Gaglione, Simone; İdil Gaziulusoy, A.

Designers Designing Businesses. Understanding how designers create enterprises

Designers Designing Businesses. Understanding how designers create enterprises

Simone Gaglione & A. İdil Gaziulusoy

Designers Designing Businesses.
Understanding how designers create enterprises

Simone Gaglione[a*], A. İdil Gaziulusoy[a]

[a]Department of Design, School of Arts, Design and Architecture, Aalto University, Helsinki, Finland
*Corresponding author e-mail: ciao@simonegi.it (Simone Gaglione)

Abstract: This paper is based on a practice-based research project which investigates the roles that designers play when designing businesses, highlighting their strengths and weaknesses. During this project, the first author designed a business concept for a client. The research methods presented in this paper were used to both carry out the business design project and to answer the research questions. Research questions were answered by integrating findings from literature review, eight interviews with designer-entrepreneurs and business designers based in Barcelona, Madrid, Naples and Berlin and observations of fifteen enterprises in Helsinki, Barcelona, Paris, Naples and Milan. The study provides evidence that designers have a distinctive way to create and conduct businesses, combining methods and approaches typical of their profession and following a process similar to the one employed in business design firms and proposed by business design scholars.

Keywords: business design, strategic design, design and entrepreneurship.

1. Introduction

1.1 Background

Design has expanded its scope considerably as an evolving and applied discipline in response to changing societal context and emerging practice areas relevant to design. It first dealt with products and visuals, together with spaces and garments (De Fusco, 2003). Then services, systems and strategies started to be developed through designerly approaches (Korvenmaa, 2014). Currently, also business design is among the professional tasks designers undertake (Rodichev, 2016). Moreover, many designers are deciding to become entrepreneurs, employing their design skills to build companies.

This paper presents an investigation on how designers design businesses. In particular, the research focuses on understanding what kind of approaches designers adopt when conceiving and developing business ideas, which process they follow, which methods they employ and which tools they use.

This paper is based on a practice-based research project. According to Frayling, practice based research - or research *through* practice, as he defined it - means "to use actions and sites of practice as a means of discovering something" (Frayling, 1993 as cited by Vaughan, 2017, p. 10). In line with this framing, the research questions of this paper were answered through the experience of conducting a real-life business design project. During this project, the first author was asked to conceive and develop a business concept for a client who wanted to start her own company and to become an entrepreneur. This experience was part of the first author's Master's Thesis.

1.2 Research questions

The research questions that guided the research project were:

What roles can designers play in designing businesses? In doing this, what are their strengths and weaknesses?

1.3 Research aim

The objectives of this research were:

- To evaluate whether design mindset, tools and methodologies can be used to design businesses.
- To provide insights on how to improve design practice by integrating findings from literature review and undertaking a real-life project for designing a business.
- To contribute to the literature on business design and strategic design by integrating findings from interviews, observations and a real-life project.

In the next chapter, through the analysis of the literature we first investigate the relationship between design and business, and then we explore the disciplines of business design and strategic design. In the third chapter we describe the methods employed during this research and the way how the first author conducted the business design project. In the fourth chapter we discuss the main findings of this research and, in the last chapter, we formulate an answer to the research questions.

2. Literature review

2.1 Design and business

The lack of business understanding is often seen by design professionals as a problem, an obstacle for their career. This acknowledgment does not happen only in practice but it is also confirmed by literature (Liedtka, 2010; Oswald, 2016; Snelders, 2012; Gaglione, 2017). Business knowledge is in fact considered of core importance for allowing designers to turn their creativity into *value*; value for them, their clients and society (Liedtka, 2010). Without business, many creative ideas would hardly become profitable (Oswald, 2016) and it would be much more difficult for designers to have an impact on the world. On top of that, knowing the business language is a strategic asset for designers to communicate their value to the corporate world (Snelders, 2012; Gaglione, 2017) and to today's society.

A designer who is not his own manager is not conceivable, argued Riccardo Dalisi and Gino Finizio in 2000. In the same way, for Dalisi and Finizio also managers are creative professionals: they pursue visionary risks and, for this reason, they have to be farsighted and intuitive as designers (ibid.). The relevance of design for business is widely recognized in research and it is today at the basis of design management literature. While some authors focus on the benefits that design brings to corporations,

such as higher profits (Gemser and Leenders, 2001; Gemser, Candi and van den Ende, 2011), improved competitiveness (Noukka, 2012), better products (Borja de Mozota, 2006) and strategic renewal (Ravasi and Lojacono, 2005), some others concentrate on the value it brings to business professionals (Liedtka, 2010; Gruber, de Leon, George and Thompson, 2015). According to this last stream of literature, design principles could inspire business people to think and approach challenges in a new way. It has been argued that adopting an open view on problems and relying on intuition more than on analytical thinking could help business people (and non-designers in general) to face the challenges of today's fast-changing world (Liedtka, 2010; Hassi and Laakso, 2011). In addition, designerly thinking is considered useful for achieving a better working experience and increasing productivity, as it allows empathy and emotions to enter the workplace (Gruber et al., 2015).

2.2 Business design

The business design field, even if it is quite established in practice, is relatively young and the literature has not yet systematically dealt with it. For this reason, in 2016 Alexander Rodichev tried in his Master's Thesis to define business design and to clarify who business designers are and how they work. According to his definition:

> business design is a practise that seamlessly combines fundamentals of design
> disciplines together with strategic business methods [...] a new approach for
> human-centred business development for healthy balance between business goals
> and user desires, administration and invention (Rodichev, 2016, p. 80).

Business designers deal basically with business development. That is, they take an idea and turn it into a viable business. They create strategies, define pricing models, plan organization structures and design business models. However, they do it in a 'designerly' way. That is, they use tools and approaches that traditionally have been associated with the discipline of design. So, they work in teams, use collaborative methods and visualize and prototype their ideas. Moreover, they base their choices on research, that can also be qualitative, and try to consider both the client's and the user's point of view (Rodichev, 2016; Rohini, 2016). When creating companies, business designers should be therefore able to balance two complementary attitudes: exploration and exploitation. Exploration is based on intuitive thinking and consists of researching new ideas and market opportunities; a creative attitude that, through a non-linear process, leads companies to build their future (March,1991). On the other hand, exploitation is based on analytical thinking and consists of repeating established, measured patterns for obtaining a predicted benefit (ibid.). According to March (1991) and Martin (2009), both attitudes should be employed by businesses in order to survive successfully. In fact, if a company focuses only on exploration it will fail in creating value from its ideas, and if it focuses only on exploitation it will become soon obsolete.

Even if business design is approached differently according to the context, there have been some attempts of defining a methodology for this discipline. One of them was developed by Heather Fraser in the book *Design Works* (2012). Fraser's method - called the *three gears of design* - tries to balance exploration and exploitation by creating a link between innovative ideas and business strategy. This step-by-step process is composed by three phases: *empathy and deep human understanding*, *concept visualization* and *strategic business design.* The first phase consists of collecting information from various stakeholders (end-users, enablers and influencers) in order to understand their desires and unmet needs. During the second phase, the information collected is turned into an idea and then visualized. In the last phase, this idea is implemented through a "well-thought-out and well-strategised action plan" (Fraser, 2012, p.66). In defining each gear, Fraser proposes different tools

and techniques, borrowed from the worlds of design (e.g. visualization, storytelling and collaboration) and business (e.g. business planning).

Another popular process is the *business model design process*, proposed by Alexander Osterwalder and Yves Pigneur in the book *Business Model Generator* (2010). This process is composed by five phases: *mobilize*, *understand*, *design*, *implement* and *manage*. *Mobilize* consists of involving the project stakeholders properly in order to gain their commitment. *Understand* is the phase where relevant information is researched and analysed. The third stage, *design*, is the moment when collected information is turned into a business concept that should be tested and then executed during the *implement* phase. Finally, *manage* consists of continuously developing the business model, in order to adapt it to market response. In any case, Osterwalder and Pigneur acknowledge that designing businesses is hardly as linear as the process they propose; instead, this activity "remains messy and unpredictable" (2010, p. 246). For this reason, in order to be successful, business designers should also adopt the *design attitude* that - according to the authors - could help them to "deal with ambiguity and uncertainty until a good solution emerges" (ibid., p.246). Finally, also Osterwalder and Pigneur propose several techniques that could be employed to design business models. Many of these techniques - like visual thinking, ideation, storytelling, prototyping and scenarios - were borrowed from the design field.

The *three gears of design* and the *business model design* processes could be both compared to the process taught in design schools and used by traditional designers, which is often composed by three phases: research, concept and development (See Figure 1). Even if they differ for minor aspects, these processes follow a very similar working flow. To find a solution to a problem, they all suggest to collect relevant data, and then to turn this data into an idea, a concept that should be tested and finally implemented.
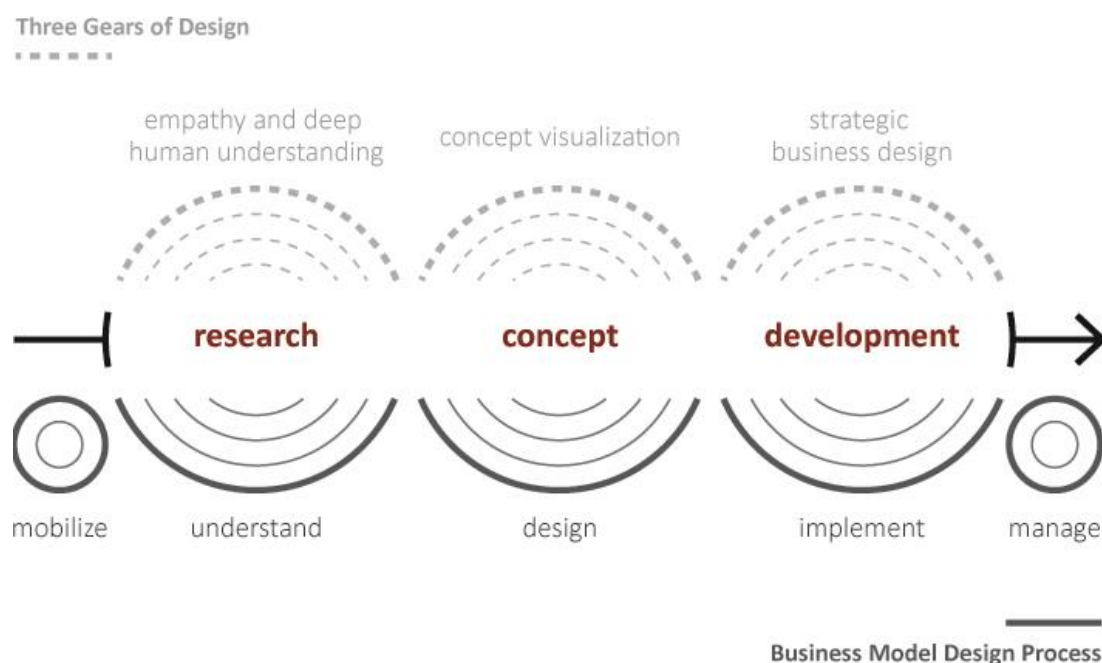

Figure 1. Comparing Fraser's three gears of design *(2012) and Osterwalder's and Pigneur's* business model design process *(2010) with the research-concept-development phases.*

2.3 Strategic design

According to Stevens and Moultrie, "Design can make significant contributions in many ways beyond those visible to customers. Successful exploitation of this we term 'strategic design' " (2011, p. 2). Strategic design means to use design beyond its traditional scope of product development, entering the area of business development (Keinonen, 2008). In other words, it means to support businesses at the strategic level and to participate in setting the scope and direction of whole enterprises (Borja de Mozota, 2003; Joziasse, 2000; Best, 2006).

In his article *Moving from Design to Strategy* (2000, p. 1), Victor Seidel affirms that there are no specific roles for "designers who seek to provide strategic business advice to clients". Nevertheless, in his research he tries to identify recurring functions of strategic designers in businesses, defining four of them: *strategy visualizer*, *competence prospector*, *market exploiter* and *process provider*. The first one, *strategy visualizer*, according to Seidel is the most recurring one. It consists of making the company's strategy tangible through prototypes, pictures and other visualizations. This process, apart from making the strategy clearer and therefore shareable, allows to test it and lets new ideas emerge. On the other hand, the *core competence prospector* role takes place when the designer is contributing to a new strategy. Here he gives a third-party perspective on the company's competences, identifies its dormant capabilities and, based on these, makes his proposal. Also the third role, *market exploiter*, takes place when designers are participating in the creation of a new strategy. However, instead of looking inside the company, in this case they look outside. They provide valuable market insights and, thanks to their customer knowledge, they spot new market opportunities. Finally, *process provider* is about educating a company on the process of managing and using design. In this way, designers empower corporations and their people to create their own design strategy, helping to set the philosophy and spirit of the company.

Another interesting, more recent point of view is given by Turkka Keinonen in his article *Design in Business* (2008). Here Keinonen identifies six *links*, "informal ways to communicate, emerging modes of operation, or attitudes that designers have adopted [...] to strengthen their organizational influence and maximize the impact of design" (Keinonen 2008,p. 31). Three of these links come from the analysis of companies that use design as a core competence, respectively design for *vision*, for *competence* and for *expectations.* The other three come instead from companies who use design in their periphery. These are design for *control*, for *meaning* and for *presence*. The *links* are contributions that designers give to businesses at the strategic level; it is interesting to notice how some links overlap with Seidel's roles (see Figure 2), respectively design for *vision* with strategy visualizer, design for *competence* with core competence prospector and design for *meaning* with process provider. Instead, while design for *control* and design for *presence* regard strictly the sphere of design - respectively the control upon products and the affirmation of design inside a company - design for *expectations* refers to the capability of managing the expectations of users and stakeholders towards a product or a project, and to influence their behaviour through different communication techniques. For example, thanks to prototypes designers could support the acceptance of an innovation or, through brand management, they could make stakeholders more committed to a project.
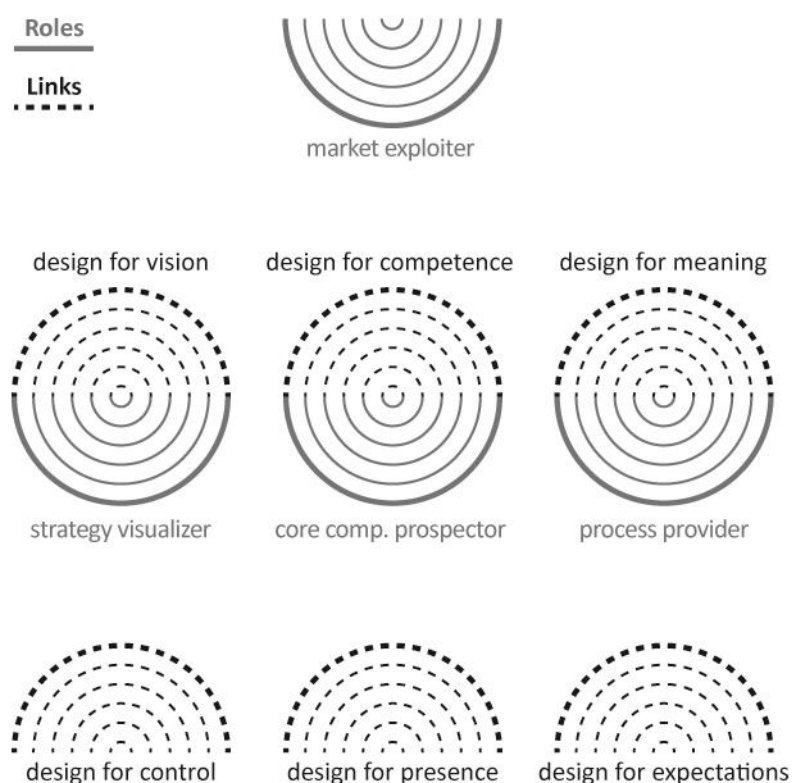
Figure 2. Comparing Keinonen's links *(2008) with Seidel's* roles *(2000).*

Summing up what discussed in this chapter, this paper can be placed at the intersection of business and strategic design; it belongs to business design because it is about designing a business. Also, it belongs to strategic design because it studies how designers use design tools and methodologies to contribute to businesses at the strategic level.

3. Methodology

3.1 General approach

Like many projects linked to design, this research employed a qualitative approach. In particular, it followed a case study methodology that, according to Robert Yin (2002), is a research strategy involving in-depth investigation of single issues in their context using multiple sources of information. Indeed, in this research, findings from interviews, observation and literature review were integrated with findings originated from the experience of conducting a business design project for a client. This methodology is useful in exploratory research to understand existing phenomena for comparison, inspiration or information (Hanington and Bella, 2012).

3.2 Field and desk research

The business design project was conducted in three phases: research, concept and development. In choosing this phases, the first author followed the traditional design process that, as discussed in the previous chapter, is similar to the one proposed by business design scholars. The methods and tools employed during the project were used to both develop the business concept for the client and for data collection to answer the research questions. These methods and tools included literature review, observations, interviews, generative participatory methods, experiments, customer journey maps and service blueprints. In this section however, we will present just the methods that were

more directly relevant for answering the research questions of this paper: literature review, observations and interviews.

The literature review focused on business design, strategic design, business modelling and entrepreneurship. The resources included in the previous chapter, together with other literature, formed the theoretical framework of the project and provided important insights for answering the research questions.

During observations, fifteen small organizations were benchmarked in different cities of Europe, namely Helsinki, Barcelona, Paris, Naples and Milan. These organizations were both profit and non-profit, and used design at different levels. Goal of observations was to gain some baseline information about how design was employed in these organizations. In some cases, the investigation was deepened through an informal conversation with the owners or employees of the organizations. Conversations and observations were documented through pictures and notes in an observation diary.

Successively, six semi-structured interviews were conducted with seven entrepreneurs based in Barcelona, Naples and Madrid. All interviewees were founders and owners of organizations encountered during observations and each interview corresponded to a different company. Four interviewees out of seven were designers and five businesses out of six employed design as a core activity. The main goal of the interviews was to understand how designer-entrepreneurs use design mindset, tools and methodologies for creating and running their businesses. All these interviews were conducted in person. Additionally, a last semi-structured interview was conducted with a business designer based in Berlin. Goal of this interview was to understand more about the business design profession. This interview was conducted via Skype and the interviewee was asked about his responsibilities, methodology and way of collaborating. All the interviews were documented through audio recordings and notes and then transcribed into an interview diary.

3.3 Data analysis

The data collected was analysed following Sanders' and Stappers' version of Ackoff's DIKW scheme (Ackoff, 1989; Sanders and Stappers, 2013). This simple scheme, elaborated to guide analysis, distinguishes four levels of sense-making: *data*, *information*, *knowledge* and *wisdom*. By stepping from the lowest level to the highest, it is possible to transform data into information, information into knowledge and eventually knowledge into wisdom and theories. When going through this process the researcher's personal interpretation is needed on several occasions and will inevitably influence the result.

The data analysis yielded to findings relevant to the business design while providing insights to answer the research questions. The data coming from observations and interviews was analysed through the following process: observation and interview diaries were read several times in search of themes and patterns useful for answering the research questions or developing the business concept. Every time a potential theme was discovered, it was listed on a separate document. The themes that recurred a consistent number of times in different contexts became findings and were used to support the generation of the project concept and to answer the research questions. Additionally, while generating and developing the concept of the enterprise, more data was collected in order to produce further insights about the extent designerly approaches and design research can contribute into business design.

4. Main findings

The research findings are grouped into three themes, each of them giving a different perspective on how designers design businesses.

4.1 Designers designing their own businesses

Through interviews and observation it was possible to understand how, when creating and running their own enterprises, designer-entrepreneurs make a broad use of design. Not only at the operational level - that is, in visuals, products and services - but also at the strategic one. Indeed, all interviewed designers used to create and run their businesses as if they were design projects. They based their choices on benchmarking, creativity, experimentation and, sometimes, on user research. To develop their business they followed a more or less structured research-concept-development design process, relying on intuition and using prototypes. As showed in Chapter 2, this process is similar to both Heather Fraser's *three gears of design* (2012) and Osterwalder's and Pigneur's *business model design* (2010) processes. The main difference was that three interviewed designers out of four, when designing their enterprises, did not follow a systematic business development. Their approach was instead non-linear and based on intuition; in other words, they were champions of exploration. All interviewed designers used to modify their business while running it; quoting an interviewee, they "went on through a process of trial and error". In this way, they managed to let their business evolve and to adapt it to the challenges they encountered on their way. On the contrary, the approach of the interviewees without a design background was more rigid. When they started their enterprise, the business concept was already well defined; afterwards, they refined it only through minor modifications. For design-entrepreneurs, exploitation seemed then to be quite challenging. According to one interviewee, "sales, accounting, market research... these are words that designers do not have in their blood". Money was a secondary motivation for two designers out of four and, for three designers out of four, growing the business was not a main objective. For these interviewees, enjoying their job and reaching their personal goals was instead more important. However, all interviewees were aware that both money and growth were still important; not only to keep their projects going but also as a personal reward. For this reason, they acknowledged that - as also Liedtka (2010) and Oswald (2016) pointed out - without business knowledge it would be harder to turn their ideas into value. For this reason, two designers out of four asked for business advice either to external services or collaborators. Finally, only two designers out of four conducted market and user research to develop their products and services. These 'user-centred' designers carried out their research through prototypes, interviews, participatory research and benchmarking, typical techniques of the design practice. Instead, the other designers developed their products according to their interests and capabilities, attracting in this way only people who were similar to them.

4.2 The first author designing a business

By analysing how the first author conducted the business design project, it was possible to understand the specific contributions he gave, as a designer, to the creation of his client's enterprise. These contributions can be compared to the *roles* that, according to Seidel (2000), designers play when providing strategic business advice to clients (Figure 3).
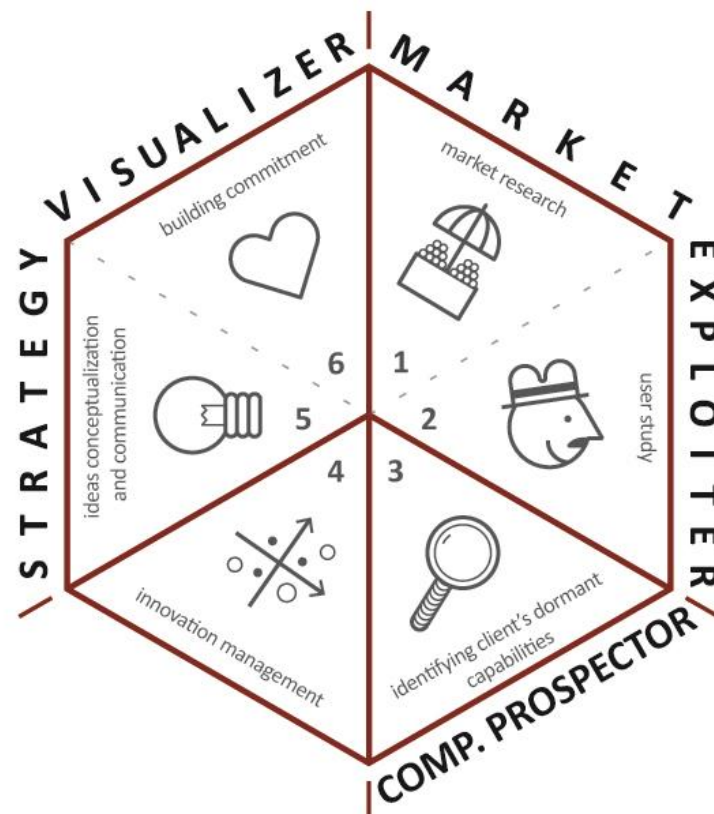
Figure 3. The contributions of the first author compared to Seidel's roles *(2000).*

In the first part of the project the first author conducted user and market research through interviews, observations and participatory workshops; thus, he played the *market exploiter* role. At the same time he tried to understand and facilitate the expression of his client's dormant capabilities, in order to create a business concept that could suit his client as a good dress. In this phase, the first author had been a *core competence prospector*. After that, he used the collected data to formulate a strategy, a business idea. He designed a concept that could fit not only his client, but also the specific time and market in which the business would have been launched. Therefore, he provided his client "with [...] strategic directions based on core capability understanding and market insight" (Seidel, 2000, p.9). Around the business concept the first author created and visualized a story, in order to communicate his ideas and to get the support of different stakeholders. In this phase he carried out the *strategy visualizer* role.

4.3 Designers designing businesses with business designers

Being aware of the limitations of conducting only one interview, in this section the literature about business design is compared to the results of the interview with the Berlin-based business designer. According to Rodichev (2016) and Rohini (2016) business designers use to work within multidisciplinary environments. This was true also for our interviewee, who used to collaborate every day with designers and engineers (see Figure 4). At the beginning of each project, he carried out the research phase together with a traditional designer. While the latter focused on user research and benchmarking, the former conducted market research. Successively, they used to brainstorm together for developing a business concept that the traditional designer will test later on through models and mock-ups. In this phase the business designer usually takes care of the business

development, designing for example the structure and the business model of the enterprise. Generally, the engineer of the team comes in the process during the development phase, when the prototype is ready and technical knowledge is needed to e.g. build an app or a website. At this stahe the business designer takes care of business planning and implementation.
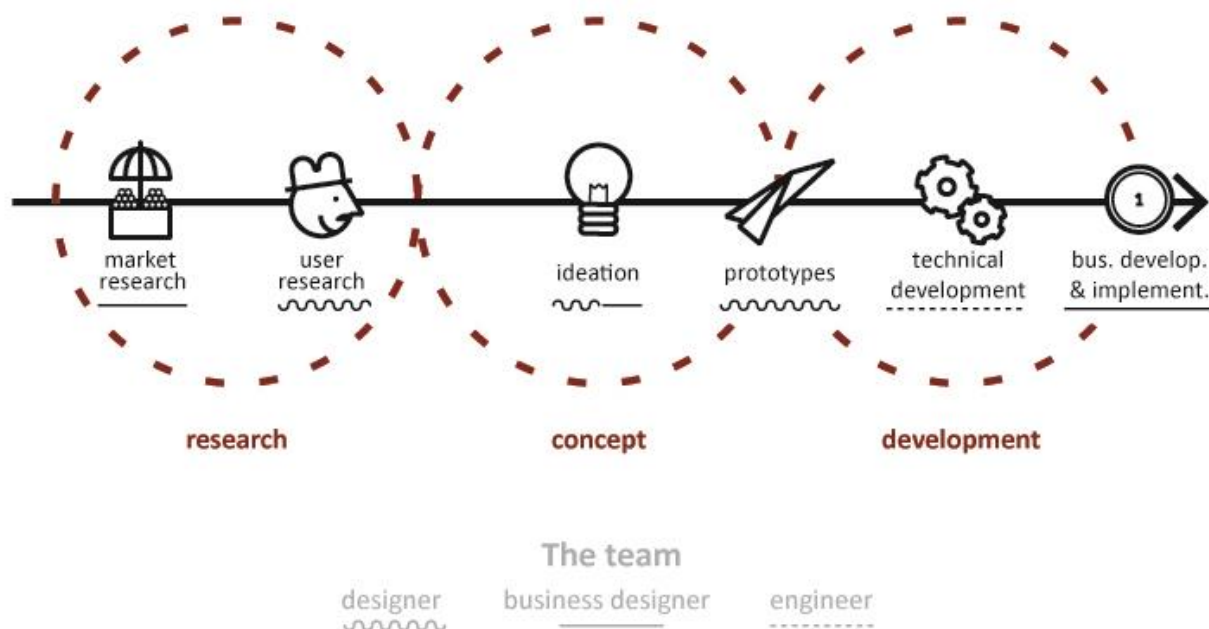

Figure 4. The business design process in the interviewee's agency compared to the research-concept-development phases.

According to Rodichev (2016), typical phases of the business design process are *research*, *idea generation*, *testing*, *validation* and *implementation.* This process is similar to Fraser's *three gears of design* (Fraser, 2012), Osterwalder's and Pigneur's *business model design process* (2010) and to the process adopted by the interviewee. What is more, as demonstrated in Chapter 2, these processes could be all compared to the research-concept-development phases. Thus, it can be easily agreed that traditional designers and business designers use a very similar process. Of course, this does not mean that they make the same job. Simply, they follow a very similar working flow. In fact, by focusing on exploitation business designers complement the explorative work of traditional designers, turning in this way creativity into value. As also highlighted by Oswald (2016), Rohini (2016) and Rodichev (2016), one of the main contribution of business designers is in fact to ensure the viability of a concept through research and business development.

5. Conclusions

In this paper, by undertaking a practice-based research project we tried to understand how designers design businesses. Starting from the discussion of the previous chapters, we integrate findings from interviews, observations, case study and literature review to formulate an answer to the research questions.

One of the aims of this paper was to evaluate whether design mindset, tools and methodologies can be used to design businesses. According to the literature review and the empirical evidences produced during this research, the answer is decisively positive. Designers can design businesses, and it seems that they have a characteristic way to do it. They create and manage businesses as if they

were design projects, employing tools, processes and approaches typical of their profession. Their approach is a mix of creativity, intuition and rationality that allows them to create and develop their business 'on the go', adapting it to the challenges they encounter on their way. For this reason, designers' businesses are often an organic result of a trial-and-error process, a combination of their owners' personalities with market requirements and users' needs. Nevertheless, design does not only mean intuition and experimentation. Instead, designers follow a structured and rational process that, in different contexts and versions, is widely used also to create businesses. From this research resulted in fact that an approach similar to the one of designers is also described in the business design literature and used by business designers. To describe in more detail the roles that designers play in designing business, we will thus use the design process as a framework. In particular, we will refer to one of its several versions: the research-concept-development process mentioned several times in this paper. Let's see, for each of these phases, which are the contributions of designers.
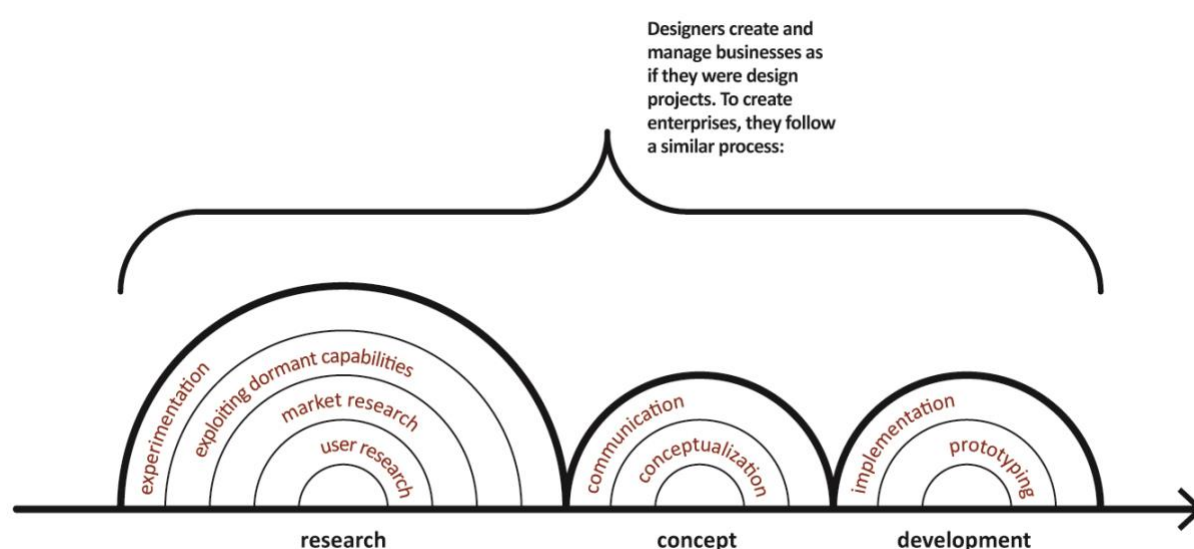

Figure 5. The answer to the research questions.

Research phase contributions. This is the phase were limits and opportunities are explored and valuable information is collected. From this research resulted that designers contribute at this stage with benchmarking, market and user research. Through methods like interviews, observation and co-creation they search for inspiration, spot market opportunities and highlight unmet user needs. In some cases, they are also able to identify and exploit their clients' dormant capabilities. Moreover, they manage to use experimentation as a tool for research and decision making and as a way to deal with uncertainty and complexity.

Concept phase contributions. The information collected during the research phase is used here to define the business concept. Indeed, one of the most important contributions of designers at this stage is undoubtedly conceptualization. Designers are in fact trained to use creativity for translating pieces of information into coherent and tangible proposals. They are able to develop unique business concepts that answer to precise needs and requirements. On top of that, they have the skills and knowledge needed to visualize and communicate their ideas effectively, not only to let their stakeholders understand but also to manage their expectations and gain their commitment.

Development phase contributions. In this phase, the ideas are defined more in detail; the business concept is usually developed, tested, validated and then launched. However, according to our research this is the most complex phase for designers. They can prototype here the enterprise or use

their design skills to develop its touch points. However, developing a product or a service is different from developing a company. Activities like business planning and business modelling need in fact a certain amount of business knowledge that not all designers have. Of course, an enterprise could be also launched without a structured business development. However, from this research resulted that asking for business advice at this stage can help to turn ideas more effectively into value.

In summary, the findings of this research project were coherent with the reviewed literature and enriched it in some points. For future research, it would be beneficial to investigate to which extent the enterprises created by designers are successful, taking into account factors such as the satisfaction of the entrepreneur and the company's financial results. It could also be interesting to compare designers' businesses to similar companies created by business people or non-designers. At the same time, it would be beneficial to compare the way how designers and non-designers design businesses. In this way it would be possible to understand more deeply the value of the contributions that designers make when designing businesses.

References

Ackoff, R. (1989)*. From data to wisdom. *Journal of Applied Systems Analysis*, *16*, 3–9.

Best, K. (2006). *Design management: Managing design strategy, process and Implementation*. Lausanne: AVA.

Borja de Mozota, B. (2003). *Design management: Using design to build brand value and corporate innovation*. New York: Allworth Press.

Borja de Mozota, B. (2006). The four powers of design: A value model in design management. *Design Management Review, 17*, 42-53.

Dalisi, R. & Finizio, G. (2000). *Creatività, design, management: Percorsi nella cultura del progetto* [Creativity, design and management: Routes in the design culture]. Naples: Electa.

De Fusco, R. (2003). *Storia del design* [Design history]. Bari: Laterza.

Fraser, H. (2012). *Design works: How to tackle your toughest innovation challenges through business design*. Toronto: Rotman-UTP.

Frayling, C. (1993). *Research in Art and Design.* London: Royal College of Art Research Papers vol. 1.

Gaglione, S. (2017). Heavy Metal project: Second look. *Unfolded, 2,* 4.

Gemser, G. & Leenders, M. (2001). How integrating industrial design in the product development process impacts on company performance. *Journal of Product Innovation Management*, *18*, 28-38.

Gemser, G. Candi, M. & van den Ende, J. (2011). How design can improve firm performance. *Design Management Review, 22*, 72-77.

Gruber, M. de Leon, N. George, G. & Thompson, P. (2015). Managing by design. *Academy of Management Journal, 58*, 1-7.

Hanington, B. & Bella, M. (2012). *Universal methods of design : 100 Ways to research complex problems, develop innovative ideas, and design effective solutions*. Beverly, MA: Rockport Publishers.

Hassi, L. & Laakso, M. (2011). Making sense of design thinking. In Karjalainen, T. M. Koria, M. & Salimäki M. (Eds.), *IDBM Papers vol 1* (pp. 50-63). Helsinki: Aalto University.

Joziasse, F. (2000). Corporate strategy: Bringing design management into the fold. *Design Management Journal, 11*, 36-41.

Keinonen, T. (2008). Design in business: Views from the nucleus and the periphery. *Design Management Review,18*, 30-36.

Korvenmaa, P. (2014). *Finnish design: A concise history*. Helsinki: Aalto ARTS Books.

Liedtka, J. (2010). Business strategy and design: Can this marriage be saved?. *Design Management Review, 21*, 6–11.

March, J. G. (1991). Exploration and exploitation in organizational learning. *Organization Science*, *2*, 1, special issue: Organizational learning: Papers in honor of (and by) James G. March (1991), 71-87.

Martin, R. (2009). *The design of business: Why design thinking is the next competitive advantage*. Boston, MA: Harvard Business Press.

Noukka, R. (2012). Organizational and managerial practices in Finnish in-house design management. In Karjalainen, T. M. (Ed.), *IDBM Papers vol 2* (pp. 100-107). Helsinki: Aalto University.

Oswald, J. (2016). *What is business design - and why is it the most important design job of the future?* Retrieved November, 28, 2017 from http://www.digitalartsonline.co.uk/features/creative-business/what-is-business-design/

Ravasi, D. & Lojacono, G. (2005). Managing design and designers for strategic renewal. *Long Range Planning, 38*, 51-77.

Rodichev, A. (2016) *Business design-agent of change: Understand-define-apply*. Master's Thesis in International Design Business Management, Aalto University.

Rohini, V. (2016). *An insider's guide to business design at IDEO: What "good" looks like.* Retrieved November, 28, 2017, from https://medium.com/ideo-stories/an-insider-s-guide-to-business-design-at-ideo-adf993b9c12c

Sanders, E. & Stappers, P. J. (2013). *Convivial toolbox: Generative research for the front-end of design.* Amsterdam: BIS Publishers.

Seidel, V. (2000). Moving from design to strategy: The four roles of design-led strategy consulting. *Design Management Journal, 11*, 35-40.

Snelders, D. (2012). Useful fabrications: Four stories about design for business. In Karjalainen, T. M. (Ed.), *IDBM Papers vol 2* (pp. 120-137). Helsinki: Aalto University.

Stevens, J. & Moultrie, J. (2011). Aligning strategy and design perspectives: A framework of design's strategic contributions. *The Design Journal, 14*, 475-500.

Vaughan, L. (2017). Designer/Practitioner/Researcher. In Vaughan L. (Ed.), *Practice-Based Design Research* (pp. 9-17). New York: Bloomsbury.

Yin, R. K. (2002). *Case study research: Design and methods.* Thousand Oaks,CA: SAGE.

About the Authors:

Simone Gaglione is a strategic, visual and product designer. He holds a MA in International Design Business Management at Aalto University of Helsinki with a minor in Creative Sustainability and a BSc in Product Design at Politecnico di Milano. (www.simonegi.it)

A. İdil Gaziulusoy is the Assistant Professor of Sustainable Design in the School of Arts, Design and Architecture of Aalto University and leader of NODUS Sustainable Design Research Group. She holds a MSc in Industrial Design and a PhD in Sustainability Science.