Abstract

Communication between service sellers and service buyers within business-to-business environment has always faced a number of barriers for mutual understanding and effective information sharing. However, the process becomes even more complicated when design-sellers and design-buyers meet. Quite naturally design mindset contrasts that of business, which can be explained by both contrasting intrinsic personality traits and educational backgrounds. Furthermore, the nature of design process makes the design quality and applicability reliant on collaboration and mutual understanding much more than that of a regular product or service. Loss of money and time, and even project termination occur due to communication and translation errors. This means that design project success and price largely depend on interaction fluency between the parties.

With the design perception moving away from tangible towards intangible, more industrial companies are starting to rely on collaboration with external designers for more than just a nice package design. Most of large industrial companies such as Novo Nordisk have their own design facilitation units. However, it is still expensive for them to continuously retain strong internal design competences. Such tendencies together with the lack of existing research on design-business communication demand a closer investigation into the issue.

The most comprehensive knowledge can be built from the analysis of the information shared by the ones facing the problem and its consequences every day. Dictated by the broad scope of the problem qualitative research method – Theory Building from Case Study in combination with Grounded Theory Method - has been applied to answer the research question:

*Which elements of the designer-buyer collaboration critically affect multi-level translation within design project?*

Building from the empirical research across three industries (*design, pharmaceutical and media*), five critically disruptive elements have been identified: *Knowledge Gap, Stakeholder Management, Detachment between Actors, Ambiguous Design Strategy, Different Levels of Willingness to Risk* and *Opposing Goals*. The research findings reveal that depending on how prevalent these elements are it can either come out as successful or unsuccessful design-business collaboration.

Keywords: Design Communication, Design Management, Design-Business Intersect, Theory Building from Case Study, Grounded Theory Method, Design-Business Translation
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CHAPTER 1 - Introduction

Success of today’s businesses strongly depends on external collaborations and outsourcing. In rare occasions a company relies exceptionally on its own internal competencies and resources in order to build a strong and lasting business. The greatest success is believed, to be built on the vast diversity of skills and knowledge. Consequently, more and more companies have started to rely on external design competencies not only in creating visual or product design, but also for strategic purposes.

In design projects, where external design agency and their clients are involved, rather contrasting mindsets come into collision creating communication errors and inhibiting design process. That can be explained by both opposing intrinsic traits and educational backgrounds. Furthermore, the nature of design process makes the design quality and applicability reliant on collaboration and mutual understanding much more than that of a regular product or service. Loss of money and time, and even project termination occur due to communication and translation errors. This means that design project success and price largely depend on interaction fluency between the parties.

For many decades bringing them together has been a challenging task for both sides. Such situation requires building a better understanding of the workings of design-business intersects by identifying the main barriers in the conversation; specifically, the critically disruptive elements negatively affecting translation from design to business language and vice versa.

This chapter will explain the roots of the research problem, which then will lead to the representation of the research problem and research question, followed by the importance and delimitations of the study. Finally, it will be closed with the portrayal of the paper’s structure.

1.1 Roots of Research Problem

Up to this day little research has been devoted to communication between design and business professionals. In general, the most relevant topics that have received some attention are concerned with the following: translation from visual to verbal, rather than from design to business languages; design vocabulary and the use of design terms; and design thinking integration into organizations, thus communication between internal designers and the rest of the company. However, the central issue of this research – translation from design to business languages – has been left aside.
Tomes et al. (1998) have studied verbal-visual and visual-verbal translation within design projects. The aim of their paper ‘Talking Design’ was to identify key processes which enable verbal-visual and visual-verbal translation all the way from brief to final acceptance. In general, the authors view design as the achievement of an agreed translation from the verbal to the visual. In their view, “the ability to articulate verbal meanings associated with visual design, and conversely, to interpret verbal messages in visual terms is a core skill” (Tomes et al., 1998, p.127). The authors have addressed translation issues within design project in regards of how the design is being verbalized or visualized in certain design process stages. However, the design-business translation has not been included in the discussion.

More attention has been paid to the language used by designers, as it contains a high number of specific term and expressions, which, therefore, requires a special knowledge to make adequate interpretations. Boland and Collopy (2004) have even proposed a design vocabulary for management, which is meant to equip the later with necessary tools for the creation of mutual understanding within design projects. Overall, discussions on design and managerial vocabularies indicate the existence of design-business communication problems.

Nevertheless, a lot of attention has been paid to the design and business communication issues from the perspective of an internal design unit management within a non-design firm. One of the first pioneers in such practice, the CEO of IDEO - Brown (2008), has discussed the ways to integrate design thinking into the non-design firms’ innovation processes. A great number of large Danish companies are starting to implement design thinking as a tool for product or service development as well. With the growing interest in design thinking, more and more encounters with designers emerge, thus more understanding of design mindset and design communication is needed.

Despite the vast number of discussions on rather relevant issues, the core problems of design-business translation have not yet been explored. As mentioned earlier, in design practice, agencies and clients seem to experience challenges, which sometimes quite severely harm the design process and the design itself. The research statement has been inspired more by these impressions of design practice than by existing theoretical background. However, previously mentioned discussions on design vocabulary, design thinking, and especially, visual-verbal translation, gave the solid start to further exploration of design and business interaction in terms of communication.
1.2 Problem Statement and Research Question

Due to the expanding design applicability scope, the increasing importance of a fluent design-business communication has been recognized by design theorists and practitioners, and other actors involved in design projects.

All of the parties admit the presence of the communication gap between design and business professionals as a consequence of the contrasting mindsets. In other words, design buyer usually does not possess a full understanding of design concepts, technology or processes, therefore, lacks abilities to interpret design ideas in a meaningful and correct way. Likewise, designer’s visual-based and artistic nature makes the collaboration rather complicated. Furthermore, their understanding of business language and way of thinking is limited by the lack of business knowledge. In addition to language and mindsets, there appears to be more disruptions within design-business interaction, which require further investigation.

This study will be an attempt to identify the most disruptive elements within design-business translation, as well as, explain their effect on design process. Resulting from the previous, the following research question will be addressed:

*Which elements of the designer-buyer collaboration critically affect multi-level translation within design project?*

The purpose of this research paper is to generate a theory to represent the elements of design and business collaboration which critically affect the success of multi-level translation within design project. Theory will be represented in a form of a visual model, in order to better show and explain the findings of the research. It will be aimed to achieve by the application of Theory Building through Case-Study (Eisenhardt, 1989) in combination with Grounded Theory Method (Corbin and Strauss, 2008). The choice of combination was made in order to make the best use as possible of the research data.

As a result of the previous, the study aims to create a full understanding of translation process between design and business languages, thus, contribute to the pool of existing academic knowledge. Furthermore, it will suggest practical implications for design practitioners and design buyers to improve their day-to-day design communication.
1.3 Significance of the Study

As previously noted, design and business communication is a fairly unexplored topic in academic sphere (see 1.1). In addition to the lack of theoretical background, design practitioners have not yet succeeded in eliminating misunderstandings and miscommunication with the users of their services. This means that time, money and effort are still being wasted on design corrections, occurring due to various communication errors. It is, therefore, highly important to look into the issue and point out the causes affecting design process, it’s duration, cost and overall success.

With the previous in mind, the findings of the research will potentially have implications for the following groups:

- **Design Sellers**, since design-business communication is a large part of their design services. Their ability to understand client and their expectations and to accordingly communicate back to them highly affects the success of design project and the final outcome. The findings of the research should equip them with necessary knowledge about what needs to be avoided or encouraged to improve the communication;

- **Design Buyers**, since their ability to clearly express their expectations and provide designers with the necessary information is crucial in ensuring the fluency and success of design process;

- **Academics** within design and communication fields, as the research findings could possibly inspire and encourage further exploration of the topic, as well as, add new insights to their existing knowledge.

1.4 Delimitations

In order to deliver reliable research results within given research conditions, several delimitations had to be made:

- This research will not attempt to test any specific theories or models, as the main purpose is to develop a new one, based on the empirical research data;

- Design Seller is understood as an external design agency, which sells their services to a Design Buyer. However, no limitations in regards to the type of design services will be taken into account;
Design Buyer is understood as a non-design firm operating within mainly pharmaceutical industry. Such choice has been made considering the complexity of medical designs, which generally leads to more complicated communication within design project;

Restrictions in regards of size or structure of the companies will not be taken in consideration when choosing the participants of the research. As long as the target interviewee has sufficient experience within design-business environment, they will be considered as a representative sample;

The research will not include companies or individual participants outside Denmark due to time limitations and the physical location of the researcher.

1.5 Structure of the Thesis

The introductory chapter, Chapter 1, will be followed by the review of existing design communication, design and business mindsets theory, as well as, the representation of design and business process models, continued with discussion on visual-verbal translation within design projects (Chapter 2).

In Chapter 3 the paper’s research design will be described, including the representation of scientific approach, theoretical perspective, methodologies, and explanation of data collection process.

Chapter 4 includes the portrayal of research results and analysis of the data, which will lead to the closing part of the paper - Chapter 5. The final part sums up the research with propositional model as practical implications for design and non-design firms, supplemented with suggestions for academic use of the research results. The chapter also links to the theoretical framework in Chapter 2 and concludes the whole thesis with the closing section.

CHAPTER 2 – Theoretical Framework

This chapter aims to create an in-depth understanding of design seller-design buyer communication within design project, where the main actors are external design agency and their client company. In order to build a comprehensive theoretical framework the following areas will be discussed: design communication, design and business/managerial mindsets and processes, and translation from design to business languages, and vice versa. Such theoretical background has been chosen, considering that these are the areas on which the new theory will be built.
Due to the lack of specialized research and literature on designer-buyer interaction, the framework will consist of information extracted from general design, design management, design communication, and design thinking fields. This theoretical framework will accomplish the following goals:

- Create an overview of design communication, and communication barriers that are present within designer-buyer collaboration;
- Portray and analyze the differences between design and business mindsets and their main elements, as well as, discuss the way the two interact with each other;
- Discuss the translation processes within design-business conversation;
- Lastly, build the necessary knowledge enabling the reader to fully comprehend the research results, and analysis in the later chapters.

The chapter starts with the discussion on the broad interest area of the thesis – design-business communication/collaboration – and then gradually narrows down to the core issue of the research – translation within design-business conversation.

2.1 Design Communication

During the last decades, design communication has gained an increasing amount of attention from both academics and practitioners (Cooper and Press, 1994; Rasmussen et al., 2011; Stempfle and Badke-Schaub, 2002; Maier et al., 2006). The term design communication is understood and viewed from several perspectives. However, not all of them are relevant in answering the research question in this thesis. According to Maier et al. (2006) communication is seen as “the social and cognitive process by which information is selected, messages are exchanged between interacting partners, and meaning is created” (Maier et al., 2006, p. 663). Nonetheless, communication theory “scholars have made many attempts to define communication, but establishing a single definition has proved impossible and may not be very fruitful” (Littlejohn and Foss, 2008, p.3).

Some authors discuss the ways in which product design communicates to users, by looking into, for instance, how product design contributes to communicating brand identity to users (Hobolt and Kristensen, 2000). Others analyze how designers talk to each other or, in other words, how communication happens within design teams. Stempfle and Badke-Schaub (2002), for example, looked into the collective thinking process within design teams by analyzing the team’s communicative acts. The problem of communication becomes more visible when, in pursuit of innovative ideas, the
increasing number of design teams, become cross-disciplinary consisting of designers, scientists, engineers, doctors and the like. Eckert et al. (2000) have looked into the communication between knitwear designers and technicians. They claim that such communication “has been identified in an empirical study as a major bottleneck” (Eckert et al., 2000, p. 99). Many of these discussions evolve around the use of visual artifacts: drawing/sketching and the impact and evolution of design technology. In other words, such communication heavily relies on visual translation which will be discussed later in the chapter.

There is also a rising interest in design thinking as a tool for business innovation, and for creating a company’s competitive edge (Brown, 2008; Martin, 2009; Von Stamm, 2004; Czarnitzki and Thorwarth, 2012). Such change has led to discussions about the communication between in-house design units and the rest of the company. It has been acknowledged that internal designers struggle in communicating design values and goals, as well as, ‘selling’ the innovation to co-workers and management mainly due to the lack of design knowledge within the company. Very often in these cases, designers are seen as a ‘foreign body’, which results in underexplored potential of the design unit.

Various debates have been emerging on whether in-house designers are superior to external design agencies. For example, Czarnitzki and Thorwarth (2012) have empirically tested whether design activities conducted in house, differ in their contribution to new product sales from externally acquired design. They have found that in-house design activities play a crucial role in the product innovation’s success. On the other hand, working with external designers means that information may leak out before the release time of the new product (Czarnitzki and Thorwarth, 2012, p.878).

Despite the disadvantages that arise with employing external designers in the design process, according to Czarnitzki and Thorwarth (2012), “a common trend toward external design skills has emerged in recent years. Due to cost and control factors, firms are increasingly outsourcing design activities.” (Czarnitzki and Thorwarth, 2012, p. 878). External designers are seen as a great source of inspiration, change and exploration of new options. They also provide “access to specialist’s expertise and additional skills”, “relieve work load” within the company, and save money and time as it “can be bought if and when needed” (Von Stamm, 2004, p.17). For these reasons, increasing number of companies has included external design firms in their product development process (Czarnitzki and Thorwarth, 2012, p.878). However, adding to the list of the disadvantages, it is worth mentioning that external design services come with a number of downsides such as: “lack of understanding of company-specific issues”, already mentioned “lack of confidentiality”, “lack of internal skills for evaluating design work”, “not-
invented-here syndrome”, “loss of control”, “credibility gap”, and potentially being a “low priority on agency’s agenda” (Von Stamm, 2004, p.17).

Communication performed by internal design units and within design teams is a compounding part of design-business conversation. For this reason, such theory is considered to be of high relevance for this thesis. By adapting a broad perception of what design communication is, more theory becomes available and the limitation of sparse literature sources can be at least partially eliminated.

Many authors have agreed that a high number of problems in design are due to poor communication (Maier et al., 2006, p.663). As already mentioned, design thinking theory acknowledges the presence of challenges in communication between designers and the rest of the company, where designers form an internal design unit. Communication problems are present in design-business conversation too. As a consequence, considering more design communication areas than just design-business, dramatically raises the number of challenges and barriers faced by the actors of that conversation. Therefore, it is important to look into what issues arise and what barriers there are which inhibit the creation of shared understanding (Kleinsmann et al., 2008), which, according to Shortell and Kaluzny, is the “ultimate test of communication success” (McGinnis, 2012, p.50).

According to McGinnis (2012), some of the most potent communication barriers in general are the thoughts and perceptions of the sender and receiver: “Successful communication only occurs when we overcome the myriad assumptions, biases and preconceptions brought to the conversation to achieve shared meaning” (McGinnis, 2012, p.50). In addition, McGinnis (2012) notes that communication failure has more potential causes: “The sender does not clearly convey the purpose or message, or provides too much information”; “the receiver may not correctly comprehend the message” and may “resist the content or distort its meaning”, or may not view the “sender as credible”; plus, barriers created by “communication settings and logistics” (McGinnis, 2012, p.50).

Eckert et al. (2012) have explored the role of formality in design communication. The authors have identified three layers of structure in design communication with varying formality levels: the design process, the interaction between participants, and the representations of design information (Eckert et al. 2012, p.91). Misunderstandings in communication are very likely with the presence of mismatches in the understanding of formality, which, to some extent, depends on the level of experience of the parties. While the use of formal systems of notation serves to help eliminate ambiguity, such systems act as a limitation when developing creative ideas. Quite naturally, companies that dependent on
creative design exhibit less formal communication, whereas “organizations concerned with the fair and
dispassionate implementation of procedures gain from a formalistic interaction” (Eckert et al., 2012,
p.93). As the mismatch in expectations of formality is a potential source of poor communication,
agreement on the degree of formality to be used for different situations and purposes can help setting
up and maintaining fluent communication within large projects (Eckert et al., 2012, p.101).

This is, however, just a small part of communication barriers, and even more can be detected within
designer-buyer interaction. As an example could be the type of knowledge and experience (Knowledge
gap) that each part holds is different and accounts for a number of misunderstandings. Designers’
perception of design often is based on experiential, tacit knowledge, which is not easy articulated or
communicated to begin with, and in the minds of clients can form a very different understanding to that
held by professionals (Heskett, 2001, p.18). In their turn, managers apply factual, explicit knowledge in
problem solving.

In a similar way, David Walker (1990) talked about educational gap, which explains that managerial
education is “verbal and numerical” and concerned with topics such as “accountancy and engineering”
(Von Stamm, 2004, p.12), whereas design education is “visual, geometrical, and concerned with craft
and art” (Von Stamm, 2004, p.12). Since school is the beginning of designers or managers professional
path, the professional knowledge provided in these schools is a large part of what shapes a students’
approach to problem solving and their perception of the world, in general. Consequently, schools of
such different natures as design and business will nurture professions with contrasting approaches.
According to Murphy and Baldwin (2012), the gap can be closed by nurturing client business in design
education. They claim that the problem lies in an outdated model of what designers do, which means a
concentration on low-level skills, technical skills and software training (Murphy and Baldwin, 2012, p.94). There is a need for more strategic abilities and business orientation in design education, in other
words “design education needs to be less about design” (Murphy and Baldwin, 2012, p. 103).

Another relevant topic, discussed by Kleinsmann (2008), is barriers and enablers for creating shared
understanding in co-design projects, one of the key success factors in design communication. He argues,
that knowing those barriers and enablers actors within a collaborative design project are able to deal
with their differences. One of the most important findings are the three organizational levels –the actor,
project and company level - on which these barriers and enablers have an effect (Kleinsmann, 2008,
p.369). As a result, shared understanding is created through project management and project
organization, as well as, through face-to-face communication Kleinsmann, 2008, p.369).
After the primary study of design communication theory and an attempt to identify the main problems within design-business conversation, it became clear that the main interacting parties are representatives of quite contrasting worlds. Their thinking processes are quite different and have an immense impact on the success of the design-business conversation. Furthermore, according to Maier et al. (2006), “it is often difficult for design managers to ascertain whether communication as such is the problem, or whether it is a manifestation of, for example, inadequate process planning or personality issues” (A. M. Maier et al., 2006, p.663).

The conclusion of the first part of the theoretical framework leads to the investigation of design and business mindsets. The following section will attempt to create a better understanding of the characteristics of those mindsets, as well as, explain the effect that they have on the overall quality of the design project.

2.2 Mindsets

Design theorists and practitioners have noted a clear difference between designer’s thought-process, sensibility and visualization, and clients’ abilities to interpret design ideas1 (Von Stamm, 2004; Cooper and Press, 2003). From the analysis of design theory, it appears that the difference between design and business mindsets is one of the underlying reasons for most of communication errors, and accounts for difficulties in finding the common ground between the two worlds. To be more precise, the complexity of design mindset makes designers themselves, and the whole design process, incomprehensible for non-designers.

Resulting from the previous, most of the effort in this section will be dedicated to creating a better understanding of the ‘designerly ways of knowing’ (Cross, 2001), and explain how the design mindset interacts with the contrasting mindset of management, or business. In order to form a better understanding these issues, relevant information has been selected from previously mentioned design thinking, design communication and general design literature.

---

**Design Mindset**

“**Becoming a designer is a process of integrating the development of the whole person – namely, mind, body and spirit – with the development of the professional expertise**”.

Nelson Stolterman

Characteristics defining design mindset have been discussed quite explicitly in the literature of design thinking and in single articles on design attitude and design culture (Michlewski, 2008; Gorb, 1995; Boland and Collopy, 2004; Yoo and Boland, 2006; Von Stamm, 2004; Brown, 2008; Cooper and Press, 2003; Cross, 2001).

According to Brown (2008), CEO and president of IDEO, “**design thinking is a discipline that uses the 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, 2008, p.86). While explaining how design thinking works, at the same time he has distinguished and described design thinker’s profile as consisting of “**empathy**, “**integrative thinking**”, “**optimism**”, “**experimentalism**” and “**collaboration**”, and argues that design thinkers are not necessarily created by design schools (Brown, 2008, p.87). Moreover, according to Brown (2008), “**many people outside professional design have a natural aptitude for design thinking, which the right development and experiences can unlock**” (Brown, 2008, p.87).

Fraser (2010) has portrayed important emotional conditions under which design thinking can flourish, thus supporting the previous statement made by Brown (2008). They are as follows: “**mindfulness**” – sensing what is below the surface, unarticulated; “**open-minded collaboration**” – being receptive to new insights; “**permission to risk early failure**” – understanding that a really ‘crazy’ idea can become a germ of a brilliant concept; “**imperfection and iteration early in the process**” – exploring lots of possible solutions keeps the cost of failure low; “**creative solution of trade-offs and constraints**” – embracing opposing models as an inspiration; and “**abductive thinking**” – “**imagine is the key word here**” (Fraser, 2010, p.43).

Martin (2009) affirms such view by stating that design thinking is based more on making connections and abductive, rather than inductive or deductive reasoning, and continues by explaining that design is meant to look into the future, invent and innovate by making a “**logical leap of the mind**” or an “**inference to the best explanation**” (Martin, 2009, p.41).
In the discussion on the nature of design, Stolterman (2008) has noted that designers are “intuitive” or “sensitive” to a situation, at the same time making the design process appear as “badly structured, subjective, or fuzzy” (Stolterman, 2008, p.60). However, from a ‘designerly’ point of view this can be seen as “highly rigorous and disciplined way” to act (Stolterman, 2008, p.60). This was called “rationality of design” by Buxton and Krippendorf (Stolterman, 2008, p. 61). They described a rational designer as the one who works on “many alternative designs in parallel in an iterative way”, while going back and forth between the whole and the details, and it is the essence of a “rational, disciplined, designerly” way of acting (Stolterman, 2008, p.61). Although this approach may appear as ineffective and inefficient, it stems from design education where designers are trained to deal with “unfamiliar concepts”, “fuzzy problems” and high levels of ambiguity, and “require assessments that are subjective, personal, emotional, and outside qualification” (Von Stamm, 2004, p.12).

Tomes et al. (1998) talk about verbal and visual ways of thinking and note that verbal and visual cultures involve quite different modes of thinking: “The question of how they can come to understand one another is therefore a real one, whatever the underlying similarity of hermeneutic process” (Tomes et al, 1998, p.130).

According to Stolterman (2008), it is necessary, both in science and design, to argue for the outcomes and the value of design and design process, and he calls it a “design argumentation” (Stolterman, 2008, p.62). Rittel (1987) talked about it as a “reasoning of designers”, which consists of more or “less orderly trains of thought”, including “deliberating, pondering, arguing, and occasional logical inferences” (Rittel, 1987, p.2). “Since design is intentional, purposive, goal-seeking, it decisively relies on reasoning” (Rittel, 1987, p.2). The author argues that “much of the mental activity of a designer resides and occurs in the subconscious”, and that such activity is difficult to verbalize and translate into business language leaving the client out of this part of the design process (Rittel, 1987, p. 2).

Despite the ‘designerly’ complexity, most of the authors consider design mindset as a highly valuable asset for managers to look into and learn from, if they aim to keep up with the pace of today’s innovation. As mentioned earlier in this chapter, design thinking has taken a turn into a business world and is bringing the two parties closer to each other. As a result, this creates challenging problems when design mindset meets the one of business.
Design Meets Business Mindset

“Designers have always had an uneasy working relationship with the management world, and nothing in their education and training makes it easy for them to do so.”

Peter Gorb

Rasmussen et al. (2011) state, that designers focus on investigation and synthesis, in other words, the future, by leaving the process open-ended as long as possible for as many options as possible, whereas management tend to focus on existing knowledge and analytical tools, or the past. Martin (2009) holds a similar view towards the two worlds, and points out the differences between “analytical and intuitive thinking” (Rasmussen et al., 2011, p.1). He explains intuitive thinking, as “knowing-without-reason” based on randomness and future orientation, and analytical thinking (“quantitative analysis”), as past-oriented, data-driven reasoning based on logic and analysis (Martin, 2009, p.38). He continues by stating, that in the future the most successful businesses will balance “analytical mastery and intuitive originality” which is called “design thinking” (Martin, 2009, p.38), and his prognosis appeared to come true.

Boland and Collopy (2004) has explored design attitude as opposed to decision attitude, which is usually exhibited by managers, and which portrays them as “facing a set of alternative courses of action from which a choice must be made”, and “assumes it is easy to come up with alternatives to consider, but difficult to choose among them” (Boland and Collopy, 2004, p.4). The design attitude on the other hand, “assumes that it is difficult to design a good alternative, but once you have developed a truly great one, the decision about which alternative to select becomes trivial” (Boland and Collopy, 2004, p.4). Authors believe, that the decision attitude to problem solving, currently dominating management education, practice and research, locks businesses into a “self-perpetuating cycle of mediocrity” (Boland and Collopy, 2004, p.10). They have also noted that stereotypical managerial behaviors are “inimical to innovation or creative problem-solving” (Boland and Collopy, 2004, p.22), which introduces one more barrier in fluent design-business conversation. “Design attitude, in contrast, sets a higher type of goal for organization, that of seeking new ways to achieve human betterment” (Boland and Collopy, 2004, p.22).

As a number of other design theorists and practitioners, they see design attitude as a way for managers to break those stereotypical managerial behaviors. They claim that, “a design attitude is the first step in being able to realize the possibilities for organizational betterment that lie within us” (Boland and Collopy, 2004,p.14). They believe that, design practice can be adapted to fit the practices of
organizational leaders who are seeking innovativeness, and that it is becoming increasingly important for the business world to understand the workings of a designer’s mind. As a concluding advice for a leader, they suggest to “resist closure of a design problem and to maintain an open and liquid flow of design ideas” till the very end (Boland and Collopy, 2004, p.22).

Von Stamm (2004) has noted that, there is a difference between managers and designers on several levels: focus (“profits and returns” vs. “product and service quality”), purpose (“survival” vs. “reform”), thinking (“linear” vs. “lateral”), and approach (“serialistic, problem-oriented and cautious” vs. “holistic, solution-led and experimental”) (Von Stamm, 2004, p.12). In general, she notes, managers are “adaptive” and designers are “innovative” (Von Stamm, 2004, p.12). All in all, according to David Walker, “the divergence between managers and designers can be detected in personality traits, in habits of thought and work, as well as in educational background” (Von Stamm, 2004, p.12).

With the presence of the variety of characteristics describing design and business mindsets there is a need to sum up the most distinct ones and present them graphically in ‘The Mindset Ribbon’ (Figure 1). The graph is based on the observations and findings of the thoughts of previously mentioned authors, in such a way that the reader is presented with the tool for a rapid recap of the section when needed and with the least amount of effort.

![Figure 1. The Mindset Ribbon](image)

All in all, not even the mindsets differ from each other, but, in many respects, they are often contradicting. Design theorists agree that these characteristics are an essential part in shaping behaviors, communication patterns and product creation processes (Stolterman, 2008; Brown, 2008). Thereupon, the next section will represent the different process models of both design and business, in
order to deepen the understanding of the two mindsets and the ways in which their differences could affect the design-business collaboration.

**Design and Business Processes**

Michlews (2008) has noted that some professions regard design as a “pre-planned, predetermined mode with no space for emergent ideas” as represented by Mintzberg design school (Michlews, 2008, p.385). Under such perception design is a discipline which relies on “careful planning, up-front decision making and alignment with predefined criteria” (Michlews, 2008, p.385). On the other hand, he states, that professional designers would consider design attitude as “freedom to explore” and to “follow unexpected but promising leads, while still keeping the overall vision” (Michlews, 2008, p.385).


Many design process models have been developed to help the process but the choice depends on designers’ preferences, values, intentions, type of project and product being designed, as well as on the profile of the agency. However, Allinson (1997) claims that despite this intrinsic uniqueness within every design process, “most projects follow a similar generic development path” (Allinson, 1997, p.38). He has distinguished three main stages in architecture design process which, to some extent, can be generalized to most design processes (Allinson, 1997, p.38): “The Orientation Stage” - the vision statement is made and edited, and followed by project specification and project plan; “The Development Stage”; and “The Realization and Closure Stage”. Brown (2008) has also distinguished the main design process stages – “Inspiration, Ideation and Implementation” – with very similar idea behind the terms to the ones of Allinson (1997) (Brown, 2008, p.88).

In addition to these stages, several distinctive characteristics appear to be standard for almost any design project, and these characteristics are rarely found in business processes and practices: “Exploration, Ideation, Iteration, and Prototyping” can be considered the core activities of design thinking process (Brown, 2008, p.88).

The internal creative process that designers go through, according to Cooper and Press (1994), follows a certain trajectory: Define Problem → Understand Problem → Think about Problem → Develop Idea → Detail Design and Test (Cooper and Press, 1994, p.38). However, they do note that the creative process is rarely linear as opposed to business process, and is of “multidisciplinary” and “iterative nature”
They continue to revealing four broad approaches to viewing design as a process: “design as an internal creative process”; “design as an external productive process”; “the total process of design within management”; and “design as a planning process” (Cooper and Press, 1994, p.41).

One of the most popular design process models is considered to be The Double Diamond model developed in 2005 through in-house research at Design Council (UK) and serves as a simple way of describing otherwise very complex and chaotic design process.

“Divided into four distinct phases, Discover, Define, Develop and Deliver, it maps the divergent and convergent stages of the design process, showing the different modes of thinking that designers use”. The project starts with the ‘Discover’ phase, where divergence is the guiding principle of that stage. The main goal in this phase is to generate an initial idea and to find sources of inspiration for the potential design solution. It involves “market research, user research, managing information and design research groups”. The second stage – ‘Define’ – is distinguished by convergence of the outcomes of the ‘Discover’ stage. Key activities consist of “project development, project management and project sign-off”. ‘Definition’ phase is followed by the one of ‘Development’ where design-led solutions are developed, iterated and tested with the company. It consists of “multi-disciplinary working, visual management, development methods and testing”. Finally, the ‘Delivery’ stage allows for the resulting product or service to be finalized and launched through the activities of “final testing, approval and launch, and targets, evaluation and feedback loops”.

The process in practice is much less linear than it appears at first sight. All four stages have to be repeated at different times, interrupt with each other and make the whole process rather chaotic. One
of the main reasons for such a turn in the process is the aforementioned ‘designerly’ tendency to keep the process open for iterations and changes until as long as possible in the project.

Mark Oakley has compared organizational features of production with those of product design, and the comparison allows us to create a better picture of the differences between the two processes (Cooper et al., 2011, p.78). He attributes such features as “rationality, standardizing, accurate and timely operations, predictability, close control and risk elimination” to the production process (Cooper et al., 2011, p.78). Even though he talks about production such characteristics are applicable to business processes as well. On the contrary, design process is “irrational, novel, and unpredictable with inaccurate timing of activities, frequent change, highly creative personnel and risk taking” (Cooper et al., 2011, p.78).

Since product life cycles become increasingly shorter, customers more demanding and competition levels rising, businesses have been looking for lean, rapid, efficient and cost-effective product development processes. Therefore, business mindset plays a part in the linear, milestone-based new product development (NPD) process which is meant to meet the requirements mentioned above. One example of such approach could be the ‘Stage-Gate Model’, which is widely used for managing new product development process and was first introduced by dr. Robert G. Cooper (2008).

![Stage-Gate Model](image)

‘Stage-Gate’ is a “conceptual and operational map for moving a new-product project from idea to launch” (Cooper, 2008, p.214). It is divided into distinct stages separated by management decision gates described as gatekeeping (Cooper, 2008, p.219). While cross-functional teams work on each stage they can move forward only after management’s approval. Each stage is a decision point or gate which serves as a go/kill and prioritization decision point where decision is made on which projects will be invested in. Gates deal with “quality of execution, business rationale, and the quality of the action plan” (Cooper, 2008, p.215). Although the model accelerates speed-to-market, introduces discipline into a process, and, in general, improves effectiveness and efficiency of a project, it has been criticized as being slow and having “high overhead”; emphasizing more “form than substance” in discussion and decisions; treating
all projects and products the same; killing innovation and treating all choices as “one off” decisions (Becker, 2006, p.4).

Driven by the growing interest in design-business intersect, many researchers have started looking for ways to connect design and business processes (Rasmussen et al., 2008; Martin, 2009). For example, Buchanan argued that “properly integrating design into a complex organization, is one of the important challenges faced by management” (Michlewski, 2008, p.386). One of the biggest problems with such integration is that while design process “is a highly open one, most non-designers find it confusing and unstructured” (Rasmussen et al., 2011, p.1). There have been attempts to connect design and business approaches in a way that both sides would benefit from the collaboration equally, and would yield the best results.

‘The Strategic Design Matrix’, proposed by Rasmussen, Kramp and Mortensen (2011), is meant to facilitate the communication between the design approach and the management approach.

![Figure 4. ‘The Strategic Design Matrix’ (by Rasmussen et al.)](image)

In the model both material and non-material aspects of design are included (Rasmussen et al., 2011, p.7). It has thirty five focus points in total, constructed in a way that ‘Subject Focus’ axis constitutes of traditional business model terminology – “customer segment, value proposition, customer relations, channels, key activities, key resources, and key partners” - whereas ‘Design Focus’ is composed of elements based on ideas of Heskett – “product, system, service, experience and strategy (Rasmussen et al., 2011, p.7). “In this way each focus point has a location in a traditional business structure, but added are the development opportunities offered by five levels of design focus” (Rasmussen et al., 2011, p. 3).
Collectively, all of the focus points create an informed overview of the overall consequences of a given strategic change.

Although it is intended for the use within strategic development processes, due to its concentration on finding the common ground between designers and management, it makes the model to a certain degree applicable within designer-buyer relationship as well.

Another example of linking design and business processes is the ‘Knowledge Funnel’ model proposed by Roger Martin (2010).

The model consists of three steps (Martin, 2010, p.37):

1. “Pinpointing a market opportunity, a problem to solve” (Selecting a particular “mystery” to be solved);
2. “Devising an offering for that market, narrow the field of inquiry and work the “mystery” down to a manageable size” (An initial heuristic or “rule-of-thumb”);
3. “Codifying its operations, applying a fixed formula, a tested method or a procedure” (Converting heuristic to algorithm).

According to Martin (2010), the model is applicable in all sorts of businesses, and can advance knowledge and capture value. Although his concentration is mainly on solving business problems, he emphasizes the importance of design thinking, and the model is meant to reconcile both intuitive and analytical approach. Martin (2010) claims that the model is a tool to facilitate businesses’
transformation towards the design-thinking organizations, and although such move is not easy the potential pay-off is enormous (Martin, 2010, p.41).

The need to connect design and business rises together with the acknowledgement of the design thinking value for all types of business. Consequently, design communication within all aforementioned areas – “product design to users, within design teams, in-house design unit to the rest of the company, and external designers to the client” – appears to play more than a facilitator’s role in ensuring the success of a design project (Maier et al., 2006, p.663). Design theorists agree, that many problems in design are due to poor communication which makes it a critical factor in the whole design process (Maier et al., 2006, p.663). Once again, the investigation of the design-business conversation reveals that most of the challenges arise from the collision of strongly contrasting natures of the actors. Such differences the two ways of thinking very often make designers and managers seem as two foreigners talking to each other in different languages. This is due to the impact of educational background and mindsets on the language used by each party. In other words, the complexity of design mindset is often very difficult for non-designers to comprehend and, in some cases, may result in massive communication errors and consequently design project termination.

2.3 Visual-Verbal Translation

According to Tomes et al. (1998), the whole design process is meant to achieve a “mutually acceptable visual ‘translation’ of the brief”, and it is accomplished through multiple translations from verbal to visual and from visual to verbal during the process (Tomes et al., 1998, p.127). Authors argue that today’s designers must acquire the core skill of “articulating verbal meanings associated with visual design”, as well as, “interpreting verbal messages in visual terms” (Tomes et al., 1998, p.127).

As noted by Bettina von Stamm (2004), one of the main obstacles to the fluent design-business conversation is not only the difference in values, behaviors and attitudes, but also the language, specifically, expressions and terminology (Von Stamm, 2004, p.13). The importance of language in project communication has been stressed also by Fleming: “[Language] is used in the communication of constraints and requirements; in group problem-solving and decision making; in designer-client dialogue and negotiation; in inquiry, research, and testing; in naming, specifying, representing, and elaboration; and in evaluation, application, and interpretation” (Cooper and Press, 2003, p.146). Having so many uses within design project, language becomes crucial in ensuring the fluency of project communication. However, the complexity of design language and its specific terms impedes the communication process.
Boland and Collopy (2004) discuss the differences between languages of aforementioned design and decision attitudes. They argue that the failure of decision (or managerial) attitude, is its outdated language which causes missing out on new possibilities that could possibly arise with a well-developed vocabulary of design. “The familiar vocabulary of management brings premature closure to problem solving by, for instance, shifting focus to discounted cash flows and calculations of cost and profit, almost before a design process has started” (Boland and Collopy, 2004, p.17). As a result, the preferred ‘liquid state’ of the design process is turned into a ‘crystallized’ one, thus design inquiry is closed too early in the process (Boland and Collopy, 2004, p.17).

The authors also claim that values of a certain professional culture cannot be separated from language and its use, and have distinguished between two different languages. The “language of decision and increase” dominates in business, and can be characterized by speed and decisiveness in approaching a problem (Boland and Collopy, 2004, p.266). This type of language is inherently antagonistic to the “language of design and balance”, which encourages sweeping in as many influences as possible (Boland and Collopy, 2004, p.266).

A number of discussions evolved trying to make the convergence of the two languages possible. However, adding a few words into the vocabulary of management will not change behaviors, meanings, and outcomes by itself (Boland and Collopy, 2004, p.267). Instead, as proposed by Boland and Collopy (2004) in their ‘Design Vocabulary for Management’, a “new vocabulary plus a new attitude in use can exert a force for change” (Boland and Collopy, 2004, p.267).

Apart from verbal language, there is also a visual one used mostly by designers. Rachel Cooper describes visual communication as designer’s ability to draw and prototype which performs the following communication functions: “referential, emotive, conative, poetic, phatic and metalinguistic” (Cooper and Press, 2003, p.138). Since managers use economic approach and lacks design knowledge, the messages transmitted by the means of drawing may not be properly interpreted. Consequently, visual tools may be seen as a rather limited communication mean between designers and clients. Therefore, visual artifacts must go together with verbal explanations, in order to clearly communicate with all stakeholders in the design process (Cooper and Press, 2003, p.143). Cooper and Press (2003) also state that verbal discussion can broaden creative outlook for the designer: “It appears that supplementing the essentially visual process with verbal discussion stimulates creativity by accessing memory and provoking thoughts that may otherwise be obscured by concentration on the physical activity of drawing” (Cooper
and Press, 2003, p.147). On the other hand, Koestler and also Lawson claim that “true creativity starts where verbal cognition is suspended” (Cooper and Press, 2003, p.147).

Tomes et al. (2008) have proposed a visual-verbal translation model which explains the translation process in detail and reveals the critical touch points in the designer-client communication (Tomes et al., 2008, p.128). The initial stage includes a verbal and written form expressed design brief. In order to fully comprehend the meanings of the brief, ‘verbal deconstruction’ of those meanings is performed by the designers (‘Encapsulation’). Subsequently, designers execute visual translation of the possible routes stemming from deconstructed verbal meanings of the brief. This stage called ‘Making ‘Routes’ includes also verbal communication within design teams while trying to find the right interpretation of the brief. Later on, the best interpretations are translated to visual language by the use of verbally ‘negotiated translations’ of the past and by applying ‘verbal-visual dictionary’, a stage called ‘Recycling Visuals’. Finally, the visual ideas are being presented to the client without any verbal explanation, only the client’s reaction is expressed with words – ‘a verbal translation of the visual’ (Negotiating Translation) (Cooper and Press, 2003; Tomes et al., 1998).

A process like this carries a risk of possible mismatch between interpretation of the message and the real meaning or intention, therefore, visual-verbal and verbal-visual translation circles around until the most appropriate solution is found and both parties have been understood correctly. On the contrary, as expressed by Cooper and Press (2003), communication across the verbal-visual divide is essential in clarifying client’s hidden requirements simply for the reason that such qualitative concepts as ‘feel’ and ‘mood’ may be left outside “the formal language of the brief” (Cooper and Press, 2003, p. 146). In other words, visual-verbal translation may increase coherence between client’s requirements and the final design solution, consequently, bringing more clarity in design-business conversation.

Visual-verbal translation or design-business translation is relatively complicated and demanding task. Therefore, very often an intermediary is necessary in order to properly carry out the conversation between designers and clients.

Lanny Vincent (2005) in his study of innovation management practices has used a term ‘midwife’ to metaphorically describe those intermediaries, or, in other words, the bridge between sponsor and innovator in a single company. He identified midwives in the context of internal innovation management as “a person who, or thing which helps to bring something into being” (Vincent, 2005, p.42), “enabling a more reliable and sustainable stream of innovation” (Vincent, 2005, p. 42). However, some of the study
findings are comparable to design seller-design buyer collaboration, as well considering that some of the
design project participants act as translators between two languages, and connectors of design and
business mindsets. The difference is that Vincent describes midwives as informal network of people
(Vincent, 2005, p.41), whereas in this paper translators occupy a more formal position within company,
such as project managers, design facilitators and creative directors.

2.4 Interim Conclusion

In this paper, design communication is primarily viewed as a conversation between external design
agency and a client. However, of relevance is communication between in-house design unit and the rest
of the company, as well as, communication within designers themselves (design teams). Issues
concerning the two types of communication are the compounding parts of design-business
conversation, the major interest area of this paper.

The communication process between designers and clients, experience a number of barriers and
challenges mainly due to the differences between the interacting mindsets of design and business. Their
contrasting profiles are shaped by educational institutions, which only recently have begun initiating the
convergence of the two worlds. As a result of the design mindset’s complexity, misunderstandings and
misinterpretations take place in design-business conversation, disrupting the fluency of the
communication.

In addition to the mindsets, the language used accounts for a large part of the disrupted design-business
conversation as well. Design language contains very specific design terms, and reflects quite well the
complex way of designer’s thinking. In a similar way, business language is a reflection of a business
mindset. Metaphorically, the terminology and expressions used by both parties can be considered as
two foreign languages. In order for designers and clients to be able to maintain a fluent conversation
certain translation process needs to be applied. Such processes within a design project have been
discussed from the perspective of visual-verbal translation. However, not many authors have explored
the translations from design to business languages and vice versa. For this reason, the paper will take a
direction towards answering the research question:

Which elements of the designer-buyer collaboration critically affect multi-level translation within design
project?

The question will be approached by applying the following methodology and research design.
CHAPTER 3 - Methodology and Research Design

This section represents the paper’s research design which will describe a scientific approach to knowledge and theoretical perspective of the research, followed by explanation of methods used, as well as, methodology informing the choice of those methods. These four elements are closely related to one another and each always informs the following. According to Crotty (1998), they can help to ensure the “soundness of the research and make its outcomes convincing” (Crotty, 1998, p.6). In pursuit of the later, the chapter will be constructed in the following way:

Aforementioned structure has been chosen for the purpose of answering four questions which, according to Crotty (1998), are meant to facilitate the description of research design in a research paper (Crotty, 1998, p.2):

- What methods do we propose to use?
- What methodology governs our choice and use of methods?
- What theoretical perspective lies behind the methodology in question?
- What epistemology informs this theoretical perspective?

The choice of methodology and methods for this research was guided, first, by the nature of the research problem, and, second, by the ‘assumptions about reality’ (theoretical perspective) and ‘understanding of human knowledge’ (epistemology)(Crotty, 1998). The sequence of the answers has been set in bottom-to-top order due to the intended logical clarity of the chapter. It will start building upon the epistemology and theoretical framework in order to lay the scientific background for the choice of methodology and methods. Supplemented with the description of the gradual development of the theoretical model, such structure will create a path leading to research results and will make the final model easier to comprehend.
3.1 Epistemology

Epistemology is explained as theory of knowledge, or as a way of understanding “how we know what we know”, and which deals with the nature of that knowledge, its possibility, scope and general basis (Crotty, 1998, p.8).

This paper’s theoretical perspective is informed by constructionist/constructivist epistemological stance which means that objective truth is non-existent.

The choice of constructivism here is based on the belief that there is no objective truth in regards of the elements interfering with multi-level translation within design-business intersect (therefore not objectivism), nor the meaning is imposed on the object by the subject (therefore not subjectivism). The meaning rather comes out of interplay between subject and object where the two contribute to the construction, not discovery, of meaning, out of the interaction between individual human subject and objects in the world (Crotty, 1998, p.79). Crotty (1998) claims that the actual meaning of a phenomenon emerges only when consciousness engages with objects, in other words, the meaning does not exist without a mind (Crotty, 1998, p.43).

Resulting from the previous, there is an assumption that different minds construct meaning of the same phenomenon in different ways. Schwandt (1998) adds by noting that to understand this world of meaning one must interpret it (Schwandt, 1998, p.222). These interpretations can be “useful, liberating, fulfilling and rewarding, or useless and oppressive”, rather than true or false (Crotty, 1998, p.48). With that in mind, such beliefs should not be generalized to all population.

Considering the social nature of the research, it is worth noting the view of social constructionists, which claims that “culture shapes the way in which we see things and gives us a quite definite view of the world” (Crotty, 1998, p.58). In other words, researcher is advised to lay aside much of the pre-formed cultural judgments and interpretations before entering the research field, in order to protect the research from the tyranny of the familiar (reification) (Crotty, 1998).

Although constructivism is suitable for practical application and is entirely simplistic, it has been criticized for being confusing and a subject to ‘epistemological fallibilism’, which means that “all knowledge is fallible by virtue of lacking exactitude and comprehensiveness” (Cobern, 1993, p.109). According to Cobern (1993), instead of a photograph of reality, scientific knowledge is much more like an artist’s “impressionistic painting of reality” (Cobern, 1993, p.109). This thesis adopts the later position
and is built on the belief that “we cannot know for sure how close our knowledge approximates the reality”, but that it is rather a “meaningful interpretation of reality” (Coben, 1993, p.109).

Next to epistemology, there is another approach to the science of knowledge which is called ontology, or the study of ‘being’ (Crotty, 1998). Ontology is concerned with ‘what is’, with the nature of existence, and the structure of reality as such. It sits alongside epistemology because each theoretical perspective embodies a certain way of understanding ‘what is’, as well as, certain way of understanding ‘what it means to know’. Realism in ontology and constructionism in epistemology turn out to be quite compatible (Crotty, 1998, p.8). However, Crotty (1998) suggests retaining the usage of theoretical perspective and reserving the term ontology for those occasions when we do need to talk about ‘being’.

The epistemological stance of constructivism leads to the choice of theoretical perspective which is represented in the following section.

3.2 Theoretical Perspective

Theoretical perspective is in general “an approach to understanding and explaining society and the human world”, and it lays the ground for a set of assumptions that are to be brought to the methodology of choice (Crotty, 1998, p.3). In order to build the basis for the logic and criteria of the methodology it is crucial to have theoretical perspective in place (Crotty, 1998, p.3).

The chosen philosophical stance behind this paper’s methodology is interpretivism, “which looks for culturally derived and historically situated interpretations of the social life-world” (Crotty, 1998, p.67). The choice stems from constructivism approach to knowledge presented in the previous section.

According to Corbetta (2003), interpretivism means that reality is not being observed but rather interpreted. He claims that in epistemology interpretivism eliminates the separation between the researcher and the object of study, and leads to “empathetic interaction between the two” (Corbetta, 2003, p.27).

Interpretivism perspective has been criticized for its interpretations going beyond subjectivity by arguing that extreme subjectivity rules out the very existence of science (Corbetta, 2003). This led to the following belief adopted by many interpretivists: “If reality is merely a subjective construction, then generalizations above the individual level cannot be made and knowledge cannot be objective” (Corbetta, 2003, p.30). However, Williams (2000) argues that “interpretivists deny the possibility of
generalization, or they ignore the issue, but they do generalize and this is inevitable” (Williams, 2000, p.209). He continues by stating that the micro-level detail of a small part of a researched society is often used “to paint a picture of that wider society”, even though many times the generalization is being admitted by researchers themselves (Williams, 2000, p.211).

Based on the perspectives of constructionism and interpretivism, this research will create the meaning from researcher’s interaction with the study object and, later on, by interpreting that interaction in a meaningful way. The findings of the research will not be regarded as an absolute truth, but rather as a useful interpretation, and will only be generalized to a certain degree and not the whole population. With the theoretical perspective in place, the methodology of the research can be chosen to reflect the underlying theoretical assumptions.

3.3 Methodology

With the research philosophy already defined, this chapter will introduce the methodology applied to answer the research question:

*Which elements of the designer-buyer collaboration critically affect multi-level translation within design project?*

This particular methodology is informed by constructivist epistemological stance and interpretivist philosophical approach. Methodology in general governs the choice and use of methods, which acts as a plan of action, and process or design, linking methods to the desired outcomes (Crotty, 1998).

This research strategy combines parts of ‘Grounded Theory’ (Glaser and Strauss, 1967) with the ones of ‘Theory-Building from Case Study’ methodology (Eisenhardt, 1989). The reason for the choice of the combination lies in the complexity of the cases chosen, and mainly in the limited availability of the research data. The incomplete profiles of the cases due to inaccessible research data have restrained the application of case analysis and determined only partial use of theory-building from case study. However, this was supplemented with grounded theory methods in order to reap the best results from the research analysis.

Further in the section both methodologies will be introduced and explained in relation to the research.
Theory-Building from Case Study

Theory-building from case study (TBCS) is a “research strategy that involves using one or more cases to create theoretical constructs, propositions and/or midrange theory from case-based, empirical evidence” (Eisenhardt and Graebner, 2007, p.25). It has been proposed by Kathleen M. Eisenhardt in 1989, and is built on the basis of previous contributions to theory building from case studies literature by Glaser and Strauss (1967), Yin (1981, 1984) and Miles and Huberman (1984) (Eisenhardt, 1989, p.532).

The research process was based on the belief that the emergent theory is developed by recognizing patterns of relationships among constructs within and across cases, and on their underlying logical arguments (Eisenhardt and Graebner, 2007, p.25). Throughout the research process each new case was firstly analyzed on its own. Theory-building usually relies on replication logic as “each case serves as a distinct experiment that stands on its own as an analytic unit” (Eisenhardt and Graebner, 2007). Since TBCS is distinguished by continuous comparison of data and theory during data collection process (Eisenhardt and Graebner, 1989, p.534), the findings of each new individual case analysis were compared to the previous ones and to the existent theory. The whole process aimed to distinguish the most common constructs and patterns that they form across the cases. This draws attention to one of the biggest strengths of this methodology - its ability to connect inductive logic with deductive logic by inductively producing new theory from data which makes it possible for a deductive theory testing to complete the cycle (Eisenhardt and Graebner, 2007).

In order to answer the research question of this study, only inductive reasoning has been applied. The decision was made considering the main purpose of the research - address theory-building rather than theory-testing. The choice was also affected by the lack of existing theory on designer-buyer intersect.

There is a gap in design theory that needs to be filled in rather than there is a need to test existing design communication theory. The gap in design communication theory is existent because most of relevant discussions evolve around the communication within a design teams or between internal design units and the rest of the company. On the other hand, communication between external design agency and their clients is more complex, as it is affected by contrasting mindsets, goals and intentions. Therefore, the existing design communication theory addresses the research question in a way that is inadequate or likely to be untrue (Eisenhardt and Graebner, 2007, p.26). Consequently, the issue requires a separate investigation into designer-buyer intersect problems using TBCS research strategy.
In consideration of the previous, TBCS was seen as one of the most appropriate methodologies in this particular case. Theory-building process is considered to be “highly iterative and tightly linked to data”, and especially appropriate in new topic areas, where the resulting theory is likely to be “novel, testable, and empirically valid” (Eisenhardt, 1989, p.532). According to Glaser and Strauss (1967), such outcomes are determined by “the intimate connection with empirical reality” (Eisenhardt, 1989, p.532).

Despite the concentration on inductive reasoning, there will be a possibility to test the findings of the research later on if needed, thus apply the deductive reasoning as well, as TBCS ensures testable results and accommodates both ways of reasoning. As concluded by Eisenhardt and Graebner (2007), “the result is fresh theory that bridges well from rich qualitative evidence to mainstream deductive research” (Eisenhardt and Graebner, 2007, p.30).

One of the main reasons for the combination of single GTM elements with the ones of TBCS lies in the limitations of data collection and is reflected in the data analysis stage. As already mentioned in this chapter, particular cases were difficult-to-impossible to identify and complete due to information confidentiality and lack of references from the interviewees. Therefore, the within-case analysis section of TBCS, suggested by Eisenhardt (1989), in this research has been replaced by more general descriptions of the interviews, and followed three main steps of the GTM - codification, derivation of concepts and categorization (Glaser and Strauss, 1967).

**Grounded Theory Method**

The methodology (GTM) developed by Barney G. Glaser and Anselm L. Strauss in 1967, laid the foundation for new methods of social research, in other words, shifted the concentration from theory verification to theory building from data systematically obtained using social research (Glaser and Strauss, 1967, p.1). The theory developed according to this methodology is “grounded in the behaviour, words and actions of those under study” (Goulding, 2002, p.5).

In addition, the GTM enables to answer not only ‘what’ and ‘how’ questions, but also allows to address ‘why’ questions in qualitative research. In this way, it promises flexibility and encourages innovation which enables researchers to develop new understandings and novel theoretical interpretations of studied life.

The choice to use some elements of the GTM in combination with the elements of the TBCS has been made for several reasons. Foremost, the main purpose of the GTM corresponds rather precisely to the
one of this research paper which is to generate a theory using a ‘construct-oriented’ approach (Creswell, 1998).

Furthermore, there is an essential contradiction between the two methodologies which led to the use of the elements from both. While in TBCS, enfolding and comparing existing literature comes at the end of the process, in GTM it is one of the first steps researcher takes before entering the field. According to Goulding (2002), “without this grounding in existing knowledge, pattern recognition would be limited to the obvious and the superficial, depriving the analyst of the conceptual leverage from which to commence theorizing” (Goulding, 2002, p.9). Therefore, in pursuit of unbiased pattern recognition, this research process has been started with the review of several existent literature sources. However, the TBCS stage of enfolding literature has also been applied at the end of the process in order to compare the new theory with similar and contradicting literature.

Having research philosophy and methodology in place, research methods and process can be defined. As mentioned in the introduction to this chapter, the choice of methods is informed by the selected methodology, and lays the ground for the research process. Guided by the decision to apply parts of both, TBCS and GTM, the most relevant methods will be discussed in the next section.
3.4 Methods

In this part of the paper the research process and methods applied in answering the RQ will be presented. It will follow the research process structure depicted in Figure 10, which is based on the two methodologies reviewed in the previous section, proposed by Goulding (2008) and Eisenhardt (1989).

![Figure 7. Research Process (based on Goulding, 2002 and Eisenhardt, 1989)]

**Definition of Research Problem, RQ and A Priori Constructs**

In order to enter the field of study with a well-defined focus and be able to collect specific kinds of data systematically (Mintzberg, 1979, p.585), it is important to have an initial definition of the research question in at least broad terms (Eisenhardt, 1989, p.536). Otherwise, there is a high probability of becoming overwhelmed by the volume of research data (Eisenhardt, 1989, p.536).

In this study the research problem have been identified through sources other than literature review, as opposed to the GTM practices. Rather it has drawn attention through stories of informants within the industry.
academic environment. Guided by the beliefs of constructivists and social constructionists, as well as, interpretivism philosophy the research field of this study was entered without prior in-depth theory review. According to Eisenhardt (1989), such practice allows retaining ‘theoretical flexibility’ (Eisenhardt, 1989, p.533). However, “a priori specification of constructs can help to shape the initial design of theory-building research”, as it “permits researchers to measure constructs more accurately” (Eisenhardt, 1989, p.536).

Below can be found a priori research problem and RQ as defined in the beginning of the research process:

‘There is a gap in the buyer-designer relationship which results from the differences between the parties and which accounts for inarticulate communication process between the two. The design client does not possess a full understanding of design concepts, software or processes, therefore, lacks abilities to interpret design ideas. Likewise, designer’s sensible, visual-based and artistic nature makes them a complicated type of people to work with. In consideration of the previous, the gap appears to be inevitable.

This study will be an attempt to analyze the gap impact on the buyer-designer conversation and the final design product. The major angles of approach include linguistics, culture, values and goals of the parties. However, the economical and juridical facets of the collaboration will be excluded from the research scope. The following research question will be addressed:

How do perceived differences between the buyer and the designer create the communication gap between the parties, and what are the methods to bridge the gap in pursuit of successful completion of the design project?’

Several potentially important constructs have been identified after reviewing a small number of articles within design communication area, such as: intrinsic differences between designers and design buyers – educational backgrounds and mindsets; the designer-buyer communication gap; miscommunication between designers and design buyers; the language gap; analytical vs. artistic nature of designers and design buyers.

Eisenhardt (1989) highlights the importance to recognize that early identification of both RQ and constructs are tentative (Eisenhardt, 1989, p.536). However, she also states that if some of the primary
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constructs come up in the data analysis results, there are strong, triangulated measures on which the emergent theory can be grounded (Eisenhardt, 1989, p.536).

After the definition of research focus it is important to identify the target participants of the research. Therefore, the next section discusses the ways to choose the most relevant cases as guided by the GTM and TBCS methodologies.

Selection of Cases

TBCS, as well as GTM, relies on theoretical sampling where cases are chosen for theoretical, not statistical, reasons (Eisenhardt, 1989, p.537). The main goal of such sampling method is “to choose cases which are likely to replicate or extend the emergent theory” (Eisenhardt, 1989, p.537). In consideration of the research purpose - to develop theory, rather than to test it - such sampling is more appropriate than random or stratified (Eisenhardt and Graebner, 2007, p.27). According to Eisenhardt (1989), in most cases, “random sampling is neither necessary, nor even preferable” (Eisenhardt, 1989, p.537).

Multiple-case study approach has been applied in this research as it typically provides a stronger base for theory building than single-case study due to its varied empirical evidence (Eisenhardt and Graebner, 2007, p.27). Consequently, the theory comes out as better grounded, more accurate, and more generalizable, because multiple-cases allow comparisons that are able to clarify emergent findings, as well as, “enable broader exploration of RQ and theoretical elaboration” (Eisenhardt and Graebner, 2007, p.27).

The initial strategy of case selection for this research was ‘extreme’ or ‘deviant’ case sampling, specifically, ‘successful’ versus ‘failed’ design-business collaborations in order to reveal unusual phenomenon (Eisenhardt and Graebner, 2007, p. 27). The choice has been made based on the assumption that this type of case sampling is especially suitable for research with limited resources and time (Patton, 1990, p.170), and is of purely ‘exploratory nature’ (Seawright and Gerring, 2008, p.302).

This approach considers ‘rich’ cases and encourages choosing the ones that are unusual or special in some way (Patton, 1990, p.169). ‘Polar Type’s or ‘Extreme/Deviant’ cases “lead to very clear pattern recognition of the central constructs, relationships, and logic of the focal phenomenon” (Eisenhardt, 2007, p.27). Patton (1990, p.170) claims that such cases provide lessons about unusual conditions or extreme outcomes that are relevant to improving more typical programs. According to Seawright and
Gerring (2008), “it is the rareness of the value that makes a case valuable”, and not its positivity or negativity (Seawright and Gerring, 2008, p.301).

However, the initial plan to apply extreme case sampling was implemented only partially for several reasons. First of all, unsuccessful design-business cases are not widely discussed in media. Therefore, informants from various companies were needed in order to identify such cases. This leads to the second reason, the confidentiality of such data and interviewees’ unwillingness to share the information with a researcher from the outside. Such behavior of the research participants can be attributed to several issues: confidential information must be retained confidential as it contains competitive advantage of the company; sharing negative opinion about or experience with specific companies/persons would possibly mean putting these relationships in jeopardy; admitting own mistakes to the outside listener would put company’s competences under a microscope.

Most importantly, after the Field research I, it became clear that the existent problems within designer-buyer intersect, no matter how severe, rarely cause termination of a project, thus failed cases appeared to be non-existent.

As a result, such difficulty in identifying extreme cases (successful versus failed design-business collaborations) led to choosing exemplary interviewees from contrasting industries: design-manufacturing and design-entertainment/media. According to Patton (1990), it is not even necessary to randomly sample poor or excellent cases, but rather seek for understanding under what conditions success or failure occur (Patton, 1990, p.170). Creswell (1998, p.118) claims that it is essential for all interviewees to have experienced the phenomenon being studied, which was true to all participants within this research. In addition, these participants have been chosen upon their ability to contribute to evolving theory (Creswell, 1998, p.118).

Generally, the sample of this research consists of four design agencies, one governmental innovation unit, one educational institution, two pharmaceutical companies and one media organization, which accounts for thirteen informants in total. In order to gather the most relevant information, and, at the same time, to stay open to various outcomes, only one major criterion has been applied: all research participants must have had experience within design-business interaction. Although some of the companies are global, all of their roots are Danish, and only their business within borders of Denmark has been taken into consideration. The sample has been created gradually by using references of other interviewees aiming to make the links between the participants.
After the sample has been composed, the data collection strategy had to be prepared. The next section will discuss the most relevant methods used to gather the most relevant information in order to answer the research question:

*Which elements of the designer-buyer collaboration critically affect multi-level translation within design project?*

**Data Collection Methods**

To begin with, it is important to note that this study adopts empirical qualitative research approach in which data collection is defined as ‘interpretive and naturalistic’ (Creswell, 1998, p.14), and which is one of the main determinants in choosing specific data collection methods. The choice of qualitative approach in this research was based on several assumptions, which are described below.

First of all, the purpose of the research is to discover and identify the disruptive elements within designer-buyer translation process. Quantitative data is unlikely to provide any relevant explanation to the quite abstract research question of this paper. The main reason is that it is not the amount of the elements critically affecting multi-level design-business translation, but rather what they are and how they affect the translation process. Corbetta (2003) supports such position by claiming that “*if the aim is to understand the meanings that subjects attribute to their own actions, the research techniques cannot be anything but qualitative and subjective*” (Corbetta, 2003, p.27).

Second, the type of data needed to answer the RQ could only be gathered by going out to the field of the study (‘naturalistic setting’) and by gaining access to the information held by design practitioners and design buyers as it is otherwise inaccessible (Creswell, 1998, p.17).

Third, qualitative research is considered as being ‘fluid’ and ‘flexible’, and it emphasizes discovering novel findings (Bryman, 1984, p.78). Its unstructured nature and associated lack of specified hypotheses makes it ‘inherently exploratory’ (Bryman, 1984, p.84). Such characteristic corresponds with the intentions of the study - explore the possible problems, identify the potential reasons behind them and to generate a new theory.

Furthermore, knowledge in this paper is best gathered in a qualitative manner, through a ‘process of induction’, “*it is ‘discovered in reality’ by the researcher who approaches it without prejudices or preconceived theories*” (Corbetta, 2003, p.27).
Semi-structured Interviews

Specific data collection method chosen for this research was one-on-one interviews or via telephone. All of them were semi-structured with open-ended questions, based on the Creswell’s (1998) statement, that interviews play a central role in the data collection in the GTM (Creswell, 1998, p.122). Eisenhardt and Graebner (2007) note that “interviews are a highly efficient way to gather rich, empirical data” (Eisenhardt and Graebner, 2007, p.28).

However, they also state that this method can provoke a “knee-jerk reaction that the data are biased” (Eisenhardt and Graebner, 2007, p.28). The challenge of avoiding such biased data has been met by forming a sample of numerous and highly knowledgeable informants who view the designer-buyer translation and the relationship between the two from diverse perspectives (Eisenhardt and Graebner, 2007, p.28). As already mentioned earlier, these informants include actors from design agencies, design-buyer companies, and other relevant participants who have encountered designer-buyer intersect in their professional life (Eisenhardt and Graebner, 2007, p.28).

As proposed by Bryman (2008), in pursuit of rich and detailed answers, the interviewees have been purposefully encouraged to departure from the main topic as it “gives insight what the interviewee sees as relevant and important” as opposed to what the researcher considers to be the problem (Bryman, 2008, p.437). To achieve this goal interview guide has been used, a list of questions and topics which had to be covered (Bryman, 2008, p.438), however, without imposing a strict structure on the conversation. Such method provides a great deal of freedom for the interviewee in how to reply, as well as, open the possibility for more relevant impromptu questions.

3.5 Field Research

All interviews within field research I, II, III and IV were semi-structured and very open to any which have not been outlined in the interview guide. Such choice was made in order to avoid fixation on ‘potential’ problems, and rather identifying the ‘real’ ones.

Each of one-on-one interviews was recorded using a voice recorder, followed by a partial and rough transcription with only essential and most relevant points selected. The transcriptions and recordings in a CD format can be found in the appendix (see p.86).
Field Research I – Exploration and Problem Clarification

The first research stage consists of one telephone interview and three one-on-one interviews. The aim of the stage was to explore the problematic area of design-business intersect with the main focus on design and business mindsets. Shortly, this led to exploration of communication problems caused by the difference between those mindsets. As a result, these topics were the starting point for all interviews at this stage. In order to identify successful and failed cases (as initially planned by using extreme case sampling) one of the main requests for the interviewees was to share their ‘horror’, or failure, stories of design-business collaboration, which potentially would lead to identifying the extreme unsuccessful cases.

Interview I. Mikal Haalstrup

_Sevenber 2013_  
_Telephone interview_

**Position**  
Chief Visionary Officer  
Background – Industrial Design, Architecture and Design, Law

**Company**  
**Designit** (Copenhagen, DK)  
International Strategic Design Consultancy Firm. Specializes in translating user needs into meaningful solutions that create both user and business value. Their aim is to create strong and sustainable business value through strategy and design, thus future oriented in order to create disruptive, future-ready solutions.

**Relevance**  
Closely works with wide range of businesses in contrasting industries. Link to other research participants:  
Brand Strategy for TV2  
Design for several Novo Nordisk products

Interview II. Jesper Christiansen

_Sevenber 2013_  
_one-on-one interview_

**Position**  
Research Manager, Anthropologist  
Background – anthropology, innovation strategy

**Company**  
**MindLab** (Copenhagen, DK)  
Cross-governmental innovation unit connecting citizens and businesses in creating new solutions for society.

**Relevance**  
MindLab’s methodologies are anchored in design-centered thinking, qualitative research and policy development.
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<table>
<thead>
<tr>
<th>Interview III. Laura Winge</th>
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<tr>
<td><strong>October 2013</strong></td>
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<tr>
<td><strong>one-on-one interview</strong></td>
</tr>
</tbody>
</table>
| **position** | Project Manager, Service Designer  
Backgound – Service Design |
| **company** | **MindLab** (Copenhagen, DK)  
Cross-governmental innovation unit connecting citizens and businesses in creating new solutions for society |
| **relevance** | MindLab’s methodologies are anchored in design-centered thinking, qualitative research and policy development |

<table>
<thead>
<tr>
<th>Interview IV. Jørgen Rasmussen</th>
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<tbody>
<tr>
<td><strong>October 2013</strong></td>
</tr>
<tr>
<td><strong>one-on-one interview</strong></td>
</tr>
</tbody>
</table>
| **position** | Lecturer, Industrial Designer  
Background – industrial design |
| **company** | **Aarhus Arkitektskolen** (Aarhus, DK)  
Founded in 1965 in Aarhus, Denmark. Currently with over 800 students |
| **relevance** | Jørgen’s research interests lies within industrial design, strategic design, design processes and methods |

**Table 1. Interviews I-IV**

The first research stage has resulted in clarified and narrower problem area which allowed shifting the research focus to the communication issues between designers and their clients. Furthermore, it enabled the formation of more specific interview guide in order to distil the most relevant information.

**Field Research II – Construct Identification and Primary Pattern Recognition**

The second research stage consists of six one-on-one interviews with four different companies from design and pharmaceutical industries. Based on the results from the previous research stage the interview guide has been revised and adapted in order to gather the most relevant information for answering the research question.
### Interview V. Thomas Sehested

**October 2013**  
**One-on-one interview**

| position          | Senior Project Manager²  
|-------------------|--------------------------  
| Background        | M.A. in History and Mass Media; branding, design project management  
| company           | **e-Types** (Copenhagen, DK)  
|                   | Brand and design agency with strong focus on strategy, digital solutions and brand communication. One of the core values of the company is pushing the boundaries and challenging the client  
| relevance         | Link to other research participants:  
|                   | Leo Pharma re-branding  

### Interview VI. Emil Hartvig

**October 2013**  
**One-on-one interview**

| position          | Senior Designer  
|-------------------|-----------------  
| Background        | Visual Communication, Identity Design, Photography, Conceptual Communication  
| company           | **e-Types** (Copenhagen, DK)  
|                   | Brand and design agency with strong focus on strategy, digital solutions and brand communication. One of the core values of the company is pushing the boundaries and challenging the client  
| relevance         | Link to other research participants:  
|                   | Leo Pharma re-branding  

### Interview VII. Marie Andersen

**October 2013**  
**One-on-one interview**

| position          | Senior Global Branding Manager³  
|-------------------|---------------------------------  
| Background        | Corporate and product branding, communication, project management  
| company           | **Leo Pharma** (Copenhagen, DK)  
|                   | Research-based specialty pharmaceutical company with the focus on dermatology and thrombosis areas  
| relevance         | Link to other research participants:  
|                   | Leo Pharma re-branding in collaboration with e-Types  

² *Note:* at the time of Field Research II.  
³ *Note:* at the time of Field Research II
Interview VIII. Lars Larson

November 2013
one-on-one interview
position
Partner and Senior Project Manager
Background – Mechanical Engineering, Design, Project Management
company
Kontrapunkt (Copenhagen, DK)
Strategic design and brand agency
relevance
Experience in designing for wide range of companies from different industries

Interview IX. Nicoline Klareskov

November 2013
one-on-one interview
position
Partner and Senior Project Manager
Background – Economics and Business Administration, Design and Communication Management, Negotiation and Decision-making Strategies
company
Kontrapunkt (Copenhagen, DK)
Strategic design and brand agency
relevance
Experience in designing for wide range of companies from different industries. Nicoline leads a team of project managers, has experience in managing large corporate identity and branding projects, as well as dealing with internal and external stakeholder management issues

Interview X. Louise Engel Balling

November 2013
one-on-one interview
position
R&D Concept Developer
Background – Industrial Design
company
Novo Nordisk (Copenhagen, DK)
A global healthcare company, the largest manufacturer of diabetes care products
relevance
Novo Nordisk has a strong design culture and is known as an experiences design-buyer. The company has a long history of collaborations with external as well as internal designers, have established their own design facilitation unit

Table 2. Interviews V-X

Open and Axial Coding

The second field research stage appeared to be critical in setting further direction of the study. As a result, new constructs emerged based on recurring themes such as: the knowledge and communication
gap between middle and top management; the role of design facilitator; and the level of willingness to risk. In addition, some of the previous have been confirmed and discussed in more detail during the second round of the interviews, for example, the difference between design and business mindsets and design versus business language remained two of the most often mentioned topics. By applying an ‘Open Coding’ method proposed by Corbin and Strauss (1990) in their GTM (Creswell, 1998, p.150), these most popular themes have been grouped together in order to identify patterns, similarities and differences (Goulding, 2002, p.110).

As a result of the open coding method, the very first sketch of the new theory has been drawn (Figure 11). Open coding includes developing categories of information (Creswell, 1998, p.150) which in this case allowed the definition of four main actors within design project – Top Decision Makers, Facilitators, Creative Director and Designers - and six interaction levels on which these actors connect. Furthermore, each of the actors appeared to have certain focus areas which have an effect on the priorities of the actors within design project. “The Extraction of early codes provided a provisional framework of concepts” (Goulding, 2002, p.111) to be tested in the last two field research stages, presented later in the chapter.

![Figure 8. Actors and their interaction levels.](image)

Note: Although this stage has shown the difficulty in finding specific extreme cases and was changed into choosing knowledgeable participants from different industries instead, the question of ‘horror’ stories within design-business intersect continued throughout the whole research as it appeared to be a valuable tool for problem identification. In such way identified problems consequently resulted on the list of final constructs within the research data analysis.
Field Research III – Construct Confirmation Using Different Industry

The purpose of the Field Research III was to test if the same major themes would appear in companies from other industries. As a result, one design agency of a different type – multimedia/digital design – was chosen, together with one company outside pharmaceutical industry - entertainment industry - and which has used the agency’s services.

Interview XI. Daniel Gjøde

April 2014
One-on-one interview

| position          | Partner and Creative Director
| company          | Stupid Studio (Copenhagen, DK)
| Background – Science and Electrical Engineering, Motion Graphics Design
| relevance        | Link to other research participants:
|                  | Brand Identity and Architecture for TV2 in collaboration with other design agencies and internal TV2 design facilitation unit

Interview XII. Jesper Jul Mørch

April 2014
One-on-one interview

| position          | Head of Design - Responsible for the design strategy of TV 2, design management and development and for building up a design community within the organization
| company          | TV2 (Copenhagen, DK)
| Background – Communication Design, Branding, Corporate Identity, Project Management, Photography
| relevance        | Link to other research participants:
|                  | Collaboration with Designit and Stupid Studio on Brand Strategy for TV2

Table 3. Interviews XI-XII

During this stage most of recurring codes have been clarified and supported with new data. Almost no difference has been noticed in regards of the themes when studying other industries than those during the first two field research stages. Re-applied open and axial coding led to the development of a more explicit graphical model, a second sketch of the final theoretical model, showing where in design project these themes arise (Figure 12).
The final field research stage aimed to confirm the findings of all previous stages. In order to ensure the reflexivity of the constructs and their interrelation it was necessary to go back to previously interviewed informants.

**Field Interview IV – Final Construct and Pattern Confirmation**

The final field research stage aimed to confirm the findings of all previous stages. In order to ensure the reflexivity of the constructs and their interrelation it was necessary to go back to previously interviewed informants.
The findings of the Field Research IV developed into the definite version of the new theoretical model which will be presented in the following chapter of this paper.

**Data Analysis**

According to Esienhardt (1989), one of the main features of TBCS is “the frequent overlap of data analysis with data collection” (Eisenhardt, 1989, p.538). Glaser and Strauss (1967, p.102) suggests “The Constant Comparative Method” of joint coding and analysis, which is to be used together with theoretical sampling. The downside of this method is that, due to the skills and sensitivities of the
analyst, it is not designed to guarantee the same results by two different analysts, even though they have been derived from the same data (Glaser and Strauss, 1967, p.103).

Analyzing data is “both the most difficult and the least codified part” of the research process (Eisenhardt, 1989, p.539). Due to the high number of cases and immense volume of data retrieved from the interviews in this research the decision has been made to dispose of within-case analysis proposed by Eisenhardt (1989) as one of the steps of TBCS. In consideration of the previous, single elements of GTM, namely, coding and categorization, was of more relevance in this particular case. This was the second part of the research to combined single elements, specifically, data analysis methods, of the TBCS with the ones of the GTM.

3.6 Interim Conclusion

Based on four elements of social research distinguished by Crotty (1998, p.4) and presented in the introductory part to this chapter, this research design was built on the following cornerstones:

- There is no objective or subjective truth. Truth is constructed during the interaction between the object and the subject, in other words, people and their environment.
- Reality is not being observed but rather interpreted, which is the way the meaning of the objects of the world is created.
- Since environment, or culture, tends to have a huge impact on those interpretations, during research it is advised to lay aside much of these interpretations and enter the field with clean slate.
- ‘Epistemological fallibalisn’ needs to be kept in mind as all knowledge is incomplete and lacks comprehensiveness. Considering this, research findings should be assessed carefully and should not be generalized to all population.

CHAPTER 4 – Research Results

Following the research data collection and analysis described in Chapter 3, this part of the paper will represent the critical research findings as a result of the previous application of coding and categorization. The results will be depicted in a theoretical model acting as a backbone of this chapter, and which aims to answer the research question:
Which elements of the designer-buyer collaboration critically affect multi-level translation within design project?

There will be two models introduced which will represent path to failure and path to success. The purpose of the division is to reflect in more detail the elements that negatively or positively affect the design-business communication/translation process.

The first model – ‘Lost in Translation’ – aims to represent the disruptive elements and explain how they inhibit the communication flow.

The second model – ‘Enabling Fluent Conversation’ – is an Implications and Suggestions part of the paper, and reflects the ways to improve communication, specifically, translation from business to design, and vice versa, and serves as a propositional model for the translation process.

Based on the research data the model was constructed to help an easy apprehension of the overall picture of the process, and answer the following questions: who are the actors; what type of information is being created and passed on by each actor; what directions does the information/message flow; when, where and how is it being lost; and finally, how can it be improved? Consequently, the combination of the answers will address the main research question of the study.

To begin with, the actors within the translation process will be presented in order to build an understanding of the competences, knowledge and mindsets involved in the process, and the ways they play together creating translation errors. Such information of the actors is empirical data-based supplement to the theory of mindsets discussed in Chapter 2.

The rest of the chapter will be divided into two sections structured according to the three main building blocks of the model which are: Design Buyer, Translation Zone and Design Seller. To sum up all of the findings the chapter ends with interim conclusion.

4.1 Actors in Multi-level Translation

As already stated before, Field research II enabled the identification of the main actors and their interaction levels within design project. The findings have been reflected in Figure 13 which represents the two collaborating parties: Design Seller (DS) and Design Buyer (DB). Throughout the paper independent design agencies are being referred to as DS while pharmaceutical and media companies act as DB. Each of them contains two to three types of actors involved in design project.
This section together with theoretical representation of the mindsets in Chapter 1 will create full understanding of the actors’ profiles.

4.1.1 Design Buyer

Throughout this paper DB refers to a non-design company paying for services of an external design agency or a freelance designer, therefore, will be considered to represent the business side of the collaboration.

The research findings show that DB, as the whole company, can be either skilled or unskilled. Large companies such as Novo Nordisk usually fall under the skilled DB category: “Big companies are much better in understanding and buying design. This is a problem in Denmark since the majority of Danish companies are small- or medium-sized” (Jørgen, October 2013). Very often they have internal designers or design units which supplies design competencies within the firm. These internal competencies help to ensure the highest value for the money, as well as, lower the risk for acquiring an irrelevant design, and for the company’s needs not being met. However, they still rely on collaborations with external design agencies for several reasons: “The reason for using services of external designers for aesthetic design in our company is because we do not have these competences internally, or even if we do have them sometimes, they lack time” (Louise, November 2013).

Small and unexperienced companies are more likely to be labeled as an unskilled DB, as usually they do not have resources for acquiring and retaining internal design competencies. On one hand, skilled DB is preferred by the majority of design agencies as it facilitates design process and brings in novel ideas. On the other hand, unlike the large, well-established companies, small firms are often more willing to take risks and experiment, which is an ultimate goal for most designers, thus makes such collaboration of a demand too.

Further in this section, several types of actors under DB category will be presented and described.

**Top Decision Makers**

Decision making power is one of the main attributes of top decision makers (TDM), a category which typically includes senior management, CEO and board of directors. They have control over company’s future which means that they can either encourage or block certain design tendencies and ideas within the company. Fortunately, in many cases they are able to observe the big picture, recognize underlying opportunities that arise with innovation, and encourage it. For this reason, according to the research
data, many TDMs have a higher level of risk-seeking than the rest of the company: “Very often top managers are much bolder and much more ambitious than the middle management” (Thomas, October 2013). They tend to be visionary, future and brand-oriented rather than market-oriented, and concerned with long-term goals. According to Urde (1999), brand orientation is more sophisticated and more complicated than market orientation. “To be brand oriented is market orientation ‘plus’” (Urde, 1999, p.118).

The categorization process of the data analysis has helped to indicate and summarize the most prevalent characteristics of TDM which are as follows: Lack of time allocated to design-related issues; Limited involvement in design process due to the busy agenda and unwillingness to have a direct contact with DS; Lack of design knowledge which affects their ability to understand and communicate design ideas; already mentioned Brand orientation and Decision making power.

**Middle Management and Design Facilitator**

According to Mintzberg (1979), middle management (MM) consists of managers “who occupy positions in the organizational hierarchy which place them below senior management, and above those who perform the operations”. There are two types of actors distinguished during this research who represent this category – middle managers (MM) and design facilitators (DF).

For the sake of clarity and simplicity, MM and DF here are joined in one category of middle management (MM). Although DF is concerned with the operational side of the project, “enabling, facilitating and translating” (Louise, April 2014), more than MM is, they both bridge the gap between TDM and design agency, and that is the core of their role.

MM encounters several types of challenges in everyday design management which define their behavior and priorities within design project.

First of all, large part of pressure comes from having to connect internal stakeholders with external designers, and, at the same time, achieve the best possible design solution. “The challenge in communicating with designers is having this many internal stakeholders, and that the hierarchy of the company does not allow designers direct access to these stakeholders” (Louise, November 2013). “The projects that fail, fail because of lack of stakeholder management” (Marie, October 2013). Some research participants have expressed that it is also “difficult for designers to figure out whom are the stakeholders, the target decision makers, especially when their opinions contradict” (Daniel, April 2014).
Second, they must make sure the design meets a number of regulatory constraints. This is a big issue in pharmaceutical industry, since medical designs generally have more health and safety regulations to comply with. Furthermore, they tend to be mistake-sensitive and have to be highly accurate. Consequently, middle managements’ focus tends to be more on the needs of the end user rather than the company vision, brand or identity.

Third, time and budget has always been a topic of discussions and disagreements. The role of MM in this situation can be defined as finding the middle ground between the requirements of TDM and the needs of designers. The challenge stems from the fact that the two are usually very contradictory.

Considering the previous, it does not come as a surprise that MM often end up more risk-averse than TDM. “Problem with middle management is that them taking risks and failing means risking their job. Although personality is a strong factor in determining whether a middle manager is willing to take risks” (Daniel, April 2014). Even if the urge to innovate is high due to DF design background, they still tend to weigh risk against benefits in the first place.

Despite these limitations, research has shown that MM and DF are most of the time the ones to ensure a functioning communication between DS and DB.

4.1.2 Design Seller

In this paper DS refers to independent design agencies. Almost all actors under this category come from design background with rare exceptions where project managers might have business education instead, however, supplemented with work experience within design field.

As already discussed in theoretical framework, DS is of a design mindset and exhibit risk-seeking attitude as a result of design thinking and design nature. According to literature review in Chapter 2 and the research data, such characteristics strongly contrast the ones of DB, and are considered as one of the root causes for design-business translation errors.

Creative Director and Project Manager

Creative director (CD) and project manager (PM) is the link between design agency, more specifically, designers, and the client’s company. Their profile is an interesting mix of design and business thinking, as a result of their varied educational background and experience. Even though their role is similar to
the one of MM, they tend to be more design oriented than MM. At the same time, they are concerned with the business aspects of design project more than designers would ever be.

Although, due to time and space limitations CD and PM in this paper are grouped in one category, there are slight differences in their roles and attitudes towards design process as well. Very similarly to MM, these actors are also being torn between two major focus areas - client base expansion and retention, as well as, with various financial, and bureaucratic responsibilities which make risk elimination a priority; at the same time, according to the research data, they act as a guardian for creativity by protecting creative process from bureaucracy and internal and external politics, in order to sustain high creativity level in the agency, which is the core competence of design companies. Resulting from the previous, CD is more of a creative guard while PM is more concerned with revenue and clientele.

In reality, every single CD/PM differs significantly from each other. Their priorities and management style is influenced by the nature and values of the agency, as well as, personal characteristics, educational and work background. According to research data, personal characteristics of the actor, more than business or design orientation, is a determinant for a fluent translation process.

The merger of CD and PM in this paper is based on and justified by two main functions that both of the actors perform: bridge between design and business, and creativity protection and cultivation. Therefore, “having designer with business approach makes it easier to create the link between designers and clients. Such position would act as a translator between designish and businish” (Jørgen, October 2013).

Designers

The purpose of this section is to expand the description of design mindset and designer’s role presented in Chapter 2, by revealing the main challenges faced by designers within regular design-business collaboration.

Despite the expanding applicability of design and increasing versatility of designers’ skills, design role still faces the issue of misconception. The problem is the client’s stagnant perception of design as being primarily concerned with aesthetics or function. Such perception is outdated and appears to have several consequences.

First and foremost, in many cases, designers are not included in the strategic part of product development, thus the potential of design thinking is not being utilized, although research data explains...
that “it takes a designer mind to distinguish how all parts of business connect, and how the message becomes clear, and every product and service reflects the value proposition of the company” (Jørgen, October 2013).

Second, by excluding designers from the process too early as not relevant anymore, the implication of the design is more likely to experience a failure. Changes made to design without designer’s approval can make a big difference to the final result, as some designs ten to be highly sensitive to even smallest adjustments, and “not all non-designers are able to comprehend the importance of the visual fit” (Rasmussen, October 2013).

Furthermore, designers are likely to experience conflicts with CD/PM due to their incomplete design process understanding. The conflict may be sharpened by the pressure from the client due to time, budget or design ideas. The contracting perception of design process can be illustrated by the following statements of PM and designers within the same company:

PM: “Sometimes the lack of speed in design process strikes me. For example, the project manager sees the solution and for designer it takes a week to visually get there” (Thomas, October 2013).

Designer: “Everything is designed manually and computer is just a tool to process things. Clients expect everything to be fast because of this tool, but there is no shortcut, everything has to be designed manually” (Emil, October 2013).

Research data supports the theoretical claim in Chapter 2 which describes designers as staying open to a question and problem re-framing until the very end, and which is the essence of design thinking. “Until you know that everything fits together in the right way, it would be stupid to make the final decisions in any of the process stages, thus close all the other possibilities” (Jørgen, October 2013). Such approach is hardly understood by non-designers and even less acceptable as it prolongs the process and might cost more financially.

One more challenge comes from designers’ reliance on imagination and imaginative language to express design ideas instead of using simple terms and tangible artifacts. However, “you can’t expect people to have the same kind of imagination that you have inside your head” (Emil, October 2013).

With the clear picture of the actors involved in the design-business translation process the main research findings can be presented in the form of theoretical framework.
4.2 Data Analysis: ‘Lost In Translation’

The core idea behind the model is to identify and reflect the types of errors and disruptive elements causing those errors within communication and translation process in a design-business intersect.

Collaboration between DS and DB is driven by one seemingly common goal - the best possible design solution. However, reality is much more complicated. Together with the fact that what the parties perceive as the best possible solution is vastly different, there are also other elements which disrupt the translation process between the two and, consequently, harm the final outcome.

Three main constructing blocks can be depicted in the model: Design Buyer, Translation Zone and Design Seller. In design project there is a large amount of information of varying importance travelling from one
end to the other back and forth. Depending on what information manages to go through, what is being blocked along the way or distorted during translation process, design project turns out either error free or disrupted.

The fading arrows represent strength, clarity and level of detail in the messages transmitted. The type of information in those messages has been narrowed down to three elements by the use of the critical disruption criteria.

The section begins with the representation of the central part of the model – ‘Translation Zone’, representing the critically disruptive elements. This will be followed by the revelation of the errors within design-business translation occurring due to those disruptions in the translation zone, as well as, on one or the other side of it.

4.2.3 Translation Zone

The following section is the essential part of the model which depicts the meeting point of DS and DB. It is the area of a design project where most misunderstandings take place and where they potentially could be corrected and resolved. This part of the thesis aims at answering the research question:

*Which elements of the designer-buyer collaboration critically affect multi-level translation within design project?*

In the center of the model the interacting two parties – DS and DB - come into collision. CD and MM act as the representatives for their companies and translators between them, thus the success and fluency of translation between design and business languages depend on the competencies and personal characteristics of CD and MM.

The clash between design and business mindsets often results in communication errors, and CD and MM are brought in for purpose of facilitating communication and design process in general. However, there are elements critically interrupting the flow of information and the translation process and resulting in the errors discussed in the previous section. These elements will be represented below and aim at answering the research question.

**Knowledge Gap**

According to research data, Translation Zone is a hostile territory due to DB and DS inability to fully accept each other’s qualities and competences. “*Clients are not fully aware of what designers do, and*
designers are not really aware of what economics are. This is the reason for their bad communication.” (Jørgen, October 2013).

The knowledge gap has been mentioned as one of the main disruptors in the design conversation, as well as, a hindrance for giving feedback and communicating design reasoning. Based on the research data, several types of knowledge gaps within design-business translation process have been identified.

Professional Knowledge

Professional design and business knowledge is provided by design and business schools, and supplemented by experience in the respective fields. Not only this type of knowledge amounts for a large part of the mindsets, it is also a reason behind several design-business translation issues.

Language Gap. Resulting from the professional knowledge both design and business languages are full of specific terms and expressions that are difficult for the opposite party to comprehend.

In addition, the same concepts are understood in different ways by different actors. For example, “The term ‘effectiveness’ can have a lot of meanings, in one company it means one thing, and in other it has a different meaning, and this can be a big problem.” (Lars, November 2013).

“Revolution’ in the minds of top management means ‘little’, in the minds of middle management it means ‘more’, and designers can take that literally. Therefore, designers have to take this difference into consideration and be careful with drastic ideas.” (Jesper, October 2013).

Subjectivity. Although TDM have the decision making power and business knowledge, the lack of basic design knowledge and experience means that their decisions are often based on first impressions and subjective opinion. “It is true that the upper management would judge the design sketch on its immediate appearance. Therefore, lacking design knowledge they might overlook the potential.” (Louise, October 2013).

Often designers make a mistake of assuming that clients know as much as they do themselves in regards of design concepts, language and design thinking. Such perception leads to incomplete design argumentation, thus miscommunication and misunderstandings.
Design Meaning

As already discussed, design reasoning plays an important role in communication between DB and DS. Although the creator of the design would express the real meaning of the design more accurately, not every designer is equipped to deliver it in a business language. Consequently, CD is brought into the process to facilitate the translation from design visual to design verbal to business languages. Nonetheless, as expressed by one of the PM, “project manager can present only what he understands, however, there might be more to it than his interpretation.” (Thomas, October 2013). Such stance has been confirmed by DF: “Creative director is not able to deliver the idea behind the design unless he was involved in the design process together with designers” (Louise, May 2014).

As a result, CD and designers face a challenge of communicating the real meaning behind a certain design internally, before transmitting it to DB as accurately as possible. In addition, CD involvement in design process and their ability to reason design by filling in the gaps left by designers is of high importance in achieving clear message transmission.

Company Knowledge

According to a number of interviewees from both DB and DS sides, the company knowledge gap has a negative effect on design process. “When you start the project you have to understand what kind of organization you will be dealing with, how decisions are being made there and how it works internally.” (Lars, November 2013).

The problem arises not only when designers lack the knowledge, but also when MM do not fully know their own company: “These people lacked the knowledge about the company’s brand, they did not know the history, and therefore weren’t able to guide the designers in the right direction, on the contrary, took them to the wrong one.” (Daniel, April 2014).

It has been expressed by MM that designers work upon a very limited knowledge about the company and its industry (Louise, May 2014). “When you come from the outside it is difficult to see all the obstacles that are hidden in the organization and which hamper some design solutions. Such knowledge is hard for external designers to grasp and thus to understand the reasons behind clients resistance towards certain design ideas.” (Jesper, May 2014). However, she argues that despite the fact that designers get to see only the tip of the iceberg, “what they’ve got should be enough” (Louise, May 2014).
Industry Knowledge

There is enormous amount of knowledge within different industries, especially the pharmaceutical one. It consists of highly technical information which puts designers in a rather challenging position. Such knowledge is not easy or quick to obtain, yet it is highly important for the whole design process. “One could argue for the benefits of including design competencies early in process, however, lacking the industry knowledge they would often come with ideas that are, in client’s opinion, immature or hardly feasible due to technical or regulatory issues.” (Louise, October 2013). Nonetheless, according to research data, designers’ holistic, user-centered approach could be beneficial in shaping new ideas. Moreover, as expressed by several research participants, even though clients are experts in their own fields, the expertise is not enough for the development of innovative design: “If we use only client’s knowledge, we will not move beyond the client.” (Jørgen, October 2013).

In the cases where internal designers are present, it has been suggested to merge their knowledge with the one of the external designers as “internal designers hold a very specific knowledge on how design works in that particular field” (Jesper, May 2014), and have a design mindset at the same time.

Stakeholder Management and Internal Politics (STM)

Several research participants have stressed the importance of internal and external stakeholder management in a design project which has to be undertaken by MM and PM/CD.

Middle Management

Internal stakeholder management carried out by MM has been named as a determinant for either a success or a failure of the design implementation: “Projects that fail, fail because of lack of stakeholder management.” (Marie, November 2013). Therefore, horizontal communication within the company is as important as the vertical one (bottom-up or top-down).

Decisions made by TDM have a huge impact on the final outcome of the design project, and it is a goal of MM and PM/CD to influence and direct them the right way. This includes also the identification and prioritization of those stakeholders: “Who and how decide what design should be like” (Louise, October 2013). This can be quite difficult, especially in large companies with complex structure: “In these companies everyone is responsible, and no one is responsible at the same time” (Daniel, April 2014).
Getting the approval, ‘the mandate’, from the TDM in the beginning of the project is very important for the fluency of the whole process. Later, “It is very much about balancing between people and different perceptions.” (Jesper, April 2014). “If you don’t get the engagement and commitment from the top management you can forget about the design.” (Jesper, April 2014). “An open gate to creativity is the full backing from top management – “just do it as good as you can.” (Lars, November 2013).

Stakeholder management leads to the issue of internal politics. Managing design in a large company is very much about choosing the right people to target in the most appropriate ways and times. However, these “internal political games can hinder and even block very potential design ideas.” (Jesper, April 2014). One of the most hindering factors is managers who are not willing to work within a system for a better, more congruent design. The problem stems from the holistic design nature which views design as a part of the whole system and a result of collaborative effort.

In general, stakeholder management is a lot about establishing a dialogue with stakeholders. It is slightly easier done within Design Buyer’s company, then between that company and external design agency, which is presented in the following section.

**Project Manager/Creative Director**

When it comes to stakeholder management on the DS side, PM/CD faces several challenges. Most of their efforts are directed to managing client relationship and their expectations. In order to distinguish the best STM techniques CD has to understand the inner workings of the client’s company and identify the multiple stakeholders of MM. This is a challenge particularly in large companies with high number of stakeholders, their multiple and overlapping responsibilities, and contradicting opinions. “Some of the responsibilities overlap and it is difficult to identify the real decision makers. Which ones should you listen to when you cannot speak to the top management? For most designers whatever lies above the middle management is much like “the cloud of the unknown.” (Daniel, April 2014).

On the other hand, PM/CD might also overdo the STM by over-selling their services to an already acquired client. Such practice often has the opposite effect of what PM/CD would expect, and tends to lose its power in a long-term relationship. In addition, in some cases, this appears to have a negative effect on TDM willingness to engage in a direct conversation with design agency.
Detachment between Actors

Detachment and lack of communication between the actors has been mentioned as one of the most disruptive elements within the design-business translation. As a result of the distance, the message has to travel longer distance and go through multiple translation stages. Consequently, it collects more errors along the way and loses its real meaning and accuracy due to miscommunication and misinterpretation.

As mentioned earlier, due to the TDM lack of design knowledge and detachment between from MM, the latter has to make assumptions and interpretations of TDM preferences and expectation. This is needed in order to make day-to-day decisions possible on the lower level. In most cases, MM would make safe assumptions, as failure in meeting TDM expectations means risking the position. MM interpretations of TDM preferences are based on their design and company knowledge and experience, also on the amount of interaction with TDM, the design strategy, the number of stakeholders to be considered, and the amount of regulations to conform to. From the perspective of DS, underestimation or overestimation of TDMs preferences affect design process as incorrect estimations can cause time and money loss.

The detachment between MM and designers is mostly due to the hierarchy of design agency. “If you are not allowed to talk to individual designer, sometimes you do not even know who the designer is, then your message can get lost, be misinterpreted” (Louise, November 2013). However, “What the client says to designer is very important. If designer gets briefed by project manager who didn’t understand the client in the first place, the designer might come up with a wrong solution” (Thomas, October 2013).

There might be challenges in communication within design agency itself. The main challenge is in making sure that all the people involved in the project have the necessary information. Important pieces might get lost as “it’s not the same people working on different stages because of their varying expertise” (Nicoline, November 2013).

One of the greatest barriers for PM/CD is the inaccessibility of TDM. “The challenge in communication with designers is having this many stakeholders in the company, as well as, the hierarchy of our organization being so complex that it would not allow designers the direct access to these stakeholders” (Louise, October 2013). Consequently, the flow of design reasoning and feedback from TDM gets interrupted. This is a problem mostly in large organizations where TDM are protected by “layers of
middle management” (Daniel, April 2014). In such cases design agency has to rely on MM, “trust that the important information will reach the right ears” (Lars, November 2013).

Many PM/CD recognize the damage design project politics can do creative process, therefore, an effort is put in protecting designers from the unnecessary noise. “I never impose hierarchy for the sake of hierarchy, but I do it to protect the designers and creativity.” (Daniel, April 2014). However, with the previous comes the risk of designers’ overprotection and isolation from the design project.

**Ambiguous Design Strategy**

A clear and up to date design strategy is critical for the success of a design project. “It is important to have an agreement with decision makers on the purpose of the design. For example, is it meant to stand out or just to accommodate the use of the drug? In my experience, when there is no or vague agreement it is hard for the middle management to make decisions which would satisfy the top management” (Louise, October 2013).

However, often MM face the issue of having to make day-to-day decisions based on ambiguous, outdated or rigid design strategy. In cases where MM is not good at interpreting verbally expressed TDM preferences, the absence of clear design guidelines can hinder the whole design process and have a negative impact on the final result. “For instance, if designers spend a lot of time working on a concept that has not been agreed upon between middle and top managers, it is a waste of time and money” (Lars, November 2013).

Outdated, as well as, ambiguous design strategy is a hindrance within a design project: “First, the focus of decision makers was on consistency of the brand, but now, because of the rising design awareness within the industry, they actually want innovative solutions. However, having no contact with decision makers, the issue cannot be discussed and the existing design manual becomes outdated, but we still have to guide designers according to it” (Louise, April 2014).

**Risk Aversion Level**

The varying levels of willingness to risk between the actors are able to critically affect the whole design process. The most noticeable difference is between TDM and MM, and MM and PM/CD. In the case of MM and CD, the latter tends to be more risk-loving due to the design nature which they represent. “Design agencies are always willing to take huge risks, but it is in their nature and it’s the way it should be” (Jesper, April 2014).
The problem arises, when on the outside both MM and CD seem to have a similar willingness to risk level when in reality they are different. This is a result of differ mindsets, languages and perception of certain concepts. “For example, when client says he wants to be completely new, different, crazy and innovative, that may only mean “I want to look like all the cool guys in my kind of businesses” (Emil, October 2013). For this reason, designers have to be very good at reading between the lines in order to extract the real meaning of client’s words.

Nevertheless, more challenging is the difference of those levels between TDM and MM, and failure in aligning them can have a strong negative impact on all actors within the project. When interpreting the preferences of TDM, MM tends to come up with either overestimation or underestimation, depending on their own background, decision-making power and personal characteristics. “In their interpretation of senior management’s opinion, they will think that the management is perhaps 80% up for the design, whereas in reality they can actually be 100% or even 120%” (Thomas, October 2013).

A number of research participants have claimed that quite often TDM are much more bold and ambitious than MM, as they have the power over company’s strategic decisions. Even though some of the participants had contradicting opinions, they did agree that risky ideas are easier accepted by TDM than by MM, as they are aware of the importance of innovation to the long-term success of the company: “CEO and the board know what they want in ten years, whereas the middle managers know what they want tomorrow” (Thomas, October 2013).

Another reason for these differences in MM and TDM preferences, as mentioned earlier, is MM concentration on risk elimination from the project. “It is important for middle manager to take out risks from design projects, as they already carried a lot of risks due to mechanics - the medical devices are very challenging mechanically, even though they look simple” (Louise, October 2013). MM often has to compare and weight risk and benefits of a certain decision.

Lastly, the two actors have different goals where MM has to make sure the project is “validated and accepted by various state institutions and production”, whereas TDM might choose the project on its ability to “communicate brand values” (Louise, October 2013).

**Opposing Focus Areas**

Some of the most common contradictions in regards of the actors’ focus areas, influencing their choices, are as follows:
**Strategic vs. Operational**

The research has revealed that the lower in the hierarchy of the company the more operational focus there is. Lower level managers are mainly concerned with actual user needs, whereas TDM put emphasis on such areas as branding and strategy. “*The top management’s concern is more on drug development and not on device, so there is less attention to device department and, consequently, the device design*” (Louise, October 2013).

**Financial vs. Creative**

The ultimate goal of most of design agencies is to leave their own creative footprint. However, “*sometimes they are too eager to stand out and are too self-centered. But it is more important to listen to the client and come up with a solution matching their brand*” (Jesper, April 2014). In such situation, too much of creative focus can distract design agency from meeting client’s expectations.

The contracting focus areas can be found within a design agency as well. “Some people in our company are hired to get the money, which then creates a lot of discussions and frustration within the agency. People who get the money might choose the project because it has a good budget. On the other hand, designer might say that this is not really a design project.” (Emil, October 2013).

It has been argued that very often the financial, or managerial, focus overrules the creative one: “*Project management takes over because it is more urgent, requires immediate attention. Creative part then suffers.*” (Daniel, April 2014). This situation brings up the necessity for creativity protection, which is, after all, the driving force of the whole project.

All of the above mentioned critically disruptive elements – Knowledge Gap, Stakeholder Management and Internal Politics, Detachment between Actors, Ambiguous Design Strategy, Risk Aversion Level, and Opposing Focus Areas – lead to various translation errors which will occur as the communication flows from designer to TDM and back. The following section will discuss those errors and how they affect the design process.

4.2.2 From Designer to TDM

**Distorted Design Reasoning**

Based on the research data, vague, distorted or even lost design reasoning is considered as one of the most inhibiting translation errors within design project. “*Top management often says that design*
agencies are bad at explaining why design looks as it does, why this one and not the other one was chosen” (Louise, May 2014). Without knowing reasons behind the choices made design may appear irrelevant and out of context. Such judgment condemns what potentially could be a brilliant design solution if only appreciated for its real meanings.

Designers face a number of challenges when expressing design reasoning. First of all, designer’s ability to verbalize visual and highly graphic ideas is often limited due to characteristics of designer’s mindset and design language. As a consequence, inaccuracy and information loss is being created.

Secondly, design reasoning might be misinterpreted and based on personal impressions as a result of unclear or insufficient communication between PM/CD and designers. Designer’s inability to verbally make arguments and CD’s tendency to overestimate owns ability to reason the design when lacking design knowledge may end up in adding even more translation errors. However, PM/CD’s knowledge of business language and mindset in general, allows them to fill in the explanatory gaps left by designers.

When entering the Translation Zone PM/CD and MM in their conversation face six critically disruptive elements which often further widen the gap between the real meaning of the reasoning and the one that has been transmitted.

In most cases, design argumentation that eventually reaches DB side contains a massive information loss, as well as, misinterpreted and rephrased reasoning. The gap between the real meaning of the reasoning and the transmitted one continues to expand as MM tends to purposefully adjust it in order to meet the requirements and expectations of TDM.

It is the most noticeable design-business translation error as it can shift the direction of the design in an opposite way based on how well the current solution is being argued for, and how well the argument have been translated from visual to design-verbal to business-verbal languages by designers, PM/CD and MM altogether. Therefore, it is extremely important to make sure, by clear and sound reasoning, that the direction the design is being shifted is the most appropriate one.

**Discarded Innovative Ideas**

Designer’s ability to visualize future and create what does not exist yet by spending a large amount of time on seemingly useless exploration, is one of the defining characteristics of design thinking. However, DB is often unable to appreciate complex and time consuming design process which is rather seen as waste of time and, most importantly, money.
“Our experience is that designers often come up with irrelevant ideas, which have already been considered and rejected for valid reasons – unrealistic ideas. The challenge is to ensure that only bad ideas get filtered out and only good ones come through” (Louise, May 2014). Therefore, in order to avoid over-filtering and to protect sensitive creative process, most of highly innovative and visionary ideas are never revealed to the client.

Despite the reasons for eliminating irrelevant design ideas, MM admits that “challenging unrealistic innovative ideas might inspire to rethink the design strategy of the company. Could we maybe challenge the regulatory constraints and production?” (Louise, May 2014).

**Unrevealed Design in Progress**

Similarly to innovative ideas, design sketches and other work in progress rarely reaches DB. The level of protection depends on the culture of the agency – some are more willing to show it to the client than others. However, in general, designers are resistance in revealing unfinished work. They explain that due to insufficient design knowledge DB may perceive an advanced design sketch as a nearly finished project, which may be far from ready for implementation. This might result in less designer’s hours sold and, most importantly, not fully realized design idea.

On the other hand, the main reason for MM desire to see design in progress is previously mentioned high priority for risk elimination. By being constantly updated on the design idea MM gains more control over the final outcome. Only they have to realize that such close proximity to design process may disrupt the flow of ideas and creativity by putting too many requirements, pressure and unnecessary constraints on designers. As noted by Louise (Louise, November 2013), a professional MM have an understanding of and respect for a complex design process, and sometimes, for the pursuit of the best possible outcome, joins in the protection of creativity by even lowering the pressure. The part of success of the design process lies in the balancing risk elimination and creative freedom, which can be achieved only by design-conscious MM and open designers and CD.

**4.2.2 From TDM to Designer**

**Distorted or Lost TDM Feedback**

TDM’s feedback has been mentioned in a number of interviews as a determining factor for designer’s ability to meet client’s expectations since their words weight the most. Whether it is good or not, TDM’s
opinion has an immense impact on the design outcome and its relevance. Without knowing clear and correctly translated TDM feedback designers may find it hard to match the expectations of the client.

The problem consists of several aspects:

- TDM’s inability to translate their reflections on design in a professional language due to the non-design background which leads to the second aspect;
- Lack of design knowledge means that some of the feedback may come out overly subjective and irrelevant to the situation;
- When MM is trying to make up for TDM’s lack of design knowledge and design language they may rephrase the feedback and distort the message. Just as in design reasoning, this may turn into a ‘Whispering Game’ – the more actors get to translate, interpret and transfer the message, the more disrupted it comes out on the other end of the line.

4.3 Interim Conclusion

As seen from ‘The Translation Zone’, the critical role in design-business translation is played by MM and PM/CD who determine the success of the design project. As expressed by several research participants, much of the outcome depends on the personal qualities and professional competences of the two. However, their efforts in facilitating the communication between DS and DB get disturbed by the following six elements which answer the research question:

- Knowledge Gap
- Stakeholder Management and Internal Politics
- Detachment between Actors
- Ambiguous Design Strategy
- Risk Aversion Level
- Opposing Focus Areas

Although design and business mindsets have not been brought onto the list of disruptive elements, it can be considered as one of the causes for miscommunication between DS and DB. As discussed in Chapter 2, and as later supported by the research data, DB has difficulty in comprehending the
complexity of design thinking. Likewise, designers misunderstand business terms and expressions, as well as, the needs of DB. 

With information travelling from designers to TDM and vice versa, the disruptive elements result in the main translation errors:

- Lack of or inaccurate design reasoning
- Isolation of potentially innovative ideas, design-in-progress
- Lack of or inaccurate TDM feedback on design
- Isolation of company and industry knowledge

Nonetheless, the elimination of the disruptive elements are mostly out of MM and PM/CD hands, and require more involvement from other actors within the process and the companies in general.

The following section will represent ways in tackling those translation problems in the form of a propositional model – ‘Enabling Fluent Conversation’. The model has been derived from the analysis of the interview material along with the results from the analysis stage – ‘Lost in Translation’.

CHAPTER 5 – Discussion and Implications

The research has enabled identification of disruptive elements within design-business translation process, as well as, errors activated by those disruptions. The findings suggest that Knowledge Gap, Stakeholder Management and Internal Politics, Detachment between Actors, Ambiguous Design Strategy, Varying levels of Risk Aversion and Opposing Focus Areas are the main inhibitors in design-business communication.

In this section suggestions for design practitioners will be presented in a form of a theoretical model followed by propositions for academics in regards of further research on the issue. The chapter will be concluded with the paper’s relation to the exiting research and the representation of the research limitations.
5.1. Enabling Fluent Conversation

The model suggests ways to eliminate previously identified disruptive elements and has been inspired by ‘Talking Design’ (Tomes et al., 1998) research on visual-verbal translation which was discussed in Chapter 2.

Based on the article and the findings of this research, the model consists of three translation levels: 
*Visual to Design-Verbal, Design-Verbal to Business-Verbal, TDM Feedback (Business-Abstract Verbal) to Design-Verbal.* For each of those levels propositional actions are introduced and advised to be taken into consideration by anyone working with or within design-business intersect. It has been generalized for application in all industries as almost no vast differences have been found when studying pharmaceutical and media companies.

5.1.1 Visual to Design-Verbal

This level includes translation form the actual design and its sketches to a verbal language which enables expressing the real meaning of the creation. In general, such language contains specific terms and expressions both imaginative and intuitive used by designers and PM/CD. Due to the mindset differences mentioned earlier, DB finds it difficult to fully comprehend what is being expressed by design language. Translation improvements on this level could be done in several ways discussed below.
Improving Design Argumentation skills by sharing design knowledge and creative process

Considering the importance of clear and accurate design reasoning, there is a need for PM/CD to become better at design argumentation. With more involvement in creative process the actor would gain necessary design knowledge and understanding of the real meaning behind the particular design. Subsequently, the clarity and validity of the translation would be significantly enhanced. Design knowledge sharing and PM/CD involvement in creative process is essential in cases where designer is not articulate enough or when design “just feels right” without having any clear meaning and explanation behind it. PM/CD is supposed to fill in those gaps left by designers while using own experience and gathered knowledge within that particular design process. The isolation of the CD from the creative process complicates such gap-filling. Furthermore, PM/CD who is aware of design process, its speed, length and design choices would make better argumentation in protecting creativity and defending designers.

Correctly translated reasoning is extremely important in choosing the right direction for the design, consequently, saving time on corrections and changes to be made in cases where mistakes have been noticed too late.

Reducing detachment between departments within design agency

Research has shown that message from MM to designers is likely to get lost between different units of design agency. Consequently, it is necessary for MM to repeat the message, at times more than once. As such situation can be time consuming and a hindrance to the flow of design process, it is important to ensure a prompt delivery of any message to the target receiver. The problem appears to be multiple design agency units separately working on different design touch points. Due to heavy workload and lack of contact between those units the message might be simply forgotten or delayed, causing significant adjournments within the whole project, as well as, financial loss. Reducing the number of design units and ensuring constant communication between them may be one of the solutions. According to interview data, the most of the responsibility in ensuring the delivery of the message belongs to PM and CD.
5.1.2 Design-Verbal to Business-Verbal and vice versa

Translation from design-verbal to business-verbal and vice versa usually takes place in the Translation Zone and depends strongly on the skills of CD and MM, as mentioned before. The process is quite complex and sensitive, and may result in a large number of translation errors due to the disruptive elements discussed earlier.

**Educating Client on and Involving in Design Process**

Educating client on design, design process and design thinking may eliminate outdated stereotypes in regards of design role within business. As a consequence, designers would be more willingly included early in the product development, and would not be excluded too early in the process. The later would allow ensuring that the implementation of the design as it was initially planned, which is one of crucial factors in overall design success.

Furthermore, client would gain more understanding of and respect for lengthy, chaotic, iterative design process, as well as, appreciation of design-in-progress and, most importantly, design reasoning provided by either PM/CD or designers themselves.

Most of the interviewees see client’s involvement in the design process, in a form of workshops and brainstorming sessions, as a benefit for both sides. However, according to PM/CD, as soon as client realizes that design process is time- and effort-consuming, they tend to retreat. What makes this contradictory though is that designers tend to be reluctant in letting outsiders into sensitive and fragile creative process.

To sum up, both sides praise the involvement of the client into design process, and, at the same time, both of them claim that the other party is resistant in doing so. In order to avoid this it is necessary to set the collaboration guidelines in the beginning of the project, and even more importantly, stick to those guidelines throughout the process.

**Sharing Knowledge**

Knowledge sharing includes previously mentioned client education on design and design process as well as providing designers with necessary company and industry knowledge.

One of the most common disagreements in regards of knowledge sharing between PM/CD and MM is user research information. MM claims that large percentage of design agencies distrust and ignore user research carried out by the client, and instead executes their own. In cases, where results of the two do not match, conflict arises.
However, due to the confidentiality of the company knowledge, very often designers have to work on a very limited amount of information, and, as a result, they seek for more clarity by gathering additional data. The client is advised to share as much information about the company as possible in order to make designers’ work easier and improve their understanding of client’s preferences.

**Merging Design and Business Backgrounds and Languages**
Research shows that having designer as PM/CD or MM is one of the major facilitators of the design-business conversation. Knowledge of design background provides understanding and respect for design process, as well as, the ability to understand design language. In combination with internal company knowledge it would enable more relevant feedback on design, as well as, more precise translation from business-verbal to design-verbal.

Having PM/CD with both business and design knowledge would have a very similar effect on design-business translation and the whole communication process within design project.

**Listening to the Client**
Research data suggests that very often designers tend to strive for an award-winning design rather than listening to the real needs of the client. From that results the advice to improve PM/CD listening skills in order to meet client expectations.

Not necessarily it means renouncing innovation and challenge. Rather, an in-depth understanding of the client’s needs would allow a more relevant and more persuasive design argumentation.

**Clear identification of stakeholders in the beginning of the process**
Due to a very complex and multi-layered hierarchy of large companies, it is a challenge for designers to identifying the major stakeholders, and especially the decision makers. The identification, however, is essential to the whole design project, as knowing whose opinion weights most helps choosing the right direction for the design. In case where the identification process did not succeed and the wrong stakeholders have been spotted, the design will likely need fundamental changes made along the way which would result in time and money loss.

It takes an effort from MM in the beginning of the project to identify and introduce those stakeholders to design agency. Made clear from the very beginning, it would keep the project clear from misunderstandings, mistakes and potential conflicts later in the process.
5.1.3 TDM Feedback to Business-Verbal

TDM feedback on design is expressed often in very subjective language, based on business terms and amateur design expressions. Usually it goes through multiple stages of translation before the target receiver – designers – has been reached. According to research data, however, if not for the vast differences in languages and perceptions of those two actors, it would be highly beneficial for both parties and the project in general, if the feedback was given directly.

**Setting Clear and Flexible Design Strategy**

Setting clear, flexible and up-to-date design strategy within DB company would enable MM to guide designers in the most appropriate and relevant direction. Such guidance would potentially save money on unnecessary adjustments otherwise caused by expectation misalignment between TDM and MM. DB design strategy is highly important as it strongly affects the whole design process and all of the participating actors. In addition, having proper guidelines in place would help MM to interpret the preferences and expectations of TDM. Together with design strategy, the alignment of willingness to risk levels between TDM and MM would positively influence designers’ work as they would be able to build the design upon valid guidelines and reliable feedback.

It is important to note that unpredictable, innovative and volatile design nature flourishes best under flexible design strategy, as it allows exploration and novel solutions which have not been thought off before. One way to ensure the flexibility is the empowerment of MM to make decisions on a certain level.

**Empowering MM**

The delegation of a certain amount of decision making power to MM would have several positive effects on design-business translation. First of all, it would save TDM time, as they are known to have a rather busy schedule. Second, it would simplify the hierarchy of the company as perceived by PM/CD and designers, which would facilitate their stakeholder management. Third, and most important, it would increase the integrity of the decisions made by the actors on DB side, followed by time saving due to the lower number of levels that the message has to travel through.

In order to enable the delegation decision power, MM has to be highly knowledgeable about the company’s strategy and vision, as well as, to be familiar with needs and desires of TDM. A certain level of knowledge has to be reached before MM can make the best design decisions in the name of the firm.
Reducing Detachment between TDM and MM

Narrowing the gap communication between TDM and MM is important in couple of ways. Since MM is translator between TDM and design agency, between business-verbal and design-verbal, they help TDM to understand the design, vocalize their impressions and then translate those impressions into design language. In order to make MM interpretations of TDM impressions as accurate as possible, closer proximity, more frequent and more open communication is required between the two. In such a way, these interpretations become less of a guessing and more of a valid, reliable feedback.

5.1.4 Interim Conclusion

Some of the solutions have been applied and tested by some design practitioners, and have proved to improve the situation at least partially. For instance, ‘client education’ has been used by most of research participants. Furthermore, the growing interest in design thinking for businesses outset the tendency to merge design and business backgrounds by employing design-knowledgeable MM or business-knowledgeable PM/CD.

Such situation means that design practitioners are going the right direction towards an error-free translation from design to business languages. Moreover, the research findings add to the pool of current practical knowledge and encourages MM, PM, CD and designers to further improve their communication practices by taking into consideration the results of ‘Enabling Fluent Conversation’ model.

Design agencies may invest time and effort in improving design argumentation skills and narrowing the gaps between project managers and designers, as well as, getting individual design units to work closer with each other in order to enhance the information flow. In addition, their practice of client education has been proved to be a necessary part of design process, therefore, may be developed further to better form client’s perception of design and design process. As expressed by design buyers, more attention should be paid to listening to their needs, rather than simply pushing certain design solutions to be accepted.

Design buying companies can also learn from the study in several ways. It has been revealed that clear and sufficient communication between TDM and MM, as well as, clear, flexible and up-to-date design strategy has an immense impact on the success of the whole design project. More thought and effort could be invested in a better communication flow between the two actors. Consequently, such turn
would allow the empowerment of MM and make the design process faster and more efficient due to rapid, smooth and straightforward decision making.

All in all, by acknowledging the existence of the main disruptive elements within design-business translation, design practitioners would find it easier to tackle the occurring translation errors. Bringing those elements into daylight will hopefully encourage real actions of both design selling and design buying companies in eliminating them and, most importantly, bringing the two vastly different mindsets closer to each other.

It is worth mentioning, that an increasing number of business schools have started offering design thinking, design management and similar courses. Likewise, design schools have realized the importance of at least basic business understanding for future designers. Research revealed that design and business mindsets are gradually getting closer in such way eliminating the disruptive elements within design-business translation. However, it is obvious that more effort from both sides still needs to be invested.

5.2 Relation to Existing Discussion and Further Academic Implications

After the practical implications of the research have been made clear, it is worth looking into how the findings relate to the existing design-business translation discussion, as well as, the benefits for further academic research. As previously mentioned in Chapter 2, design-business translation has not been explored enough, and there are open issues that still need investigation. Although this research has attempted to fill in some of the gaps, due to time and resource limitations, only a small part of all unanswered questions could have been tackled.

First of all, design communication between external design agencies and their clients has a potential for further research, as only few authors have looked into the topic (see 2.1). The research has revealed that both sides face a number of communication challenges in the form of disruptive elements. Furthermore, such communication appeared to be slightly different from generally understood design communication to users, within design teams or the one between internal designers and the rest of the company (see 2.1). However, up until this day, none of the solutions seem to have fully eliminated the main disruptive elements within translation.

Second, the effect of design and business mindsets on design project communication could be further explored, since there is still confusion in what exactly constructs those mindsets and which differences
significantly affect mutual understanding between designers and their clients. Although the description of design mindset contains a high number of characteristics in quite abstract terms, most of the authors, as well as, the participants of this research, tend to agree on the core features, such as: emotive, intuitive, visionary, holistic, and willing to take risks and staying open to different solutions till the very end (see 2.2). However, current business mindset discussions evolve more around managerial qualities (see 2.2), which is not necessarily the best representation of business thinking and behavior, and which is the gap to be filled by the future studies.

As already mentioned before, translation issue within design projects has not been explored in detail, and only couple of authors has showed interest in the topic (see 2.3). Tomes et al. (1998) discussion on visual-verbal translation only partially relates to research subject of this study, as it does not analyze the translation from the perspective of design and business languages. However, it did influence the evaluation of the research findings as similar translation levels to the ones pointed out by the authors have been identified. Furthermore, the issue of design language has been debated as having a big impact on design-business conversation where even design vocabulary for management has been introduced (see 2.3). Nonetheless, findings of this research reveal lower impact of vocabulary on translation success than expected.

The characteristics of design and business professionals, as well as, their processes presented in Chapter 2, has been confirmed and supported by the data of this research. The application of open-ended process appears to be the defining attribute of the design process, and at the same time, the most difficult one for non-designers to comprehend.

One of the most important matters to investigate is previously identified disruptive elements which critically affect design-business translation. Only a limited number of those elements have been presented in this paper, and they have not been explored in previous discussions. With the necessary amount of time and a better access to resources, they could be examined further. Some of the elements have been sparsely mentioned in previous studies in the form of barriers (see 2.1), and most of them evolved around educational gap. The research data supports the belief that mixing design and business educations would lead to closing the knowledge gap between the two mindsets, however, it is not clear yet what pieces of design and business knowledge would equip the actors to communicate in the best possible way. Similarly, the rest of the disruptive elements - Stakeholder Management and Internal Politics, Detachment between Actors, Ambiguous Design Strategy, Risk Aversion Level, and Opposing Focus Areas – require a deeper examination.
To sum up, the research has not revealed findings that would contradict the existing discussion on design-business translation or communication. This could be due to the general lack of existing research on the issue. It can be concluded, that the findings of this research does not prove or deny certain theories, but rather add to the existing pool of sparse theoretical knowledge about design seller and design buyer communication. Furthermore, it has laid the foundations for further research on design-business translation and factors affecting the success of that translation.

5.3 Limitations of Research

The issue of various limitations regarding the research has been mentioned throughout the paper, and will be more explicitly discussed in this section.

First of all, resulting from the application of qualitative research methods (GTM and TBCS), the quality of the study has been influenced by the skills of the researcher. Therefore, the interpretation of the data may contain personal bias. In general, all interpretations made should not be considered as the only possible interpretations of the data. Although, the methodologies and methods used have been described in detail, however, the nature of the research do not promise the same results if carried out by another researcher.

Furthermore, the tools applied in data gathering were not always able to ensure the thoroughness of data documentation. In the cases where telephone interviews took place, the conversations have not been audio taped, but rather transcribed by taking notes in real time. Consequently, important bits of data could have been lost, thus affecting the results of the research analysis.

The sample of the research has been limited by the time and resources available, and resulted in 14 interviews within Danish design, pharmaceutical and media industries. Not all potential interviewees agreed to participate in the research, thus less relevant participant has to be chosen as a replacement. Resulting from that, the soundness and relevance of the gathered data may have suffered. In addition, the access to the relevant data has been limited due to its confidentiality or interviewees unwillingness to reveal such data for personal or professional reasons.

Considering that the research was carried out in a foreign language for the researcher and participants, some miscommunication may have not been recorded, and consequently leave a negative mark in the validity of the data. In addition to language, cultural and situational bias may be present. In other words, some of the interviewees’ opinions on the issue may have been affected by the events that took
place right before the interview. For example, a professional conflict within the company, the type of projects carried out at the time of the research, and the like.

Lastly, due to time limitation it was impossible to perform a longitudinal study. Therefore, changes regarding the research problem could not be recorded and taken into account when analyzing and interpreting research data. This means that the findings can be considered to represent only a limited period of time, not before or after the research has taken place.

Despite the number and complexity of limitations, effort has been put in eliminating various constraints in the most effective way possible. Regardless the effort some of them remained and has to be taken into consideration when evaluating the results of the study.

5.4 Final Conclusion

Conversation between design sellers and design buyers is a complex combination of specific professional knowledge, language and contradicting mindsets. With such different actors involved in design process, the complete fluency of the communication is never possible. Sparse traditional design theory is concerned with product design communication, communication within design teams or between internal designers and the rest of the company. The growing interest in design thinking application amongst both academics and practitioners has encouraged more discussions on the later type of design communication. As a result, effort has been put into design and business integration. Even though such tendencies positively affect the design-business conversation, the communication between the two has not been explored enough to provide strategies for improving the complex process of communication between the vastly different parties. Rather, it has been regarded as an issue of customer relationship management or project management in general.

The need for more relevant insights stems from the complexity and specifics of the communication, and has laid the ground for this study. As mentioned in Chapter 1, design success and price dependency on the design-business conversation fluency makes the elimination of disruption a priority. Such context inspired the research question, concerned with the critically disruptive design-business collaboration elements, which have a negative effect on their translation process. The purpose of the study was to develop a theoretical model providing the answer to the question; furthermore, to identify the translation errors resulting from those critical disruptions.
The findings reveal that design-business translation process does get negatively affected by a number of elements that constitute collaboration between Design Seller and Design Buyer. The ‘Lost in Translation’ has indicated Knowledge Gap, Stakeholder Management, Ambiguous Design Strategy, Detachment between Actors, Willingness to Risk Levels and Opposing Goals to be the most disrupting to the clarity and fluency of the design-business translation. Furthermore, such errors as Distorted Design Reasoning, Discarded Innovative Ideas, Unrevealed Design in Progress, Distorted or Lost Feedback, together with general misunderstanding and misinterpretation of languages and expectations, result from those disruptions.

In the midst of the whole process are Middle Managers and Creative Directors who carry most of the responsibility design-business translation success. They act as ‘midwives’, as metaphorically named by Lanny Vincent (2005), or, in other words, as a bridge between the farthest actors of the project – Designers and Top Decision Makers, who rarely get in contact with each other, but are crucial to the process. It has been show by the research results, that ‘midwives’ with both design and business knowledge are the best connectors of the two worlds.

All things considered, the findings of the research does not only add to the existing knowledge of design communication and design-business translation by covering yet unexplored areas; it also introduces practical implication for Design Sellers and Design Buyers. Despite the valuable findings, the issue remains open for further research due to its rather complex and broad nature.
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