.1 Thematic interview questions

Due to the sensitive nature of the research topic, all background information will be anonymized in the final study. In this interview, you'll represent only yourself with your thoughts and experiences – not your employers in any way.

BACKGROUND

A. Could you first introduce yourself?

name	professional experience in years
background education	time in current position
professional experience & background	time in current organisation

B. Could you next briefly describe your relationship and views about the concept of Design Thinking?

RESEARCH

C. According to your experience, what would you say is needed to support the decision-making process of starting a design project? Or in reverse, what is hindering this decision?

D. Briefly, in your view, what kind of characteristics a successful design leader/project owner would have?

Thank you for your time.

8.2 McKinsey Company report (2018)

<https://www.mckinsey.com/capabilities/mckinsey-design/our-insights/the-business-value-of-design>

8.3 The Design Management Institute, Design Value Index Scorecard

<https://onlinelibrary.wiley.com/doi/abs/10.1111/drev.10257>