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## **SERVICE DESIGN AS A SOURCE OF COMPETITIVE ADVANTAGE FOR BIG CORPORATIONS AND FOR SMALL AND MEDIUM SIZED ENTERPRISES**

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<p>Shifting from manufacturing-based economy to a service and knowledge led economy has resulted in the increased need to design user experiences involving services. Designing such services is a complex task and various mechanisms of collaboration need to put in place between the designers, businesses both big and small, customers and other stakeholders, in order to design services and concepts which are perceived as valuable by the intended users. This will mainly be achieved through an extensive literature review on the theories of service design and design thinking, from the perspective of their evolution as concepts, as well as the key drivers of their use and obstacles in the adoption of service design as the new mainstream of strategic management of both large corporations and SMEs. Special emphasis will be given to the definitions of both service design and design thinking, in order to understand the similarities and differences in their contexts, to build a base to understand how big companies and SMEs may utilize the design principles to engage their user communities as a form of competitive advantage. The thesis also plans to provide recommendations for future study, in order to assist the academic community to establish service design as an academic field of study.</p> <p>Ever since the introduction of the terms design and design thinking by Nobel Prize winning economist Herbert Simon, the notion of design thinking has attracted wide attention among the academia and design practitioners, especially so after the early 2000s, as a wide variety of organizations, academic institutions, businesses and service providers have addressed issues related to service design. There is still an ongoing debate among both the academia and the practitioners, whether service design and design thinking are just another trendy words which will fade away in few years time or whether they are here to stay.</p> <p>Some of the key contributing factors in the growth of interest towards service design have been the changes in the economic structure.</p>	
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## INTRODUCTION

Globalization and the shift from manufacturing based economy to a service and knowledge led economy has resulted in the increased need to design user experiences involving services. Designing such services is a complex task and various mechanisms of collaboration need to put in place between the designers, businesses both big and small, customers and other stakeholders, in order to design services and concepts which are perceived as valuable by the intended users. Such collaboration is multi- and interdisciplinary by nature and requires new ways of thinking and conceptualizing as opposed to the tools required to design industrial goods. Depending on the overall objective of the company to employ service design in their business development, experts from areas such as marketing, business strategies, technology or human resources are often needed to successfully implement service design<sup>1</sup>.

The overall aim of this thesis is to study the differences in the roles of applying service design principles as a driver of competitive advantage for large corporations and within the SME sector. This will mainly be achieved through an extensive literature review on the theories of service design and design thinking, from the perspective of their evolution as concepts, as well as the key drivers of their use and obstacles in the adoption of service design as the new mainstream of strategic management of SMEs. Special emphasis will be given to the definitions of both service design and design thinking, in order to understand the similarities and differences in their contexts, to build a base to understand how big companies and SMEs may utilize the design principles to engage their user communities as a form of competitive advantage. Traditional theory of competitive advantage, by Porter (1985)<sup>2</sup>, will be also presented and bridges will be built to incorporate the service design as a component for competitive positioning of firms in their respective value chains. The thesis also provides recommendations for future study, in order to assist the academic community in establishing service design as an academic field of study.

1 Miettinen, S., & Koivisto, M. (Eds.). (2009). *Designing services with innovative methods*. Helsinki: University of Art and Design Helsinki.

2 Porter, M. (1985). *Competitive Advantage – Creating and Sustaining Superior Performance*, New York: Free Press.

Ever since the introduction of the terms design and design thinking by Nobel Prize winning economist Herbert Simon<sup>3</sup>, the notion of design thinking has attracted wide attention among the academia and design practitioners, especially so after the early 2000s, as a wide variety of organizations, academic institutions, businesses and service providers have addressed issues related to service design. The core belief behind the concept of service design is that the processes used by professional designers have the potential and value to companies to innovate and solve their complex problem in a holistic manner, incorporating and addressing the needs and expectations of their user communities. There is still an ongoing debate among both academia and practitioners, whether service design and design thinking are just more trendy words which will fade away in a few years' time or whether they are here to stay.

Some of the key contributing factors in the growth of interest towards service design have been the changes in the economic structure. One study regarding the changes in the US economy was done by Florida (2005)<sup>4</sup>, who discovered that the number of people employed by highly creative occupations had risen significantly from around 10% in 1900 to nearly 30% at the time of the publication of his book in 2005. Motivating these creative professionals was found to be equally challenging, as most organizations in which these creative professionals are employed, are not creative or supporting innovation and creativity.

## 1. Purpose of study

The aim with service design and the main reason for implementing service design processes within business context is the establishment of the relevant processes for designing context specific, sustainable and competitive services to meet the needs and requirements of the various customer and user segments, according to the capabilities of the service providers.

<sup>3</sup> See Hebert Simon biography, available online on: <https://www.nobelprize.org/prizes/economic-sciences/1978/simon/biographical/>

<sup>4</sup> Florida, R. (2005). The Flight of the Creative Class. The New Global Competition for Talent, 2005. HarperBusiness.

Therefore, the gained knowledge and tools, derived from the practice of service design, may be of valuable use to companies, regardless of their size. The quality of the service offering and hence the competitive advantage with regards to the positioning of the company may be significantly increased by the implementation of service design approach and methods, to ensure both short and long term goals of the organization are being reached in a way which is satisfactory to the user community and customer base of the company.

Service design improves the experiences of both the user and service provider by optimizing an organization's operations to better support customer journeys. The complexity of designing services today demands an understanding of the user perspective at top corporate levels.

The purpose with this thesis is to use the service design approach to develop strategies for leaders in service organizations to make decisions regarding future strategy of the company based on customer-centric insights. To create services that are perceived as valuable by the users, we need close collaboration between strategic business management and design thinking.

## **2. Objective of the study**

The shift of paradigm from goods based economy to services and experience economy requires new sets of thinking and practice for business professionals and in the field of business study as an academic discipline. The aim of this thesis is to study the relationship of design thinking and service design with the competitive advantage of SMEs. The author of the thesis believes that service design thinking has considerable potential to contribute to improving the quality of the service offering and user experience to the user communities of SMEs. The strategic use of service design will be further explored in detail in this qualitative study, in order to attain a better holistic understanding of the potential these methods and design principles have for the competitive advantages of SMEs.

One can say the success of any company involved in producing services nowadays, is based on a profound understanding of their customers' needs and expectations. With customers we mean the traditional customers as well as internal customers and other external stakeholders which take an active interest in the company and are part of the wider user community of the organization. Companies often are challenged with looking at their entire customer journey because of distributed operations, processes and responsibilities. The key feature of gaining such a holistic view of the user community involves looking at the various touch points and encounters between the different user segments and service providers, increasing the understanding of the experienced value creation within the service offered. Service design is a conceptual framework consisting of design principles and practical tools to combine the goals of the organization with the user community's perspectives and views<sup>5</sup>.

Service design as a methodology and practical tool box can be viewed as an instrument for strategic innovation, with the incorporation of understanding, mending, branding, innovating and reforming the corporate processes and operations. Managers in today's world are required to understand the importance of the maximizing the value of customer experience along the whole value chain. By looking at the way the service process is constructed, one can detect defects and weaknesses in the customer journey and needed corrections and alterations can be made. Based on the attained knowledge and understanding, the existing business model can be further developed to create a competitive service offering to the user community of the company<sup>6</sup> (Koivisto and Miettinen 2009, 259).

<sup>5</sup> Tuulaniemi, J. (2013). Palvelumuotoilu. Helsinki: Talentum Oyj. pg. 95-73.

<sup>6</sup> Miettinen & Koivisto (2009) Designing services with innovative methods. pg. 259.



### 3. The research question

For the purpose of this Thesis, the Author has selected the following main research question:

How can service design be incorporated as a driver of competitive advantage for large and small businesses?

The main research question has been further divided into the following three sub-questions, which will be addressed and answered in detail in the subsequent chapters of the research:

- What is design thinking and service design?
- What are the drivers and obstacles related to the use of service design by SMEs?
- How can service design increase the competitive advantage of SMEs and big businesses?

### 4. Methodology

Available previous academic literature provides various differing service design process definitions. However, the most of them share similar core design principles, with the business specific design process varying according to the project requirements, with detailed conceptualizing being one of the key requirement for any approach to using service design in real life situations (Tuulaniemi 2011, 126-127). Similarly, one can identify certain key phases of the service design process:

1. Understanding and defining the problem / challenge

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2. Gathering insights and understanding
3. Innovation and conceptualization
4. Testing, building prototype and implementation
5. Evaluation and feedback

Similarly, Koivisto and Miettinen (2009, 259) have offered the following conceptualization for the service design process:



**Figure 1. Service design process (Koivisto & Miettinen 2009, 256)**

In essence we have adopted a similar view on how this thesis will be structured. We will analyze first the problems SMEs face when designing their services, then move into understanding the concept of service design and design thinking, moving next to analyzing the sources of competitive advantages of both large companies and SMEs, to finally building a bridge to identify service design as a component of competitiveness in SMEs in the new service and experience based economy of today's business context.

This study will be of a qualitative nature, as the attempt is to analyze underlying causal relationships and motivational factors instead of quantifying the problem and transforming data into usable statistics<sup>7</sup>.

<sup>7</sup> Curedale, R. (2014). Introduction to design research methods [online course]. Retrieved 29th July, 2019, from <https://http://www.eventbrite.com/e/introduction-to-design-research-methodstickets-11588600817>. pg. 36-37.

## 5. Structure of the thesis

This Bachelor thesis is built on a study of existing literature on service design and design thinking, especially from the perspective of small and medium size enterprises and their competitiveness. Design thinking and the customer experience creation with customers and other relevant stakeholders plays a central position in this thesis. The literature found on the use of service design methods by businesses is also analyzed briefly, but mainly to provide a context to understand service design as a source of competitive advantage for business, both large and small.

The complexity involved in designing services shaped largely the theoretical framework for this thesis. Hence, a significant part of the thesis will focus on opening the concepts and definitions of service design and design thinking, as well as analysis of the specific factors influencing the design of services, as they require a holistic approach, as opposed to developing products, where the focus can be solely on the user experience of the product itself, not the complex set of interrelated relationships by the service producer and the user community, as is the case with service design.

## CHAPTER I: DEFINITIONS: DESIGN, DESIGN THINKING AND SERVICE DESIGN

### 1.1. Definitions of Design

Looking at traditional ways of using the word, design can be seen either as a product, as a process or as a practice. For the purpose and context of this Bachelor thesis, when using the word design, we will focus mainly on the practice aspect of design. However, I do this in relation to the changing character of the design product and the implications for design practice. In the seminal book by Simon, *The Science of the Artificial*, he writes that "design is the transformation of existing conditions into preferred ones".<sup>8</sup> Even though this definition has been used as a basis for all subsequent research on design related topics, there has also been serious criticism of Simon's definition, as it has been seen too positivistic and not in alignment with the ways designers practice their profession in reality<sup>9</sup>. Other authors, such as Schön, through their study of how designers work, have come up with a proposition with an interpretive definition of design as "reflection-in-action".<sup>10</sup> Additionally, others have offered definitions of design as meaning creation and designers as interpreters of meaning<sup>11</sup>. With limited available literature, there is not a set definition of design and the activities it involves. However, this is not surprising for an emerging field of investigation as "consensus among researchers can be reached only when theories converge into consolidated paradigms"<sup>12</sup>. As a young field of research, the growing number of articles published in academic journals and discussed in conferences is promoting this discipline which has been confused with engineering over the years and the design research community is finally

<sup>8</sup> Simon, H. A. (1996). *The sciences of the artificial* (3rd ed.). Cambridge, MA: MIT Press. Pg. 111.

<sup>9</sup> Dorst, K., & Dijkhuis, J. (1995). Comparing paradigms for describing design activity. *Design Studies*, 16(2), 261-274.

<sup>10</sup> Schön, D. A. (1983). *The reflective practitioner: how professionals think in action* (1st ed.). New York: Basic Books.

<sup>11</sup> Verganti, Roberto (2008), *Design, Meanings, and Radical Innovation: A Metamodel and a Research Agenda*. *Product Innovation management*. Volume 25, Issue 5. September 2008. Pg. 436-456.

<sup>12</sup> Calabretta, G., Montaña, J., & Iglesias, O. (2008). A cross-cultural assessment of leading values in design-oriented companies. *Cross Cultural Management Journal*. 15(4): 379-398.

claiming its autonomy<sup>13</sup>. There is no doubt that not all designs are the same<sup>14</sup>. However, as we have not come across a clear classification of design types, we will adopt couple of different views to differentiate between designs from customer perspective. Within product development literature, Bruce<sup>15</sup> distinguishes between incremental and radical development. Incremental development is defined as the gradual improvement of a product through a series of product variants. Radical development is defined as breakthrough innovation associated with significant jumps or changes in the product<sup>16</sup>.

## 1.2. Design Thinking

Ever since the publication of Simon's<sup>17</sup> seminal work about the nature of design, design theory publications begin to flourish in the 1980s, and became wide in their circulation during the first decade of 2000s. The academic community began showing interest mostly in both business and design fields in the linkages between the two, followed later by experts from other disciplines. Johansson-Sköldberg et al<sup>18</sup> have distinguished two different schools of thought within the design thinking subject matter: 'designedly thinking', referring to the practice by the professional designer and his competence as well as the theory of what being a designer constitutes. This school of thought is mainly rooted in the design field of study. The second school of thought, the one of 'design thinking', is mainly used by experts beyond the practice of design to describe the elements and methods used by designers but applied

13 Calabretta, Montaña & Iglesias (2008). A cross-cultural assessment of leading values in design-oriented companies. *Cross Cultural Management Journal*. 15(4): 379-398. Pg. 388.

14 Garcia, Rosanna and Roger Calantone (2002). A critical look at technological innovation typology and innovativeness terminology: a literature review. *Product Innovation management*. Volume 19, Issue 2 (March). pg 110-132.

15 Bruce, M., & Bessant, J. (2002). *Design in business: strategic innovation through design*. New York: Financial Times/Prentice Hall.

16Perks, H., Cooper, R., & Jones, C. (2005). Characterizing the role of design in new product development: an empirically derived taxonomy. *The Journal of Product Innovation Management*, 22(2), 111-127.

17 Simon, The sciences of the artificial. Pg. 111

18 Ulla Johansson-Sköldberg, Jill Woodilla and Mehves Çetinkaya (2013). Design Thinking: Past, Present and Possible Futures. *Creativity and Innovation Management*. Volume 22 Number 2 10.1111/caim.12023. <https://blogs.helsinki.fi/yhteisluomisenpolitiikat/files/2018/03/Creativity-and-innovation-management.pdf>. pg. 35.

in business and other contexts, especially in management. Design thinking uses the very same concepts that have been around in design circles for over 40 years but the novelty is in use and application of these principles in a business context. As with design, there is no single, universally accepted definition of design thinking. What distinguishes designers is what Diego Rodriguez<sup>19</sup> calls "design thinking" which is analytic thinking complemented with the unique way that designers think. Design thinking is by nature evidence-driven, including thinking holistically and taking an integrative view, emphasizing experimenting, and with the core characteristics of intuitive thinking and optimism. As for the work done by David Burney<sup>20</sup> for him design thinking as a term is a way to define thinking that has the potential to produce transformative innovation. However some designers and design scholars are not comfortable with the notion of 'design thinking' as a concept as for them the term is associated with a distinction between thinking and the act of doing.

### 1.3. Service Design

Although design has long been recognized as one of the key drivers for innovation and competitive positioning within product design, only more recently has it been acknowledged as such in the design of services. Today one can say, service design is used to refer to methods and processes used by professionally trained designers applied to the development of services<sup>21</sup>. Service design is a creative, viable and user-centered design process that is used by firms to create value for their customers or users and serves as a competitive advantage for the service provider and the value chain of the company as a whole.

However, this understanding may be further expanded upon by looking in-depth into the approach with a focus on the front end of innovation in this emerging field of service design as a subject matter of academic study. The front end is used to describe the area where

19 Fernando Merino and Diego Rodriguez. Business services outsourcing by manufacturing firms. *Industrial and Corporate Change*, 2007, vol. 16, issue 6, 1147-1173.

20 Burney, David & Nancy Levinson (2013), "An Interview with David Burney," *Places Journal*, May. Accessed 29 Jul 2019. <https://doi.org/10.22269/130528>.

21 Mager, B. (2004). *Service design: a review*. Köln: Köln International School of design.

ideas are created and built into concepts to influence the direction and goals of the firm. In other words, new service concepts may sometimes make the firm take strategic decisions that are likely to affect its long-term scope, future strategy and value chains. Service firms may be both manufacturing companies which also have a service element as part of their products offering, as well as organizations where service is the core product and where tangible products sometimes are needed for the delivery of the service.<sup>22</sup>

Marketing theory has since the publication of Kotler's early writings established that design can play a key role in positioning strategy of the firm, helping the firm to achieve a better position and advantage over its competition by designing its products and services.<sup>23</sup> Service design thinking can be seen as a form of a connection between design, business and technology. The goal of service design is to visualize, formulate and choreograph solutions to as yet unidentified problems and challenges, by looking at the needs and expectations of the various user groups and service providers.<sup>24</sup> The research context of this thesis takes several theoretical perspectives into consideration, as service design is a holistic and multidisciplinary approach by default, based on tools and frameworks derived from the fields of technology, aesthetics, ethnography, marketing, management and social sciences.

In service design, the focus lies on maximizing the customer experience and the quality of services to the whole user community as the key value drivers for a company's success. Service design is also closely linked to the field of study of psychology in suggesting behavioral patterns related to the interaction between the user community and the service.

<sup>22</sup> Tuulaniemi (2013). *Palvelumuotoilu*. pg. 127.

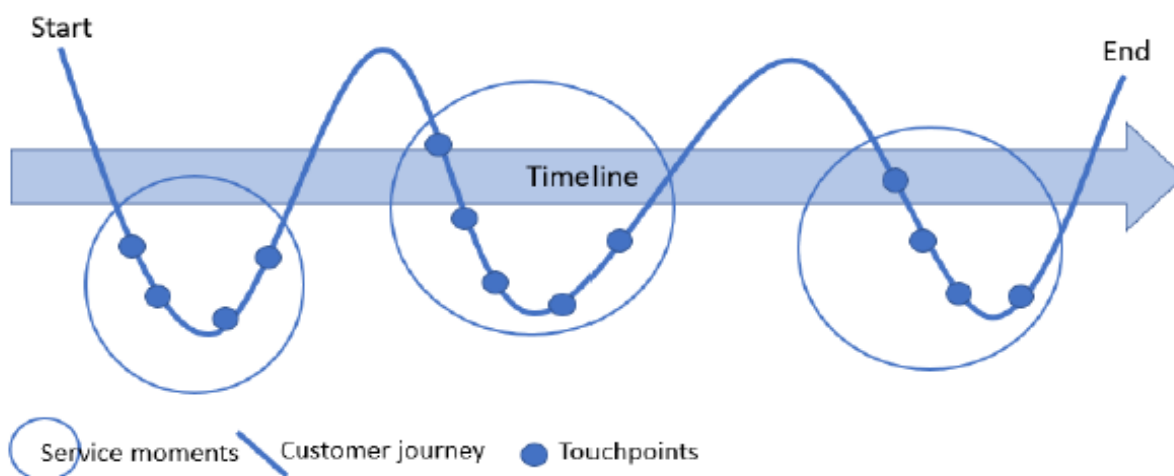
<sup>23</sup> Kotler, P., & Rath, G. A. (1984). Design: a powerful but neglected strategic tool. *Journal of Business Strategy*, 5(2), 16-21.

<sup>24</sup> Miettinen, S., & Koivisto, M. (Eds.). (2009). *Designing services with innovative methods*. Helsinki: University of Art and Design Helsinki. Pg. 35.

In this context, it is an interesting question to ask how service design tools could be put to best use by small and medium sized enterprises to achieve maximum competitive advantage over their existing competition and to deliver maximum value to their customers through the incorporation of service design principles and innovation in service area?

This trend has evolved from a mix of established design disciplines as well as business strategy, and borrows the best methods and tools from product, interaction, and communications design to create a process that works across multiple touch points and platforms. From a designer's viewpoint, service design is the process of inventing or improving experiences that happen across multiple touch points over time. From a business viewpoint, service design is a set of tools and strategies for defining and designing the way a business operates.

Development of services includes the design of a system of touch points (points of contact) between the service provider and the user. These series of touch points together constitute a service journey, which may also be referred to as a customer journey. The interrelated system of touch points requires orchestration in order to create service offerings that are perceived to be valuable by the user.<sup>25</sup>



<sup>25</sup> Tuulaniemi (2013). *Palvelumuotoilu*. pg. 127.



## Figure 2. Customer Journey (Tuulaniemi 2013, 22)

The aim of our research is look at how designing customer journeys through service design may lead to competitive advantages to small and medium sized enterprises. This discussion relates to the transformative power of service design, which in our case can be viewed as the process through which services have the capacity to disrupt traditional channels to market, business processes and models, and by doing so, they significantly enhance customer experience, by having network impacts upon the whole value chain. One may safely say that service design is one of the key elements shaping emerging sectors, industries and markets, therefore contributing to structural change and development of economies. Since it is increasingly difficult to stand out with your products alone, you need to make a difference by providing customers with a valuable service and meaningful experiences. While service design aims to ensure that the service is more efficient for the service provider and stakeholders, it also focuses on producing well designed experiences for the end user.

Efficiency, effectiveness and usability are mentioned as positive results from any service design project businesses, but these aspects are also very important from the customer perspective<sup>26</sup>. Digitization is here to stay and this has in many ways spoiled the customers, greatly enhancing their expectation levels and so magnifying their disappointment when these remain unfulfilled. Now the digital space and the use of smart phones and gathering of data from the user community's makes user centric design much easier, as the firms are able to retrieve immediate reactions from their communities with regards to new tests of products and services. This also contributes to the opportunity of larger personalization of service offerings than before<sup>27</sup>.

<sup>26</sup> Stickdorn, M., & Schneider, J. (Eds.). (2010). *This is service design thinking: basics, tools, cases*. Amsterdam: BIS Publishers.

<sup>27</sup> Tuulaniemi (2013). *Palvelumuotoilu*. pg. 16-22.

Service design is the process that helps brands transform from commodities to loyal partners that support customers in living a meaningful life. The aim in service design is to engage customers so that their demands/needs are met more effectively in sustainable, new and unexpected ways. Service design aims to ensure that service interfaces are useful, usable and desirable from the customer perspective, efficient and distinctive for the service provider and other stakeholders participating in the production of the service. In service design, aspects from psychology, user experience and design creativity meet to help brands rethink their entire ecosystems and in order to focus on adding value to the service and the customers' experiences<sup>28</sup>.

<sup>28</sup> Miettinen & Koivisto (2009). Designing services with innovative methods. Pg.34-35.

## CHAPTER II: SERVICE DESIGN IN BUSINESS PERSPECTIVE AND AS A SOURCE OF COMPETITIVE ADVANTAGE

In this chapter we will try to answer the main research questions. The following will be an attempt to understand the concept of service design in a business context, based on recent academic led discussions<sup>29</sup> on perspectives of service design as an emerging field of academic study. Furthermore, we will discuss the changing role of designers in the process of designing services to the user communities of SMEs. This is done with regards to the evolution of the Western economies and the prevailing trend of such economies to become more service oriented, moving away from the industrial production of goods towards producing services to a wide base of user communities. This trend is connected with the impact the designer and the company wish to bring about to their respective communities and which role designers as either internal or external experts and advisers to the companies play in the design process, as the key component of successful design is the ability to meet the needs and expectations of the various user segments and design the services in a holistic way to be consistent along the whole customer journey along the value chain. One of the key challenges the both large corporations and SMEs face is how to connect external professional designers in an integrated manner to design services.

### 2.1. Competitive Advantage of Firms

In his seminal book "The Competitive Advantage of Nations", Porter<sup>30</sup> (1990) developed his diamond model. The model incorporates four elements in this model: factor conditions, demand conditions, related and supporting industries, and firm's strategy, structure and rivalry. In addition to the diamond model, Porter's five forces model (1985) and Porter's value and supply chains are still used or the analysis of industry and firm and in order to measure

29 Clatworthy, S. (2011). Service innovation through touch-points: development of an innovation toolkit for the first stages of new service development. *International Journal of Design*. 5(2): 15-28. Special issue on designing for services.

30 Porter, M. (1990). *The Competitive Advantage of Nations*, New York: Free Press.

the competitiveness at the firm's level. In his diamond, Porter<sup>31</sup> points out that competitiveness involves more than just macroeconomic issues such as deficit, interest rate, and political stability. Even though macroeconomic issues are deemed as necessary to consider, the long-term determinants of productivity are based in the microeconomic firm level conditions, such as human capital, research and development capacity, physical infrastructure, and innovation capacity. Some of these conditions, such as innovation capacity, are hard to quantify, yet their possible impact on the competitiveness of the firm are of paramount importance.

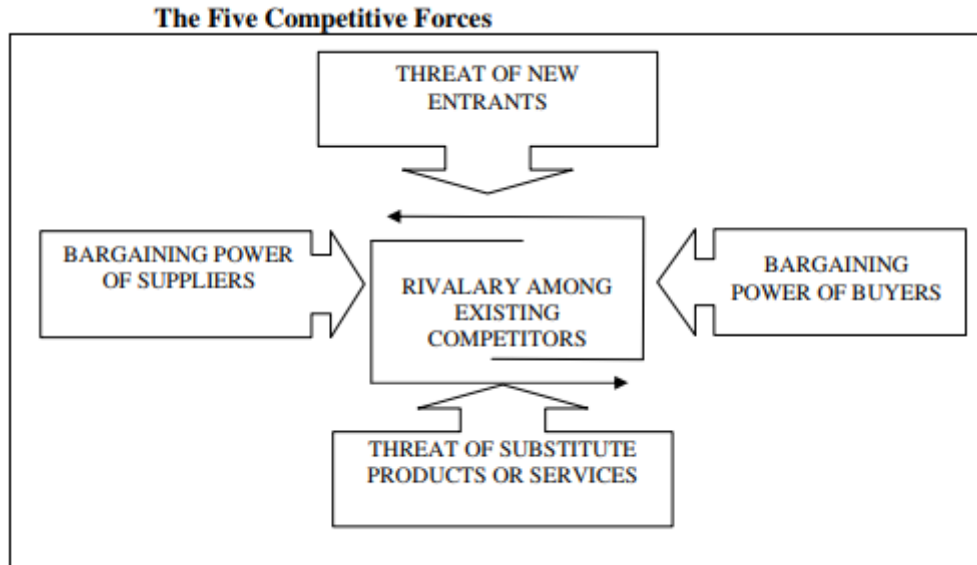
Porter<sup>32</sup> builds a bridge between the innovation support mechanisms and competitiveness. The related and supporting industries provide close working relationships whereby suppliers and users are located in proximity of each other that take an advantage of short lines of communication. Porter's main message is that there needs to be domestic competition amongst the firms in order to make them remain competitive and innovate in order to beat the competition.

Porter<sup>33</sup> explains that when a company earns above-normal profits, this is an indication of the firm's competitive advantage. Porter further writes that the industry structure is relatively stable, but can evolve over the time as the industry dynamics change and the strength of the five competitive forces varies from one industry to another. Also the crossing of the boundaries within the value chains and cross-industry innovations can have major impacts on the whole industries. The buyer's power influences the price that a firm can make as revenue and influences both cost and investment. The bargaining power of suppliers determines the costs of raw materials and other significant inputs. The intensity of rivalry affects the prices as well as the costs of competition. The threat of entry limits prices and the amount of possible competition, and shapes the investment required to deter entrants.

31 Porter, M. (1990) The Competitive Advantage of Nations. Pg. 18.

32 Porter, M. (1990) The Competitive Advantage of Nations. Pg. 19.

33Porter, M. (1985). Competitive Advantage – Creating and Sustaining Superior Performance, New York: Free Press. Pg. 35.



**Figure 3. The five competitive forces (Porter, 1985)**

The value chain is a notion which describes the full range of activities which are required to bring a product or service from conception, through the different phases of production, delivery to final consumer, and final disposal. The important foundation of Porter's theory on competitive advantage is that competitive advantage grows out of the way that firms organize and structure their discrete activities. The performed activities within a particular industry can be grouped into categories, as these activities can be divided broadly into primary activities and support activities. Primary activities are those involved in the ongoing production, marketing, delivery, and servicing of the product whereas support activities are those that provide purchased inputs, technology, human resources<sup>34</sup>.

## 2.2. A service perspective as a strategic approach

Gummesson<sup>35</sup> has stated that there is no generally accepted and complete definition of services. Services can basically be understood to as dynamic activities and processes, while

<sup>34</sup> Porter, M. (1985) Competitive Advantage – Creating and Sustaining Superior Performance. Pg. 35.

<sup>35</sup> Gummesson, E. (2007). Exit services marketing - enter service marketing. *Journal of Customer Behaviour*, 6(2), 113-141.

goods are static things. The service-dominant logic (S-D logic) perspective, introduced by Vargo and Lusch<sup>36</sup> in the field of marketing, views service provisions rather than goods as the basis for economic and social exchange. The researchers argue that the orientation has shifted from the product to the consumer. Likewise, Normann<sup>37</sup> argues that the notion of service logic (to use his term) forces us to shift our attention from production to utilization, from product to process, from transaction to relationship. Involving the customer as a co-creator of value in the value-creating process is central to S-D logic. In relation to innovation, the S-D logic provides a theoretical perspective that demands a shift towards a value perspective as well as shift from a company perspective to a customer-centric approach<sup>38</sup>. One may ask this: how will applying strategic use of service design to the S-D logic perspective empower the possibility of design of desirable service innovations? Innovation in service design is strongly shaped by the need to pay attention to the customer's point of view.

This viewpoint refers to how the perspective of the customer is given preference in the development of every touch point of a service journey. A way to obtain this is to apply specialized knowledge and competences to create benefits and added value when using the service<sup>39</sup>. One of these specialized competences is service design. In a business context, design is the process of seeking to optimize customer satisfaction and company profitability through the creative use of major design element<sup>40</sup>. In order to achieve an optimal design

<sup>36</sup> Vargo, S. L., & Lusch, R. F. (2004). Evolving to a new dominant logic for marketing. *Journal of Marketing*, 68(January), 1-17.

<sup>37</sup> Normann, R. (2007). *Reframing business: when the map changes the landscape*. Chichester: Wiley. Pg. 98.

<sup>38</sup> Michel, S., Brown, S. W., & Gallan, A. S. (2008). An expanded and strategic view of discontinuous innovations: deploying a service-dominant logic. *Journal of the Academy of Marketing Science*, 36(1), 54-66.

<sup>39</sup> Edvardsson, B., Gustafsson, A., & Roos, I. (2005). Service portraits in service research: a critical review. *International Journal of Service Industry Management*, 16(1): 107-121.

<sup>40</sup> Kotler, P., & Rath, G. A. (1984). Design: a powerful but neglected strategic tool. *Journal of Business Strategy*, 5(2): 16-21.

outcome, Gloppen<sup>41</sup> argues that leaders should exploit the synthesis of the specialized competences of service designers with business competences.

Research by Beverland<sup>42</sup> on design thinking indicates that there is lack of academic study on the general questions of what kind of firms are effectively able to develop a design function capable to generate sustainable competitive advantage and what kind of managerial practices, values, and assumptions are more likely to be associated with an appropriate management of design. Beverland describes in his article five design-based values held by studied companies: remaining true to craft, expressions of place, stylistic consistency, living up to the brand's heritage, and remaining current. Five methods of integrating design by the firms were being identified. These were:

- 1) Top leadership support and integration at the strategic level,
- 2) Simultaneous loose-tight coupling,
- 3) Being the marketplace versus being in the marketplace,
- 4) Intergenerational teams, and
- 5) deliberate decoupling.

The deliberate decoupling is a novel solution and involves designers walking a fine line between their commitments to their individual values and the evolving nature of the brand they are working with.

41 Gloppen, J. (2009). Perspectives on design leadership and design thinking and how they relate to European service industries. *Design Management Journal*, 4(1): 33-47.

42 Beverland, M. B. (2005). Managing the design innovation-brand marketing interface: resolving the tension between artistic creation and commercial imperatives. *Journal of Product Innovation Management*, 22: 193-207.

### 2.3. Evolution of the service design approach

The role of the professional designer is shifting and evolving, mainly as a result of the service economy becoming more relevant in the developed economies of the Western world. The needs and awareness of consumers constituting the user communities are becoming more complex and the service design must incorporate a number of issues and ensure the consistency of the overall design approach along the whole value chain.

In product development, the role of design has advanced from design being considered a sub-process in the 1990s to designers taking on a leadership role in the development of new products (Perks, Cooper, & Jones, 2005). Scholars are now arguing that regarding design as being about creating objects and experiences is too narrow a perspective, and that there is a need to explore the role design may have at a more strategic corporate level<sup>43</sup>. Lately, design thinking, how designers approach challenges by use of their methods, processes and attitudes – has aroused interest in the management discourse. Design thinking occurs at the border of business and design, according to Johansson and Woodilla<sup>44</sup>. In relation to how design may contribute to business strategy, Brown<sup>45</sup> has argued that thinking like a designer can transform the way firms develop products, services, processes, even their strategy. Liedtka<sup>46</sup> argues that strategic thinking and design thinking are both concerned with what might be and how to realize the desired future state of the firm or of a service. Similarly, Martin<sup>47</sup> makes the point that the design-thinking organization applies the designer's most crucial tool to the problems of business, inference to a new explanation, which are lean prototyping and the abductive reasoning, looking more deeply at the problem that they're facing. Understanding a customer in a more deep, holistic, ethnographic sense. The design

43 Cooper, R., Junginger, S., & Lockwood, T. (2010). Design thinking and design management: a research and practice perspective. In T. Lockwood (Ed.), *Design thinking. Integrative innovation, customer experience, and brand value* (pp. 57-63). New York: Allworth Press.

44 Johansson, U. & Woodilla, J. 2010. How to avoid throwing the baby out with the bath water: An ironic perspective on design thinking. EGOS Colloquim 2010: June 30 - July 3, Lisbon, Portugal.

45 Brown, T. (2008). Design thinking. *Harvard Business Review*, 86(6): 84-92.

46 Liedtka, J. (2000). In defense of strategy as design. *California Management Review*, 42(3): 8-30.

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



of services relates to business strategy at the corporate level, in the sense that everyone in a service organization is part of shaping the customer's total experience along the whole value chain and customer journey of the service offering to the user community. This experience is affected by the complex direct relationships of the various user segments and the service providers along the value chain.

According to Holmlid<sup>48</sup>, the challenge of service design is related with its business, innovation and strategy focus, which are usually highly context specific. Design as a field must always be contextualized within a wider holistic perspective, taking into account the complexity inherent in its use, as designing services involves a cross-disciplinary collaboration of experts with various backgrounds and their orchestration to work together to reach intended goals and objectives. Therein lies the biggest difference to developing single products, as they can be designed with the product's user experience in focus, whereby designing services involves looking at the entire customer journey of the user community.

In the early 1990s, service design has been established as an academic discipline. Service design was first introduced in 1991, by Prof. Dr. Michael Erlhoff from Köln International School of Design (KISD)<sup>49</sup> as a design discipline. In 2000, Engine Service Design, the first service design consultancy, opened for business in London. Since then the promotion and use of service design has taken off in academia as well as in the private and the public sector.

Today, we understand service design to be a creative process used by designers, often working within innovative areas of a business. However this is a fairly recent development as the practice began life in the management literature of the late 1970's early 1980's, with examples of common service design tools such as blueprinting being used in the services industry. It is only during the past decade that designers have taken these tools as their own,

48 Holmlid, S. (2007). Interaction design and service design: expanding a comparison of design disciplines. Paper presented at the Nordes 2007. *Design Inquiries*. 2nd Nordic Design Research Conference. Stockholm, May 27-30.

49 <https://kisd.de/en/studium/menschen/prof-em-dr-michael-erlhoff/>

combined them with user-centric design methods, and developed a new area and market for service design. This mix of disciplines proved to be powerful for businesses and organizations that operate across multiple platforms and deliver services across a large number of touch points.

However developments over the past decade have pushed ideas of service to the forefront of a number of fields – in contemporary businesses, public service and third sector organizations, and among professional service firms in technology and design. This new interest in service design may also be explained by the number of new technologies emerging during this period, resulting in products that perform multiple functions, integrate electronics, and connect to wireless networks. This convergence between technology and product application meant that several product and interaction design agencies found they were talking to their clients more about the service they were offering rather than the individual touch point they were designing.

#### **2.4. Drivers of use of service design as a competitive advantage**

The biggest driver of the demand for service design is derived from the growth of the service economy. Mirroring the macroeconomic shift towards services, global rankings of leading firms, such as the Fortune 500, contain more service companies than in previous decades. In some cases, manufacturing or product-oriented firms have transformed themselves into predominantly service providing companies. Physical goods production has become secondary to firms that instead focus on the provision of “business solutions”. This whole growing business process outsourcing sector is challenging the existing notion of manufacturing being the driver of economic growth.

Manufacturing firms’ transformation into service providers is part of a shift in the comparative advantage of advanced economies. As China and other emerging markets move up the value added ladder in manufacturing, straight goods production has fallen under intense cost pressure. Many manufactured goods, for instance consumer electronics, have become commoditized. In fact, due to this trend the high income countries have lost competitiveness

in such manufacturing. They have been able to stay competitive in part by shifting towards business solutions rather than the sale of products, as the price elasticity of demand for business solutions is lower than for hardware.<sup>50</sup>

The management literature refers to this as the “servitisation of products”, meaning mainly that products are seen not merely as physical things but as a complex solutions consisting of the physical products, the accompanying service and the interaction as a user experience between the service provider, the product and the whole user community in addition to the individual customer. Technological change is another important driver for firms to adopt and use service design in order to achieve competitive advantages. Technology developments including cloud computing, digitalization, and the continued expansion of access to wireless and mobile networks are resulting in changes for all organizations by enabling more frequent connections between customers and firms, and between customers and other stakeholders. The types and amount of data, including data from the “internet of things”, has developed opportunities to connect with end users and the wider user community in novel ways. One such example is how increased use of high speed mobile internet has changed the way news is distributed and created in the first place. Readers no longer have to wait for the evening TV broadcast or the morning newspaper, but the news audience of today wants to watch and be updated live as things unfold for which they are interested in. People are also more interested in unfiltered data so they can formulate their own positions.

A third driver for the use of service design by companies is the development that boundaries of firms are redefined as they have untangled the traditional boundaries of what is seen as the firm and its external stakeholders. A holistic value chain and stakeholder perspectives on strategic management hold that the firms should manage all of their value chain and design every user experience along all the major touch points on that value chain. Engaging with

<sup>50</sup> European Union. (2014). Service design as a means to advance business models. Retrieved on 29.07.2019 from: <https://ec.europa.eu/docsroom/documents/13406/attachments/2/translations/en/renditions/native>. Pg. 10-12.

users, customers, stakeholders, regulators, citizens and many others reinforces how many actors play roles in co-creating value in the form of a service. Powerful and engaged customers drive what firms consider as valuable to offer to their user communities. Firms, both big and small, are opening up to their user communities, and vice versa the whole value chain can be seen as an integrated network with all actors as co-creators of value in the larger stakeholder context. This trend requires development of new competencies within firms to be able to embrace them and to use them to advantage. This is producing opportunities for service provider firms who are ahead in understanding the transition from customer-centered product organizations to delivering services requiring the participation of the whole network. These ecosystem led firms, which are more likely to be agile SMEs rather than more static large corporations, are leading the way to a more user centric future business world.<sup>51</sup>

## **2.5. Main obstacles of SME business in service design as a competitive advantage**

The use of service design can be much greater if new service development and delivery is formalized in organizations. Few firms use, and develop, methods to elicit ideas for new services, and select among them subsequently. The nature of services is, given their characteristics, such that it is difficult to define moments that offer a 'natural' occasion for review. Service design is often an ad-hoc process that is not embedded in the organizational structure. Even when service design is more formalized, the final stage of testing a new service is often done by simply bringing it to the market.<sup>52</sup>

The company cases and academic literature show that firms providing services are more competitive when they

- are innovative, and
- organize their innovation process

<sup>51</sup> Tuulaniemi (2013). *Palvelumuotoilu*. pg. 127.

<sup>52</sup> European Union (2014). Service design as a means to advance business models. Pg. 13.

and prevent it from being ad hoc process. An external party with knowledge on formalization of service design can be very valuable, as illustrated by these cases. Another important obstacle is formed by the fact that it is hard to value and finance intangible service assets. Large majority of service firms invest little or nothing on research and development in the traditional sense, mostly focusing on human resources development, in the form of trainings and other organizational change activities. These kinds of costs are generally not very well reflected in financial statements and therefore set limits to small and medium sized service firms to access to private finance and government public funding support mechanisms.

Also, another challenge is the perceived lack of intellectual property (IP) protection of service designs. This is even more valid when the designers are external to the firm. Services are generally perceived as difficult to protect, in particular for their intangible assets. Moreover, service design is by its very nature an interdisciplinary approach, as it involved the development of new services. Service design adds to the core of business strategy a new layer from a design perspective. This combination of business and design skills is often not found in one employee and therefore needs to be cultivated by firms through the building of these skills in team environments. Also, universities and other academic institutions are already offering Bachelor and Master programs which have incorporated the different expertise and skill sets for service design mastery. <sup>53</sup>

<sup>53</sup> European Union (2014). Service design as a means to advance business models. Pg. 15.  
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## CONCLUSIONS

The central aim of this thesis has been to understand service design as a source of competitive advantage for large and small businesses. As an emerging and interdisciplinary approach by default, service design intends to bring about a holistic approach to designing the customer experience, involving various internal and external experts, ranging from marketing to production to logistics and designers of various kind, of the company to conceptualize, map and design the customer journey from the beginning to the end of the value chain of the service process.

Traditional concepts of an enterprise's competitiveness, such as the five forces model of Porter, do not emphasize the role of design as a factor catering to the competitiveness of the firm. However, as we have shown in the review of the existing literature, the shift from goods based economy to service and knowledge based economies requires different approaches to create experiences for the customers and other stakeholders, as a way to increase loyalty and as a key contributing factor to differentiation to the existing and emerging competition by other firms. Nonetheless, taking into account how these forces may change after some time is a valuable method for investigating situations to shape the vital arrangement, and successful plan can add to the powers at play. Clients' dependability is particularly relevant in three of these powers, decreasing their propensity to change to substitutes, changing allegiance to rivals and the danger of new entrants. Dedication is fortified by configuration, concentrating on addressing client needs through a convincing, engaging encounter, strengthened with a solid brand character and picture.

Service design can be defined as an activity of organizing and planning people, processes, infrastructure, processes and material flows and communication between the various value chain actors in a way which improves its quality and the interaction between the various service providers and actors along the value chain, resulting in a unique customer experience.

Such a design approach is user-centric and is used by organizations to create value to their user communities and hence serves as a source of competitive advantage over competition. The use of service design as a structured tool kit and approach has been fairly recent. The first associations dedicated to service design were set up by the opinion leaders in the sector in the early 2000s (such as the establishment of the Service Design Network in 2004) and the area has been fairly scarcely researched until now, especially when it comes to specific service design approaches used by specific companies to increase their competitiveness. In this thesis we have tried to look at various ways how companies can use service design principles and tools to make their customer experiences more viable to their user communities. We have also looked at the various drivers and obstacles related to the use of service design by European SMEs, from the perspective of the scalability of these approaches.

Our research shows that designing of services is hard to separate from design management and from the management and operation of services. Further research on this emerging field will be necessary in order to establish the basis for service design research as an academic field of study.

These include health services, organizational strategy and business transformation. In order to design service innovations that are perceived as valuable by the user, there is a further need for design management at the corporate level to adopt a leadership approach that synthesizes the most relevant competences from design and business. For design management, this is a matter of not only facilitating mutual understanding to optimize collaboration between design and business. It is also one of enabling the different sub disciplines in design to collaborate and contribute to service innovations. The complexity, multiple touch points and time factor involved in designing services make a holistic view on service design leadership all the more central and important in the response to meeting future challenges for business in the service industry.

With the help of service design methods, customer needs and expectations can be transformed into innovation and sustainable solutions to problems in the company's service process. By visualizing the customer journey and ideas for development, practically applicable and concrete improvements could be made in this thesis. There are many advantages of linking design thinking to leadership in the innovation process. The whole organization becomes more empathetic towards customers' needs.

In the service design approach, you focus on the motivational drivers in human behavior to manage and create sustainable customer relationships. The objective is to improve the customer satisfaction by creating valuable experiences in the service. Service design is a systematic and human-centered way of developing the business in a holistic manner. Services are complex, time bounded and interactive systems. The purpose of service design is to engage all participants in the service-process and through co-operation create competitive and efficient services.

The research question 'How can service design be incorporated as a driver of the competitive advantage for large and small businesses was answered in the study. The ability to understand drives competitive advantage is in the core of the new service economy. We discovered that this can be achieved through innovation and one such innovation is represented by service design. The methods used in service design enable creation of successful and meaningful customer journeys leading to long term relationships and loyalty across the value chain. Service design is a source of disruption as it transcends the product-focused approach towards a user community centered approach. The success of the implementation of service design in the business strategy is ultimately dependent on the participation of the main actors within the value chain of the company.

To create a service design-centric culture and achieve innovation objectives at a deeper and more sustainable level, broad commitment to design thinking is needed on every level in a company, starting with the top management. The most essential element to change the



strategic intent in an organization is having leaders who value and realize the benefits of service design. Change is impossible if the top management is not committed to changing their perspective and be open to incorporate design at the core of the company's vision and innovation strategy.

Service design offers numerous benefits at the level of the organization and of the users of the service. It can lead to improvement of idea generation, service improvement, and improved risk management. In the longer run, service design can lead to greater customer satisfaction, increased user community loyalty, decreased time-to-market, and improved innovation practices, processes and capabilities.

What can one say about the applicability of service design as a source of competitive advantage for SMEs? Even though service design as an approach has been used more widely by larger corporations mainly due to their larger marketing budgets and the ability to hire external designers as experts or hire them in-house, still the author believes that the largest potential of service design lies within the SME sector. This is because SME's are more customer centric and due to their smaller management structure, find it easier to iterate their services to quickly fit customer need and demand, whereas larger corporations face multiple layers of decision making and tend to take decisions in a exceedingly measured procedure.

Similarly, if we consider the context of large corporations and other big businesses, service design provides a comprehensive framework which firms can utilize to become more competitive through applying disruptive innovations from a holistic perspective. These large companies usually have the financial means to engage external and internal designers to work on their customer journey maps. Large companies are however more difficult to manage so there are several challenges to their incorporating the service design approach, as their managers might have a traditional mindset and will not be committed to the new values and processes. Without such involvement any service design project is bound to fail. SMEs on the

other hand have the ability to be much more agile in their approach to new business initiatives.

We have seen the transformation power that service design can have to disrupt entire industries when applied to the context of designing user experiences and customer journeys along the whole value chain. Small and medium sized enterprises, who are usually very product oriented, may by adopting a user-centric approach to their services, become dominant players in their markets by utilizing the positioning power that service design offers.

## SUMMARY

The shift from manufacturing economies to service and knowledge economies has had profound impacts on how business is done. One of the trends observed in the last decades has been the rise of the creative class. The practice and thinking processes of such creative professionals have been studied extensively since the 1980s but ever since the early 2000s there has been a rising interest towards using design principles and applying them of designing services, instead of and in addition to the more traditional product design.

One of the key questions we posed ourselves in the beginning of the thesis was to analyze how service design can contribute to the competitive advantage of small and medium sized enterprises. We went through the definitions of service design and design thinking, to understanding the implications of applying service design in business context, to understand the disruptive power inherent in service design to transform whole industries. This power of disruption lies within the fact that service design by nature focuses on the whole value chain instead of a single use experience with a product. Services have multiple touch points along the customer journey, each of which need to be analyzed as part of the whole.

Even though it has been historically mainly the large corporations who have had the financial capacity to employ designers and apply the principles of service design, we have seen that the disruptive power of service design applies well to SME context as well. The servitisation of the economy and the crossing of traditional boundaries of industries as new products and services need to be developed and entangled to remain competitive, has led to new opportunities for competitive advantage and more so, to the need to analyze the industries from a more holistic perspective, outside of the traditional value chain analysis, to consider each of the touch points along the customer journey not as individual independent events but as a part of the whole experience between the company and its user community.

Some of the main challenges for the development of service design is the lack of unified concepts around it, including the very concept of design itself. The second main obstacle is the challenge of intellectual property right protection in the case of service design, as well as the nature of designers as usually outsiders to the company. Third problem lies within the same context, as businesses in general value each other based on financial metrics and the value of service design can't be read from the financial statements of a company, as it is much harder to quantify.

Porter's classic theories on the competitiveness of firms and nations stress the importance of innovation to competitive advantage. They however fall short of explaining how firms should structure their approaches to be innovative. We have seen that service design provides small and medium sized enterprises with a disruptive tool to position themselves along their value chains to achieve competitive advantages.

As we have seen, there are benefits, obstacles and drivers for the use of service design in business context. Mostly these drivers and challenges are the same for both big and small businesses, but with some clear differences as well. The SMEs are more agile and able to endorse and adapt new business practices and mindsets quickly, whereas big businesses and large corporations have existing mindsets which may block the penetration of new business ideas and concepts, especially if the top management is not endorsing them fully, to ensure the whole organization's commitment to service design. One can yet say that one thing is for sure: as services take a more central stage in our modern economies and services are entangled at every stage of delivering physical products, as companies are competing with each other globally, service design has become one of the key positioning strategies to achieve competitive advantage on the global market place. It is becoming increasingly clear that, instead of being a trend or a buzz work about to fade away, service design is here to stay.

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