

LAPPEENRANTA UNIVERSITY OF TECHNOLOGY
School of Business
International Marketing Management

Simo Stigman

**PRODUCTIZING PROFESSIONAL MARKETING SERVICES THROUGH
SERVICE BLUEPRINTING**

Supervisor: Professor Liisa-Maija Sainio

Examiner: Professor Olli Kuivalainen

ABSTRACT

Author:	Stigman, Simo Juhani
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The goal of this research is to study how knowledge-intensive business services can be productized by using the service blueprinting tool. As services provide the majority of jobs, GDP and productivity growth in Europe, their continuous development is needed for Europe to retain its global competitiveness. As services are turning more complex, their development becomes more difficult.

The theoretical part of this study is based on researching productization in the context of knowledge-intensive business services. The empirical part is carried out as a case study in a KIBS company, and utilizes qualitative interviews and case materials. The final outcome of this study is an updated productization framework, designed for KIBS companies, and recommendations for the case company. As the results of this study indicate, productization expanded with service blueprinting can be a useful tool for KIBS companies to develop their services. The updated productization framework is provided for future reference.

FOREWORD

Writing this master's thesis has been both a great challenge as well as a huge accomplishment in my life. The biggest challenge was related to the empirical part of the thesis, as the focus of it changed halfway during the research. This naturally provided its own complications and setbacks, but in the end I managed to overcome them with support and help from other people, whom I wish to thank now.

First, I want to thank my wonderful girlfriend Dasha. She believed in me and supported me during the whole almost nine months that I worked on this thesis. Without her constant support, this thesis would have probably been left unfinished. I also want to thank my supervisor, Professor Liisa-Maija Sainio, and examiner, Professor Olli Kuivalainen. Their assistance, comments and suggestions during my work helped me when I was facing difficulties. I am very grateful to my mentor at the case company, who provided me with this interesting and challenging topic and the possibility to do it as a case research for the company. Finally, I want to thank my family, especially my parents, who have always supported me in everything I do. It is because of their love to me and my brother and sister, that I am today reaching such a milestone in my life. They have always wanted nothing but the best for us and done everything in their power to provide it. My father has been an inspiration to me during my whole life, and his experiences were the motivation for me to apply to study business at LUT. Therefore, this master's thesis is dedicated to him.

In Lappeenranta, 21.5.2014

Simo Stigman

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1 INTRODUCTION

Services development has historically received much less attention than manufacturing development, both from managerial and academic perspectives (Alam & Perry, 2002; Edvardsson et al., 2013). However, the importance of services in developed economies is constantly increasing, and they can account for two thirds of employment and GDP (EU Commission, 2007). To address this disparity between the importance and lack of research on services development, this thesis researches services productization. This study concentrates on knowledge-intensive business services, or KIBS, companies. Because KIBS companies often customize their services based on individual customers, they are usually operating on tight schedules, budgets and low resources. This can, among others, hamper their growth and result in lower operating margins. By productizing their services, KIBS companies can achieve many benefits, such as being able to combine standardization and customization and achieve faster growth. In this study, productization has been expanded by two other concepts: modularization and service blueprinting.

This study is carried out as a normative case study. The case company is trying to achieve growth and is in the process of renewing its strategy. The CEOs of both the case company and the case company's parent company are interested in productization as a process, and look towards it as an answer to some of the problems they are facing. As with any new project, the support and approval of the management is necessary for the success of the project (Simula et al., 2010).

This study aims to provide answers to what productization actually is and how knowledge-intensive business services, specifically marketing services, can be productized. The thesis consists of five chapters. The first chapter presents the background of the study, research problems and objectives, research methodology, literature review, definitions of key concepts, theoretical framework, delimitations and the structure of the thesis.

1.1 Background of the study

The vital role of innovation has long been recognized in manufacturing companies and the research related to them. However, in service companies innovations have historically played a significantly smaller role than in manufacturing companies, and even the research related to service innovations is much less developed than for products (Alam & Perry, 2002; Edvardsson et al. 2013). The failure rate of new services remains at a high 43 per cent even today (Edvardsson et al. 2013), with no improvement in the past ten years (Stevens & Burley, 2003). Edvardsson et al. (2013) mention several reasons for the high failure rate, among them the lack of research on new service development and the key success factors influencing it, as well as the inadequate understanding of the strategies, methods and activities related to service development.

Jaakkola (2011) and Valminen and Toivonen (2012) have researched productization in the context of KIBS companies. They have found out in their studies, that productization is a framework that can be applied to KIBS companies for their development activities. However, since productization traditionally has focused on the development of non-KIBS companies (Rope, 2005; Valminen & Toivonen, 2012), a revised framework is needed for KIBS productization.

This study is carried out as a normative case study. A suitable case company was found, which is currently performing service development activities. The company provides a good opportunity to test the framework in a real life situation. The case company is a Finnish marketing company. The case company is the subsidiary of a bigger marketing company, which offers different marketing services from strategic marketing to social media marketing, from marketing planning to audio-visual and studio services. The case company offers different international marketing services for Finnish companies. One of the main competitive advantages the company has, is the possibility to use the services of the parent company to offer their customers a wider array of marketing services, something that many

of its competitors cannot offer. Even though the company concentrates on international marketing operations, it operates wholly within Finland.

The lack of academic research on productization and especially productization of knowledge-intensive business services, combined with the real life problem of the case company, provide an interesting research topic. The practical contribution of the thesis for the case company is to deepen the understanding of the processes, goals and benefits of service productization, in order to better serve their customers and to optimize the internal processes to save resources in service production. In addition, the theoretical and practical knowledge created and gained through this research will help in increasing the expertise of the case company in their future productization processes and in developing their service offering further. The thesis should also provide theoretical knowledge about productization of knowledge-intensive business services for other researchers and managers.

1.2 Literature review

This research studies the concepts of productization, service blueprinting and modularization in the context of knowledge-intensive business services, abbreviated as KIBS. In this chapter the key contributors to the existing literature are presented.

The term productization is mostly used by Finnish academics such as Valminen and Toivonen (2012), Jaakkola (2011), and Sipilä (1999), and management consultants such as Parantainen (2011) and Rope (2006). It does not have one universally agreed upon definition. Most authors, however, define productization as a way to refine a service into a more 'product-like', tangible, and commercial entity (Parantainen, 2011; Simula, Lehtimäki & Salo 2008; Valminen & Toivonen, 2011). Other times productization might refer to a process, whose objective is to standardize the service process (Jaakkola, Orava & Varjonen, 2009). Some authors, such as Torkkeli et al. (2005) and Sipilä (1999), have researched

productization as a part of the whole service development process in general.

Traditionally modularity has been researched from a social sciences or product manufacturing point of view (Campagnolo & Camuffo, 2010; Rahikka, Ulkuniemi & Pekkarinen, 2011). Sundbo (1994) was one of the first researchers to suggest the concept of service modularization, and he defined it as a method to standardize the company's service offering, but in individual modules, which can be combined with the customer for a unique and tailored service. Baldwin and Clark (1997) refined Sundbo's model by defining the service modules as subsystems that can be designed independently, but when used together function as a whole product offering or service portfolio. Besides modularization of products or services, the concept has been introduced into production systems and organizational development. However, these two aspects are relatively underdeveloped when compared to modularization of products. (Campagnolo & Camuffo, 2010) In their study Gerhenson et al. (2003) came to the conclusion that, as with productization, there is no universal definition of modularity. Other researchers (Pekkarinen & Ulkuniemi, 2008; Rahikka, Ulkuniemi & Pekkarinen 2011) mention the scarcity of research on service modularization as one reason for the lack of a universal definition.

Service blueprinting is a method invented in the 1980s by Shostack (1984, 1987). Kingman-Brundage (e.g. Kingman-Brundage, George & Bowen, 1995) and Fließ and Kleinaltenkamp (2004) expanded the model by visualizing the service processes. Zeithaml and Bitner (2003, 233) describe service blueprint as "a picture or map that accurately portrays the service system so that the different people involved in providing it can understand and deal with it objectively regardless of their roles or their individual point of view." Service blueprinting was originally introduced as a process control technique, whose main advantages were identifying failure points and preemptively solving problems caused by these failure points (Shostack, 1984). As the focus of service firms has turned more

towards their customers, service blueprinting has also evolved into a more customer-focused tool (Bitner, Ostrom & Morgan, 2008). Kingman-Brundage (Kingman-Brundage, George & Bowen, 1995) further developed the tool by adding separating the onstage actions from the support actions. The later additions to service blueprinting include the use of video, photographic or visual components in the blueprint (Zeithaml & Bitner, 2003).

1.3 Research questions

The main objective of this research is to find out how professional marketing services can be productized by using service blueprinting. In order to find an answer to the main research question, the topic is further examined through supportive sub questions, which provide necessary background information regarding the main research question. The main research question together with the sub questions also provide the basic structure, on which this thesis is built upon. The main research question is:

How can professional marketing services be productized through service blueprinting?

To be able to understand how professional marketing services can be productized, it is necessary to find out their characteristics in contrast to other types of services. Therefore, the first sub question is:

How do the characteristics of professional marketing services affect their productization?

The second sub question examines the main benefits and challenges related to the service blueprinting technique and what implications it has when used in productizing professional marketing services. The second sub question is:

What are the implications of the service blueprinting tool when it is used for productization?

1.4 Theoretical framework

The theoretical framework of this study is based on the works of Jaakkola (2011) and Valminen and Toivonen (2012). Their productization frameworks have been combined with service portfolio modularization, as initially suggested by Sundbo (1994), and the components of services blueprinting, as developed by Shostack (1984; 1987) and updated by Kingman-Brundage (Kingman-Brundage, George & Bowen, 1995) and by Fließ and Kleinaltenkamp (2004). The theoretical framework is presented below in Figure 1.

Jaakkola (2011) has defined the three core elements of productization: specifying and standardizing the service offering, tangibilizing and concretizing the service offering, and systemizing and standardizing the service processes and methods. These elements form the basis of the theoretical framework, to which the other components are linked.

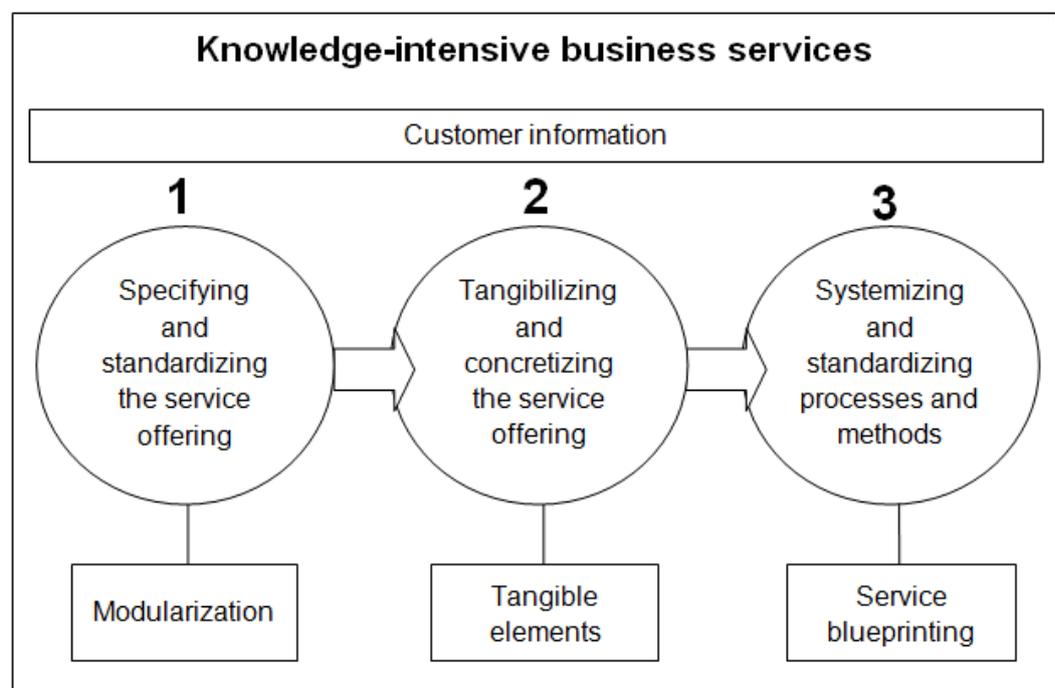


Figure 1. Theoretical framework. Based on Jaakkola (2011) and Valminen and Toivonen (2012).

The three core elements are combined with the results from Valminen and Toivonen's (2012) findings on the importance and continuous use of customer information during the productization process. They have mentioned customer understanding as one of the biggest challenges related to the productization of KIBS. Therefore, customer information has been taken into account in the framework. Customer co-production is one of the defining characteristics of KIBS companies. It has a key role in the productization process of KIBS, due to the important role the customer plays in the service production. This leads to the process being collaborative in nature. (ibid) Valminen and Toivonen's results are presented in the upper row of the framework, where customer information spans through the whole productization process.

The lower row of the framework includes the two concepts of modularization and service blueprinting. Modularization helps in achieving standardization while retaining the benefits of customization. Due to the highly customized nature of knowledge-intensive business services, it is difficult or impossible to fully standardize the service, because of the different needs and requirements of customers. By dividing the service into smaller, standardized modules, the customer can combine them for a customized service that is simultaneously standardized for the company to produce. Service blueprinting illustrates the delivery process of the service from the customer's perspective. By utilizing the blueprinting tool, the company can keep a customer-centric focus during the productization process, as emphasized by Valminen and Toivonen (ibid).

1.5 Definitions and key concepts

In this chapter the key concepts of the thesis will be explained briefly.

Productization

According to Simula, Lehtimäki and Salo (2008), productization as a word does not exist in the English language and it lacks an established concept in literature. Therefore, its definition varies from research to research.

Simula, Lehtimäki and Salo (ibid) define productization as a process wherein a company that operates in a service business wants to modify the intangible service offering they provide to a more clearly defined outcome. According to Salmi et al. (2008) productization occurs when a company gives its service tangible features and makes the buying process easier for the customer. Parantainen (2011) has defined productization as the work that results in knowledge being refined into a saleable, marketable and deliverable service product. Rope (2006) defined productization as the process of building the service offering into a concrete, buyable model, whose content the customer knows, even if the service they are buying is conceived to be very abstract. Even though all of the definitions vary from one another, they still have a common view of productization as a process: tangibilizing the service offering in order to facilitate the buying of the service. In this case the definitions of the academics (Salmi et al., 2008; Simula, Lehtimäki & Salo, 2008) and of the management consultants (Parantainen, 2011; Rope, 2006) share the same main idea.

In this research the three dimensions of productization suggested by Jaakkola (2011) will be used. According to them, productization is divided into three key practices: specifying and standardizing the offering, tangibilizing and concretizing the service offering, and systemizing and standardizing processes and methods (ibid).

Service blueprinting

A service blueprint is a visual representation of a service delivery process. Service blueprints are created in a manner that they can easily be understood by all the different stakeholders involved in the service process. Service blueprint consists of five components: customer actions, onstage (visible) contact employee actions, backstage (invisible) contact employee actions, support processes, and physical evidence. These five areas are separated from one another by different lines: line of interaction, line of visibility, line of internal interaction, and a line of implementation, respectively. Service blueprinting differs from other mapping or flowchart

techniques because of the central role of the customer. (Bitner, Ostrom & Morgan, 2008; Zeithaml & Bitner, 2003)

Modularization

By using modularization a product or service is divided into smaller parts in order to gain the simultaneous benefits of standardization and customization (Torkkeli et al., 2005), specifically to bring cost savings and the possibility to serve multiple different variants of the product or service than without modules (Hölttä-Otto, 2005). Rahikka, Ulkuniemi and Pekkarinen (2011) define a service module as the smallest individual service unit that can be offered to a customer either individually or as part of a larger service offering. Originally modularization was used in physical product design (Campagnolo & Camuffo, 2010) and Sundbo (1994) was the first researcher to introduce this concept into services design.

Tangibilization

Service tangibilization refers to making the intangible service offering more concrete for the customer, that is, to reduce the abstractedness of the service and to be able to better communicate the content and quality of the service and of the professional service provider's expertise to the customer (Jaakkola, 2011; Jaakkola, Orava & Varjonen, 2009; Simula et al., 2010). In this way the customer feels he is getting something concrete instead of only an intangible, ambiguous service. This facilitates the buying process, because people buy rather something tangible that they can witness for themselves (Parantainen, 2011; Simula et al., 2010). It is therefore one possibility for organizations to overcome the weaknesses related to services intangibility. Tangibilization of services is done in this thesis by using the service blueprinting tool.

KIBS

Knowledge-intensive business services, or KIBS, is a term that was first used by Miles et al. in 1995 and is widely used in service studies, but as with other terms and theories studied in this thesis, it lacks an established

definition (Toivonen, 2004). Valminen and Toivonen (2012) define KIBS as "expert companies that provide services for other companies and organizations". These include, among others, IT services, management consulting and marketing communications (ibid). Originally Miles et al. (1995) referred to KIBS as companies that rely heavily upon professional knowledge and either produce services based on their knowledge or are primary sources of knowledge themselves. The original idea of KIBS is unchanged, as pointed out by the similarity of the definitions by Valminen and Toivonen (2012) and Miles et al. (1995). As listed by Valminen and Toivonen (2012) marketing services are considered to be KIBS.

1.6 Delimitations

Productization as a process can be applied to almost any company. However, this study is limited to researching productization from a knowledge-intensive business service's and, more specifically, a marketing company's perspective. Therefore, the findings from this research can only be applied to other professional knowledge-intensive business services that have common characteristics with marketing services. Since the study will be conducted as a single case study, applying the results to other service productization studies might be challenging. Every productization process is different and unique and this study only provides one case example of a productization process.

Theoretically, this study will focus on productization, which includes service blueprinting and modularization, in the context of knowledge-intensive business services. There are several different concepts that have the same goal as productization or that share some similarities with productization. These include such concepts as commodization, mass customization, and commercialization. These theories will not be covered in this study due to them providing little value for this specific case study research.

Professional knowledge-intensive business services are highly focused on individuals with expert knowledge, they are very heterogenic and customer input has a significant impact in the creation and delivery of the service. However, customer interviews were not conducted during this study, as the focus was on developing the company's internal processes instead of external visibility. This might be an interesting possibility for future research.

In this research productization is viewed as a separate project within the company. However, in reality, this is not the truth. Productization of services is an on-going sequence, not a single and separate project (Simula et al., 2010). For successful productization, several factors that are left outside of this study have to be taken into account: customer input and opinions, the company's strategy and various other external and internal factors. These factors are not taken into account in the theoretical framework of this study, though it is of utmost importance to understand and acknowledge these factors and their effects on productization. In this study these factors are deliberately excluded from the theoretical framework and the research for two reasons. First, this study focuses on internal instead of external productization. Second, this thesis provides an initial research for the case company into using productization for their service development, instead of trying to fully productize the company's services.

1.7 Research methodology

The theoretical part of this research is based on existing literature on the subjects of productization, service blueprinting, modularization, and knowledge-intensive business services. Numerous articles and books are studied in order to create a solid theoretical basis, upon which the empirical research can be built. As the main focus of this study is to investigate how professional marketing services can be productized through service blueprinting, the other phases of productization, such as modularization, will have less emphasis in this research. However, they

are included into the study, as they are important parts in the overall productization process.

This study is done as a qualitative, normative case study research. There are several factors that warrant using qualitative instead of quantitative research methods. As Boeije (2010) has mentioned, qualitative research is an applicable method for research, when a study has an explorative nature. This can mean, for example, a new and emerging field of interest that has not yet been extensively researched. Qualitative research is suitable in this kind of a situation, because of its flexibility and the possibility to adjust data collection and analysis based on the emerging findings. (ibid) This is true with productization. According to Jaakkola, Orava and Varjonen (2009) productization is thus far little researched topic within the academic field of new service development. Even less is known about productization of services of knowledge-intensive businesses (Valminen & Toivonen, 2009).

According to Yin (2009), case study is a suitable form of qualitative research, when the research tries to answer a "how?" or "why?" question. Furthermore, case studies are used when contemporary events are examined, which cannot be manipulated (ibid). Case studies typically use direct observation of the events being studied, as well as interviews of the people involved in the events, questionnaires and archived material (Huberman & Miles, 2002). A qualitative case study "facilitates the exploration of a phenomenon within its context using a variety of data sources" (Baxter & Jack, 2008, 544). Therefore, it can be argued that case study is a correct form of qualitative research for this study. First, the research question of this study is a "how?" question: "How can professional marketing services be productized through service blueprinting?" Second, this study utilizes different types of data sources: existing secondary material and interviews.

The empirical research is done in the form of interviews and the analysis of the case company's reports and materials. The interviews implemented are semi-structured, one-on-one interviews. The data produced by the

interviews is transcribed for easier use as a reference. The interviews are conducted with key personnel in the case company, who are part of the service process that will be productized. Because the roles and responsibilities differ between the interviewees, each interview situation was unique. Therefore, no interviewee answered exactly the same questions. The basic outline of the interviews is shown in Appendix 1.

Most of the interviewees were interviewed after the service blueprint had been drawn. This was done in order to verify, whether the service blueprint matches the current situation or not. Additionally, it was deemed easier to conduct the interviews and gather additional information from the employees after blueprinting. This is due to a couple of reasons. First, it is easier to talk about the whole service process, as the employee can be shown the blueprint. Second, it is easier to recognize development ideas and suggestions, when the whole process has been visualized. Recognizing the problem areas and giving suggestions for future developments were the biggest contributions of the employee interviews. The only personnel interviewed before the drawing of the service blueprint were the CEOs. Especially the case company's CEO was interviewed several times before and during the drawing of the blueprint. The CEO contributed a lot to the blueprinting process.

The interviews have several objectives. Firstly, the interviewees' roles and tasks in the service process will be revealed, in order to find out the possibilities for improving efficiency in the work process. Secondly, the interviewees have the possibility to influence the productization process with their own ideas and feedback. As Sipilä (1999) writes, it is important to engage the personnel with the productization process, to reduce the resistance to change, to motivate the personnel and to ensure the quality of the process. The second objective of the interviews will aim to affect these key factors.

The qualitative analysis of the case company's reports is used in order to find out possibilities for productization. This way, inefficient and repetitive tasks can be identified and eliminated. Documents analyzed include

offers, contracts, yearly reports, internal documentation and guidelines. Overall, several hundred pages of documentation is read and studied. Most of these are old offers and contracts, which have been written between 2011 and 2014. These documents provide a basic understanding of the case company's services and their production processes. The documentation is used for drawing the blueprint, and along with the case company's CEO's interviews, are the major sources of information for blueprinting.

2 PRODUCTIZING PROFESSIONAL MARKETING SERVICES

This chapter starts with a general overview of service characteristics, after which the characteristics of professional marketing services are discussed in more detail. Because KIBS are unique and differ from "traditional" services, it is important to acknowledge their defining characteristics, as they affect their productization and development. After the KIBS characteristics have been identified, the benefits of productization are discussed. Finally, the three main steps of productization, as depicted in the theoretical framework, are discussed individually and in detail.

2.1 Service characteristics

There are many differences between services and manufactured goods. Due to the unique nature of services, it is suggested in academic literature that the so-called IHIP attributes are used as the defining characteristics of services to distinguish them from products (Ritala et al., 2013). The IHIP attributes are intangibility, heterogeneity, inseparability of production and consumption, and perishability (e.g. Fitzsimmons & Fitzsimmons, 2011; Hoffman & Bateson, 1997; Lovelock & Gummesson, 2004; Zeithaml, Parasuraman & Berry, 1985). Figure 2 visualizes a basic separation between services and products. Additionally, it distinguishes between "traditional" services and knowledge-intensive business services. (Sipilä, 1999, 26)

		Knowledge-intensity of the offering	
		Low	High
Nature of the offering	Physical	Traditional manufacturing industry	High-Tech companies
	Service	"Traditional" service industry	Knowledge-intensive business services

Figure 2. Separation between services and products (Sipilä, 1999, 26).

Intangibility refers to the fact that services are performances, not objects, and therefore they do not have a physical existence (Zeithaml, Parasuraman & Berry, 1985). It has been argued that intangibility is the single most important aspect that differentiates services from products (Zeithaml & Bitner, 2003): it is the major source of differentiation, from which the three other characteristics are derived (Hoffman & Bateson, 1997). Even though services can include some degree of tangible elements, such as sitting in an airline seat or eating a meal during a flight, the service performance itself is still an intangible performance (Lovelock, 1996).

According to Edvardsson, Gustafsson and Roos (2005) there are two ways of looking at heterogeneity. First, the service processes and service providers tend to be heterogeneous between each other (ibid). Secondly, the service production in a given company is considered to be heterogeneous due to variation in its employees and in its customers in terms of their needs and expectations (Edvardsson, Gustafsson & Roos, 2005; Zeithaml & Bitner, 2003). These characteristics exemplify the fact that services do not have a standard outcome, and that the outcomes and their quality differ depending on the specific customer and the service context (Lovelock, 1996).

Perishability distinguishes services from goods in that they cannot be stored or saved in inventories (Hoffman & Bateson, 1997), nor can they be resold or returned (Zeithaml & Bitner, 2003). Because services cannot be stored, they are lost forever if not used (Fitzsimmons & Fitzsimmons, 2011). This creates management challenges for example in the full utilization of service capacity (ibid).

The production and consumption of services is inseparable (Fitzsimmons & Fitzsimmons, 2011). In more detail, inseparability of production and consumption refers to three issues: the service provider's physical connection to the service that is being produced, the customer's participation in the service production process, and the participation of

other customers in the service production process (Hoffman & Bateson, 1997; Zeithaml & Bitner, 2003).

Even though these four characteristics of services are well-established and widely recognized, they have also been criticized. Already in the 1970's Levitt (1972) argued that there are no service industries, but only industries where service components have a more important role than in others. His view was that service development should not be regarded any differently from product development, and he argued that service production could be developed in a similar manner as product manufacturing. These arguments are the theoretical roots of the concept of productization. Many authors agree with Levitt's views that the conventional differences between products and services are becoming outdated (Bettencourt & Brown, 2013; Santamaría, Nieto & Miles, 2012).

Intangibility has been criticized because services often include some tangible elements to them, such as the room in a hotel (Lovelock & Gummesson, 2004). In addition, many products are getting more intangible features. For example, foodstuffs are packaged in protective packages that hide the sensory stimuli and e-commerce cuts off buyers from goods in advance of delivery (ibid).

Services can in fact be standardized in many different ways, which has lead to heterogeneity being criticized as a defining characteristic of services (Lovelock & Gummesson, 2004). Standardization of services can occur through IT, such as with internet-based services, through machine-intensive service operations, such as ATMs (Edvardsson, Gustafsson & Roos, 2005), or by offering the same service to multiple consumers at the same time, as with university lectures (Vargo & Lusch, 2004b). Lovelock and Gummesson (2004, p. 28) conclude that "it is inappropriate to continue to generalize about heterogeneity (or variability) as being a distinctive characteristic that sets all services apart from all goods".

Inseparability has been criticized due to the reason that a large group of separable services exists, which do not involve the customer directly,

which results in the production and consumption of the service taking place separately (Lovelock & Gummesson, 2004). These separable services include among others car repair, goods transportation (Edvardsson, Gustafsson & Roos, 2005) or pre-packed and pre-measured hamburger patties to ensure quality and consistency (Levitt, 1972).

Finally, services can also be stored for example in systems, buildings, machines, knowledge and people (Edvardsson, Gustafsson & Roos, 2005), which contradicts the perishability characteristic of services. The ATM is a store of standardized cash withdrawals (Gummesson, 2000), live performances such as music concerts or educational lectures can be recorded for later use (Lovelock & Gummesson, 2004), and students can internalize their university education thus inventorying the knowledge and skills for later use (Vargo & Lusch, 2004b).

These criticisms form the basis for service development frameworks such as productization and service blueprinting. If services actually were completely intangible, no physical form of them would exist, as proposed by the service blueprinting framework. It would be impossible to standardize services, if they were completely heterogenic with no similarities between service situations. Back-end functions would not matter in the service production process, if the producer of the service and the consumer were entirely inseparable. If services were completely perishable, it would not be possible to gain time-efficiency or cost-efficiency by pre-manufacturing materials, such as hamburger patties or service catalogues.

2.2 Knowledge-intensive business services

This chapter discusses knowledge-intensive business services and their defining characteristics. By examining these characteristics closely, their impact on the productization process can be identified. This way, the proper productization process for knowledge-intensive business services can be derived.

The majority of European jobs, GDP and productivity growth are based on service activities. The service sector has an especially dominant role in developed countries, where it accounts for approximately two thirds of employment and GDP. (EU Commission, 2007) Knowledge-intensive business services have displayed more rapid and sustained growth rates than those of other economic sectors, and they represent one of the fastest growing areas of the European service economy in terms of employment generation and trade value (EMCC - European Monitoring Centre on Change, 2005). Therefore, the success of the service economy is closely linked with future economic development (Santos-Vijande, Gonzáles-Mieres & López-Sánchez, 2013), and the continuous, positive development of knowledge-intensive business services has a key role in ensuring future economic growth.

In literature, knowledge-intensive business services have been found to contribute to economic growth (Huang & Ji, 2013; Inklaar, Timmer & van Ark, 2008). Additionally, they show considerable innovation and growth potential and they support economic development both at regional and national levels. This is due to KIBS not only transmitting knowledge to their customers, but also by them having a crucial role in "knowledge re-engineering": with their activities, KIBS improve innovation capacities of client companies and get stimuli for their own innovations. (Muller & Zenker, 2001) Furthermore, services, and KIBS specifically, also have an important role in the development of the manufacturing sector. Manufacturers are already offering services that are linked to the goods they produce, but more and more manufacturers are starting to offer services that aim to support the use of the goods or the client's business in a broader sense (Valminen & Toivonen, 2009). KIBS can offer these manufacturers the knowledge that is required to successfully add more service offerings along with their goods, and therefore ensure the continued success of the manufacturing companies.

The term knowledge-intensive business services, or KIBS, was first used in the mid 1990's by Miles et al. The term "intensive" emphasizes that the

knowledge functions concerned involve more than just the transfer of existing information; it includes also knowledge that has been created during the transfer process. (Miles et al. 1995; Toivonen, 2004)

Miles et al. (1995) identified three principal characteristics of KIBS:

1. they rely heavily upon professional knowledge;
2. they *either* are primary sources of information and knowledge themselves and offer services based on this knowledge (e.g. reports, measurements, consulting) *or* they use their knowledge to produce intermediary services for their clients' production processes (e.g. communication and IT services);
3. and they are of competitive importance and mainly have as their clients other businesses.

More accurately, Miles et al. (1995, 18) defined KIBS as services that "involve economic activities which are intended to result in the creation, accumulation or dissemination of knowledge". Den Hertog (2000, 505) suggested a more precise definition of KIBS: "Private companies or organizations that rely heavily on professional knowledge, i.e., knowledge or expertise related to a specific (technical) discipline or (technical) functional domain; and supply intermediate products and services that are knowledge based". Bettencourt et al. (2002, 100-101) defined KIBS as "enterprise[s] whose primary value-added activities consist of the accumulation, creation, or dissemination of knowledge for the purpose of developing a customized service or product solution to satisfy the client's needs". Finally, Muller and Doloreux (2009, 65) refer to KIBS as "service firms that are characterized by high knowledge intensity and services to other firms and organizations, services that are predominantly non-routine."

Although the definitions vary from one another, there are common elements in all of them. First, the services of KIBS are demanded by other firms and public organizations and they are not produced for individual consumers. Second, knowledge intensity is emphasized, and it can refer

either to the need for qualified professionals with specific knowledge or to the requirements for the transactions between the producer and the procurer of the service. (ibid)

It can be concluded, that even though there are similarities between the definitions, there is no standard and generally accepted definition of KIBS. This fact has also been recognized in literature (e.g. Toivonen, 2004). However, some consensus exists among researchers on what service branches and companies actually form the KIBS sectors. According to Muller and Doloreux (2009) NACE (a European classification of economic activities) has become increasingly popular in Europe for identifying KIBS firms. Under this classification, the KIBS sectors are computer and related activities, research and development, and other business services. Each category also contains some number of sub-categories. The KIBS sectors and sub-sectors according to the NACE classification are presented in Table 1. As can be seen from the emphasis in the table, the case company is considered to be a KIBS company.

In this study, KIBS will be defined using the definition of Toivonen (2004, 36). She understands KIBS as "business service companies, i.e. private service companies which sell their services on markets and direct their service activities to other companies or to the public sector. They are specialized in knowledge-intensive services, which means that the core of their service is contribution to the knowledge processes of their clients, and which is reflected in the exceptionally high proportion of experts from different scientific branches in their personnel." This definition covers all the main characteristics of KIBS: they are business service companies that offer their services to other businesses, they specialize in knowledge-intensive services and they have a high proportion of experts in their personnel.

Table 1. KIBS sectors and sub-sectors (Muller & Doloreux, 2009).
(Emphasis added)

NACE code	Description
72	Computer and related activities
721	Hardware consultancy
722	Software consultancy and supply
723	Data processing
724	Database activities
725	Maintenance and repairs of office, accounting and computing machinery
725	Other computer-related activities
73	Research and development
7310	Research and experimental development in natural sciences and engineering
7320	Research and experimental development in social sciences and humanities
74	Other business activities
741	Legal, accounting, book-keeping and auditing activities; tax consultancy; market research and public opinion polling; business and management consultancy; holdings
7411	Legal activities
7412	Accounting, book-keeping and auditing activities; tax consultancy
7413	Market research and public opinion polling
7414	Business and management consultancy activities
742	Architectural and engineering activities and related technical consultancy
743	Technical testing and analysis
744	Advertising
7484	Other business activities

The most prominent characteristic of KIBS is co-production of the service together with the customer. Lovelock and Young (1979) were among the first to emphasize the issue of customer co-production in services, suggesting that customers are important contributors to firm productivity. According to Bettencourt et al. (2002, 101) "the significance of co-production is especially pronounced for knowledge-intensive business services." Valminen and Toivonen (2012) highlight that KIBS transactions

are very often collaborative and co-produced together with the customer, instead of solutions provided on behalf of customers. Therefore, this co-production relationship has to be taken into account in the productization process (ibid). To include the co-production relationship in the productization process, service blueprinting will be used. Service blueprinting is a tool that visualizes the service process (Jaakkola, Orava & Varjonen, 2009). By using service blueprinting, the tasks of the customer and the producer can be identified, along with the points of customer contact and the evidence of service from the customer's point of view (Zeithaml & Bitner, 2003). Having drawn the service process, the designer is able to see the points where the service can fail (Shostack, 1984). Additionally, points where the service process can be improved can also be identified, and therefore it serves as a great tool for productizing KIBS offerings.

Knowledge-intensive business services are often customized according to the specific needs of individual customers (Bettencourt et al., 2002). This happens because of the assumption that customization adds value to the service from the customer's perspective. Customers believe that they have unique problems and they desire customized services, not standardized, pre-packaged responses. (Petersen & Poulfelt, 2002) This can lead to a conflict between the desired outcome of productization (standardized service offering) and the nature of KIBS (customized service offering to appeal to customers). However, this conflict between standardization and customization may be rather misleading, since the working methods and processes of a customized service itself can be standardized (Salmi et al., 2008). Sundbo (2002) suggests that modularization can be used as an approach that combines the benefits of both approaches. By using individual service modules, the customer feels like they are receiving a customized and individual service offering, and thus the value of the service is higher to them, even though the service provider is only offering a standardized service in the form of service modules (Torkkeli et al.,

2005) Using service modules corresponds to Jaakkola's (2011) core element of specifying and standardizing the service offering.

Another major characteristic of KIBS is their reliance upon professionals with expert knowledge. This creates a multitude of problems for the service producer, such as buyers wanting to buy the knowledge of individual experts instead of the whole organization, the tacit knowledge of experts not being transferred to other members of the organization and managing and organizing in the organization being inefficient (Torkkeli et al., 2005). The buyer of the service is not unaffected by this characteristic either. Even routine buyers may experience considerable uncertainty when buying professional services, because they are only able to evaluate the value of the service to a very limited degree (Aarikka-Stenroos & Jaakkola, 2012). Because the outcomes of exchanges are uncertain, customers desire to manage their risks in buying services (Mitra, Reiss & Capella, 1999). As a solution to these problems, several authors suggest productization of the service offering (Jaakkola, 2011; Rope, 2006; Torkkeli et al., 2005). By systemizing and standardizing internal processes, the service process can be developed to be more controllable and efficient. Tangibilizing and concretizing the service offering, on the other hand makes, it easier for the buyer to assess the service's value before purchasing it. (Jaakkola, 2011)

Fährnich et al. (1999, in Bullinger, Fährnich & Meiren, 2003, 279) derived four different types of services based on the level of contact with the customer and the variety of each service event. These service types are depicted in Figure 3. Service type D is characterized by a high contact intensity and a high variety, which typically necessitates a high amount of customization and can prove to be difficult to standardize. KIBS belong to service type D, as exemplified by consulting services in the figure.

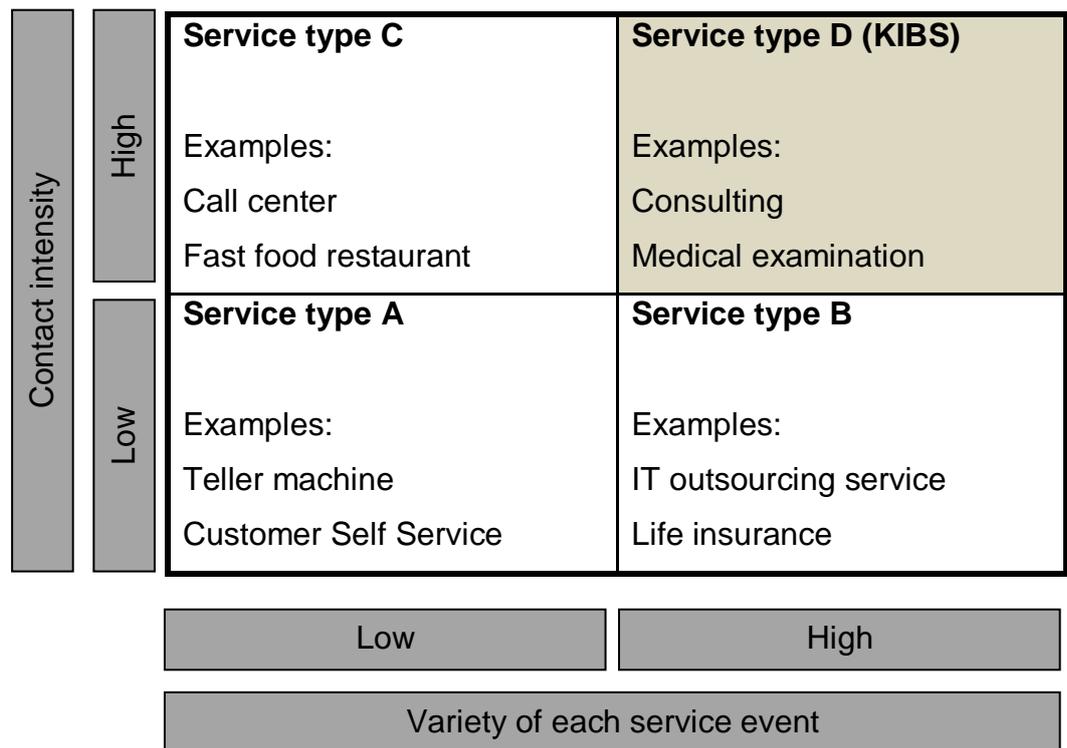


Figure 3. Service typology (Fährnich et al. 1999, in Bullinger, Fährnich & Meiren, 2003, 279).

2.3 Benefits and challenges of productization of services

This chapter discusses the rationale of productization in the context of knowledge-intensive business services. The motivators for productization and desired outcomes and results of the productization process are reviewed. Additionally, the possible risks and negative effects of productization are discussed. Due to the specific nature and characteristics of KIBS, the benefits gained through productization might differ from "traditional" services.

The innovation process of service firms tends to be an ad hoc one, and organizations have a tendency of reinventing the wheel when it comes to services development (Dolfsma, 2004). Even though it has been argued that productization and standardization prevent customization (Rust & Miu, 2006), in reality this conflict is less clear-cut and a productized and standardized service can have a high degree of customization (Jaakkola,

2009; Lampel & Mintzberg, 1996; Salmi et al., 2008). By standardizing the working methods and procedures or by standardizing the service offering with service modules, more time can be left for customized work and for maintaining customer orientation in operations (Salmi et al., 2008).

Jaakkola (2009) has identified three broad areas that are the main reasons for KIBS to productize their services: making internal processes more efficient, rationalizing and facilitating management, and facilitating sales. All of these three broad reasons are bundled up from several individual benefits and possibilities. Valminen and Toivonen (2012, 278) have come to the same conclusion of the main benefits of productization, albeit from a slightly different perspective: "The benefit that service companies seek thorough productization is first and foremost an increase in efficiency, profitability and competitiveness." However, the benefits of productization are not only limited to the ones that the company achieves, since the customers also benefit from productization (de Brentani, 1991).

As per Jaakkola's (2009) categorization, the first main reason for productization of services is to make the internal processes of the company more efficient, that is, to ease and systemize daily routines and work processes. Jaakkola (2009, 7) further explains this need for KIBS companies by stating that "much of the work done by professionals is unproductive and routine". As an example she mentions the process of writing offers and the considerable amount of time it takes out from other, more creative and meaningful work processes. This is also one of the problems the case company of this thesis has recognized and wants to deal with. Predefined processes or methods can be used to make writing and pricing offers faster and easier (ibid). This then leaves more time for creative, interesting, and value-adding work for the professionals. This not only makes daily work more motivating, but also drives the development of both old and new professionals in the company. When less time is spent on routine work and more on creative problem solving, the employees learn quicker (Torkkeli et al., 2005).

According to Sipilä (1999), productization improves efficiency in several ways: it gives clear goals for research projects, it forces the company to analyze and systemize their internal processes, which leads to more clear and rational work processes, and it gives possibilities to better division of labor within the company. Additionally, productization improves efficiency of internal processes by enabling systematic accumulation and better knowledge transfer between the employees (Valminen & Toivonen, 2012). Because much of the work in KIBS is customized for each individual customer, each employee may have a unique way of working (Jaakkola, 2009). By introducing more systematic and unified work processes with productization, the information and experience that is gained through customer projects is easier to capture and transfer to other employees (Sipilä, 1999). In an organization that deliberately uses its productized services as 'learning platforms', knowledge transfer to other employees is easier and better than in an organization that works on an ad hoc basis (Valminen & Toivonen, 2009).

The second main reason for productization is the need to rationalize and facilitate management. When a company defines and plans their service processes and methods, resource allocation along with planning and measurement become easier (Jaakkola, 2009; Simula et al., 2010). This enables, for example, a detailed analysis of individual projects and helps the company in identifying which work processes require improving. Data collection overall is easier, which helps the management with analyzing the costs and profitability of the individual services, projects, and customers (Torkkeli et al., 2005). Standardized work processes also enable new professionals to solve problems faster and more individually (Lehtinen & Niinimäki, 2005; Sipilä, 1999), thus requiring less tutoring from the old professionals and making orienting of new employees and partners easier (Jaakkola, 2009; Sipilä, 1999). Due to the reliance upon professional knowledge (Miles et al., 1995; Muller & Doloreux, 2009; Toivonen, 2004), KIBS are very person-centric. With the help of productization, expertise can be turned into an organizational instead of an

individual asset, so that the customer would buy a service rather than the help of an individual professional (Jaakkola, 2009). By reducing the person-centricity of the work, the service quality can also be improved by ensuring uniform quality in customer work (ibid). Productization also improves the recognizability, reputation, and value of the company (Sipilä, 1999), which all help in facilitating and rationalizing management within the company.

The third main point for productization according to Jaakkola's (2009) categorization is to facilitate sales. Due to the intangible nature of services (e.g. Fitzsimmons & Fitzsimmons, 2011; Zeithaml, Parasuraman & Berry, 1985), communicating their benefits to customers can be difficult (Lovelock, Wirtz & Chew, 2009), which leads to selling being a challenging and time-consuming process. Lovelock, Wirtz and Chew (2009) identify this problem as mental impalpability: due to the multi-dimensional and complex nature of services, customers have difficulties in understanding what benefits the service truly offers to them. This has also been empirically witnessed by Jaakkola (2009), who discovered in her study, that productization is often used to define and specify the content of the service so that it would become both easier to sell and to buy. She emphasizes this further by reporting that productization makes the benefits of the service more obvious for the buyer and, therefore, reduces the risk that the customers perceive in purchasing the service. Parantainen (2011) echoes Jaakkola's findings by stating that removing the fear of bad investments, that is, making the customer feel at ease and safe with the purchase, is one of the main reasons for productization.

Marketing of services is easier when the service offering has been productized (Simula et al., 2010; Sipilä, 1999). Due to the differences between products and services, as earlier described with the IHIP attributes, service marketing is more challenging than product marketing (Hoffman & Bateson, 1997). By adding more product-like features with productization, marketing will be more efficient as customers have fewer difficulties in recognizing the benefits of the service (Sipilä, 1999). Other

ways, in which productization can facilitate sales are defining and specifying the service and its production process, which demonstrates competence and trustworthiness of the firm (Jaakkola, 2009). Productization also enables companies to use different pricing methods, which are more beneficial for them than hour-based fees, such as fixed pricing (Sipilä, 1999). Additionally, a well-designed service may provide the firm with a key point of differentiation from its competitors (Bitner, Ostrom & Morgan, 2008). Junarsin (2010, 618) has summed up the benefits of productization: "It is only the new service products that provide distinguished attributes and are difficult to copy [which] can bring a competitive advantage."

Despite all of its positive influences, productization does not always proceed without difficulties. Some employees might be unwilling to share their expert knowledge and experience with others, because this intellectual capital is seen to be linked with their position and esteem (Valminen & Toivonen, 2008). Therefore older employees might be protective of their position and benefits and see new employees as threats and competitors. Another problem related to the personnel of the company is that people are often resistant to change and the same applies to productization. New ideas generated by productization are typically met with resistance from the company's employees before they are accepted and established (Heusinkveld & Benders, 2005).

To be able to productize service offerings, firms need to have a clear strategy and they need to invest in strategic planning and management, systematic marketing of their new services, competitor analyses, and service development (Sipilä, 1999). Small KIBS companies might not have the resources or willingness to invest in these areas, and they might lack the know-how within the company for productization of their services (Valminen & Toivonen, 2012).

One fear companies can have is that it is easy for their competitors to copy the productized service (Valminen & Toivonen, 2008). In the manufacturing context this fear is very real (ibid), but in the context of

KIBS it is often an unnecessary worry, because a knowledge product that consists of applied and interpreted knowledge is too complex to be successfully imitated by others (Gallouj, 2002, in Valminen & Toivonen, 2008). Even though services are intangible and it is difficult or even impossible to protect them with patents or trademarks, one way that companies can protect their service offerings from competitors copying them is by productizing the service and subsequently publishing it (Parantainen, 2011; Sipilä, 1999). By publishing its services the company signals their own knowledge and expertise and everyone entering the market after them with similar services is automatically viewed as a copier (Sipilä, 1999). Another worry that KIBS often have is that productization is oversimplification of the highly complex and specific customer problems that KIBS aim to solve (Valminen & Toivonen, 2008).

2.4 Productization process of knowledge-intensive business services

The often used defining characteristics of services (IHIP: intangibility, heterogeneity, inseparability, and perishability) together with the unique characteristics of KIBS (reliance upon professional knowledge, co-production of services, customized nature of service offering) present challenges in managing, marketing, and selling knowledge-intensive business services, especially in terms of operational management (Verma, 2000) and in terms of communicating, promoting, and pricing the services, calculating costs accurately, and controlling service quality (Clemes, Mollenkopf & Burn, 2000). In this chapter the term productization together with its applications to service development and service production will be discussed.

Productization of services is not a very widely covered area of research in the academic world. As discussed earlier, productization can be seen more as a managerial practice than an academic theory. Even the name productization is not always used, but some refer to commercialization of services, productification or modularization.

The term productization is mostly used by Finnish academics such as Valminen and Toivonen (2012), Jaakkola (2011), and Sipilä (1999), and management consultants such as Parantainen (2011). It does not have one universally agreed upon definition. Most authors, however, define productisation as a way to refine a service into a more 'product-like', tangible, and commercial entity (Parantainen, 2011; Simula, Lehtimäki & Salo 2008; Valminen & Toivonen, 2011). Other times productization might refer to a process, whose objective is to standardize the service process (Jaakkola, Orava & Varjonen, 2009). Many authors do nevertheless share the same idea of what the two goals of productization are: maximization of customer benefits and improving the profitability of the service provider (Jaakkola, Orava & Varjonen, 2009; Lehtinen & Niinimäki, 2005; Sipilä, 1999). Productization can also be used in the context of product development, but in this thesis productization has been delimited only to the context of services development.

Sipilä (1999, 12) defines productization as "defining, designing, developing, visualizing, and producing the service offered to the customers in a manner so that the customer benefits are maximized and the service provider's profit targets are achieved." However, Sipilä has a very strict view of what a productized service is. He believes that a service has been productized only when it can be sold (like a manufacturing company can sell one of its business units or a production facility) or licensed forward. The main objectives of productizing professional services are to improve the impressiveness of one's own work and the customer benefits (ibid).

Lehtinen and Niinimäki (2005) have a very similar definition of productization as Sipilä. As Sipilä, they also define productization to be a process, which aims to maximize the customer benefits and profits of the service provider. They argue that productization is a way of thinking and implementing research and development projects. They conclude that overall productization is the development of the service offering, so that it better matches the wishes of the customers.

According to Parantainen (2011), productization includes all the work, which results in professional knowledge being refined to a saleable, marketable, and deliverable service product. He emphasizes that services should be easy to buy and sell and the communication to customers should be clear. Simula, Lehtimäki, and Salo (2008) see productization as a way to reduce the obscurity of what is being offered and thus helping companies to come up with well-defined products without compromising innovativeness. Additionally they believe, that productization is a novel way to interlink new product development and marketing inside a company.

Other reasons to productize include removing the risk that customers associate when buying intangible services (Kurvinen, 2008), decreasing the person-centricity of KIBS companies (Jaakkola, 2011), or converting abstract knowledge into saleable products by codifying, abstracting, or translating the knowledge (in other words, standardizing the service), to ensure uniform service quality, better profitability, and possibilities for branding the service (Suddaby & Greenwood, 2001).

As with the differences in definitions of productization, the actual descriptions of productization processes vary among authors. Torkkeli et al. (2005) argue that productization of knowledge-intensive business services is difficult and mostly restricted to productization of the internal working methods and processes, because the core services of KIBS companies are mostly customized in each individual service situation. They argue that due of the customization nature of KIBS services, productization in its true meaning cannot be referred to, and therefore creating a process model for productization of KIBS services is challenging.

Sipilä (1999, 13) has suggested a four stage model for productization: (1) productizing the internal working methods, (2) product support for the service, (3) productized service, and (4) a product that can be reproduced and duplicated (see figure 4). The first stage means increasing the operational efficiency through improved internal working methods and

tools that speed up customer service situations. The second stage includes adding a means of product support, such as computer software. In the third stage the service is either fully productized and consistent enough to be sold as is to customers, or it is partially productized and then customized with individual service modules. In the last stage the service has been fully productized and converted into a physical product (e.g. a book or computer software) that can be sold and distributed through different distribution channels. (ibid)

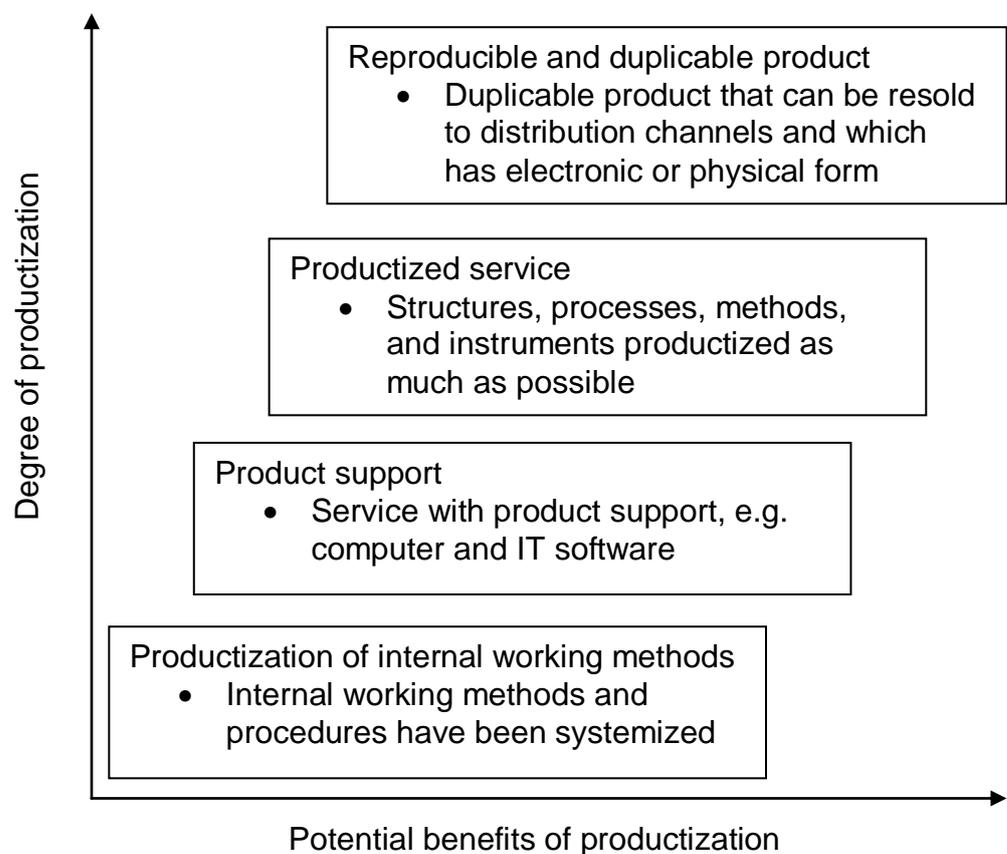


Figure 4. Productization stages (Sipilä, 1999, 13; Torkkeli, et al., 2005, 24).

Rope's (2005, 218) model of productization builds upon theories of new product development. Rope's idea of productization is heavily built upon tangibilization and standardization of the service offering. According to Rope (2005, 215-216), there are four different levels of productized services: (1) unique services, with a standardization level of 0-10%, which are individually prepared every time, (2) customized services, with a

standardization level of 10-50%, which have a standardized basic service with added, customized parts, (3) applied services, with 50-90% standardization, which are mostly standardized services with small changes based on the customer, and (4) packaged services or so called 'shelf products', which are 90-100% standardized and are sellable without any modifications. Rope states, that in order to say that a service is customized, it must achieve a standardization level of at least 50%.

There are many similarities between Rope's model and Sipilä's model of productization. Both authors have divided productized services into four different levels, with basically the same definitions and qualities. Both authors believe that a service can only be called as a productized service when it reaches the fourth and final level as a reproducible, sellable product or entity. However, as pointed out by Torkkeli et al. (2005), this level of standardization for KIBS might not be achievable, but is mostly restricted to standardizing and productizing the company's internal processes. Therefore Rope's and Sipilä's models can be said to be more suitable for non-KIBS companies or KIBS companies that are specifically aiming to offer a highly standardized service, such as computer software. Therefore, a more suitable model needs to be used when productizing knowledge-intensive business services.

Jaakkola (2011, 224) has divided productization into three different parts: "(1) specifying and standardizing the service offering, (2) tangibilizing and concretizing the service offering and professional expertise, and (3) systemizing and standardizing processes and methods". Jaakkola's model is specifically designed with the context of KIBS companies, and it has a very concrete focus on the service aspect of productization, whereas for example Sipilä's model concentrates more on organizational development as a whole. Therefore Jaakkola's model of productization is used as the basis for this research.

2.4.1 Standardizing and specifying the service offering

The first practice in productizing a knowledge-intensive business service is to specify and standardize the service offering. This step is motivated by the perception shared among KIBS managers that their customers lack a clear understanding of what they need and what the company can offer them (Jaakkola, 2011). Correspondingly Jaakkola discovered, that in order to facilitate the selling and marketing of a knowledge-intensive business service, the contents of the service need to be standardized at least to some degree. Customers expect clear and well-defined service offerings, therefore the variability and ambiguity of the service need to be reduced (ibid). This is related to mental impalpability as suggested by Lovelock, Wirtz and Chew (2009): due to the multi-dimensional and complex nature of services, customers have difficulties in understanding what benefits the service truly offers them. Jaakkola (2011) suggests that by dividing the service into smaller parts the service offering can be clarified and defined. Other scholars have also recognized the benefits of dividing the service (e.g. Kaitovaara, 2004; Sipilä, 1999; Torkkeli et al., 2005). Service modules or modularization of services can be used to achieve these goals, as suggested by Sundbo (1994; 2002).

Traditionally customization and standardization have been seen as conflicting goals, as the two ends of one spectrum that prevent one another (Rust & Miu, 2006; Sundbo, 2002), but in reality this conflict is minor and a standardized service can have a high degree of customization (e.g. Lampel & Minzberg, 1996). This is supported by Jaakkola's (2011) findings, according to which it is possible to combine both customization and standardization by specifying some part of the service and still leaving room for customization. Jaakkola (2011, 225) emphasizes further: "Despite the specified content and process, the actual service is customized and unique for every customer." Again, service modules are considered to be the key to achieving both customization and standardization.

2.4.2 Tangibilizing and concretizing the service offering

The second dimension of productization in Jaakkola's (2011) study is tangibilizing and concretizing the service offering and professional expertise. Due to the intangible nature of services, as discussed earlier, buyers have difficulties understanding the benefits that the service can offer them (Lovelock, Wirtz & Chew, 2009). This is verified by Jaakkola's (2011, 225) results: "customers perceived a great risk in buying professional services, due to their abstract nature and lack of tangible evidence." In other words, customers do not understand the advantages of services, which are missing a clear content, price tag, and delivery date (ibid). These lacking qualities describe KIBS very accurately, mainly due to their customized and very intangible nature.

Customers rely on the tangible elements of products before buying them, but because services lack tangible elements, instead in their decision-making process customers have to rely on the reputation of the firm (Fitzsimmons & Fitzsimmons, 2011) and on the physical evidence configured by the service provider (Junarsin, 2010). Therefore tangibilizing and concretizing the service offering and professional service provider's expertise refers to the process of making both the service offering and the service provider's expertise seem more tangible and concrete in the customer's eyes (Jaakkola, 2011).

Because services are intangible, it is challenging to effectively communicate about them (Zeithaml & Bitner, 2003). Service tangibilization is seen as the key to successful services marketing (Day, 1992; Reddy, Buskirk & Kaicker, 1993). Service tangibilization is associated with bringing concrete elements to intangible services (Shostack, 1977). According to Sipilä (1999) concretization is the last phase of productization and it is the process of collecting different kinds of visible evidence and clues, and adding them to the service offering to help the customers in their decision-making process.

Intangibility of services causes many difficulties and challenges both for the service provider and the customer. Customers cannot evaluate the qualities and properties of the service before the purchase and therefore have problems in understanding the benefits of the service (Zeithaml & Bitner, 2003). Creating prototypes of service concepts is more difficult than with physical products, and in order to describe the service process to their customers, firms need to use service blueprints instead of physical prototypes (Junarsin, 2010; Salmi et al., 2008). Service blueprinting will be discussed in more detail later in this thesis. Intangibility combined with the co-production nature of services means that the (perceived) quality of a service, especially with new services, may differ significantly across customers (Dolfsma, 2004). Because of the intangible nature of services, they are characterized by few search attributes; informational cues that can be determined prior to purchase (Hoffman, Turley & Kelley, 2002). Pricing researchers have discovered that the informational value of price decreases as the number of other informational cues increase (Monroe, 1973). Due to the intangibility of services and the lack of other informational cues, price therefore plays a key informational role in service consumer decision processes (Hoffman, Turley & Kelley, 2002). However, intangibility creates a conflict for the company. Because of the intangible nature of services, the informational value of price is high, but at the same time intangibility can cause a wide range of service outcomes, which makes pricing of services difficult (Docters et al., 2004). Modularity, or service modules, are recommended as a solution (ibid), which will be discussed later in this thesis. Junarsin (2010) sums up the effects of intangibility of services: "The perception of service quality is hence much more subjective than that of physical products." By tangibilizing its services, the service provider can add other informational cues that help the customers in their decision making process (such as a visible brand name), and at the same time new pricing models can be used for easier and more profitable pricing of services (e.g. Sipilä, 1999).

The goal of tangibilization is to create tangible service offerings, which are easy for the customers to understand. Productization can include the development of brand names and visual identities for their services. Another manner of achieving tangibility is to add physical material to the service, such as promotional material (flyers, brochures, leaflets) and cardboard packs to hand out to the customers. (Jaakkola, 2011) Other forms of physical material include USB-sticks, DVD's, customer cards, and so on (Parantainen, 2011). An IT service provider can concretize its services by creating brochures, printed material, or even mouse pads with the name of the IT service printed on them (Kaitovaara, 2004).

Jaakkola (2011, 226) discovered, that managers of KIBS have "difficulties in convincing the customer of their expertise and special knowledge". The managers she interviewed stated tangibilization of the company's and the individual service provider's competence and trustworthiness as a key motivation to productize their services. Many of the interviewees mentioned that the expertise and experience should be tangibilized at the organizational level, because of the problems involved with services that are highly identified with the expertise of an individual person. Jaakkola (2011) also found out that specifying, standardizing, and tangibilizing the service were considered a means of communicating company-level expertise to the customers.

Tangibilization and concretization of the service offering aims to reduce the feeling of risk customers associate with intangible services by reducing the abstractedness, vagueness, and lack of tangible evidence. People prefer buying concrete and touchable products (Parantainen, 2011), and even a small, concrete element such as a USB stick or cardboard pack helps the customer understand what the service is about and helps to alleviate the risks the customer perceives. Therefore, making a service more tangible is not very challenging. By tangibilizing the service offering, companies can also communicate their expertise and knowledge to the customers.

2.4.3 Systemizing and standardizing processes and methods

The third and final component of Jaakkola's (2011) study on productization is systemizing and standardizing processes and methods. The fundamental need for this is to make the service process more controllable, and this is achieved by developing unified processes, methods, and tools. By pre-defining (standardizing) processes or methods some routines can be made easier and faster, such as having ready-made templates for offers and contracts instead of writing new ones from scratch every time. In addition, by systemizing internal processes the effectiveness of work is increased, which leads to improved profitability of projects. (ibid)

Managing and organizing within the company can be made more rational and efficient with productization. By specifically defining and planning the service processes, resource allocation, planning, and measurement are easier. Systematic and standardized processes are also seen as improving service quality. (Jaakkola, 2011)

As already mentioned earlier in the previous component under tangibilizing and concretizing the service offering, productization is a way of turning individual, tacit knowledge and expertise into an organizational instead of an individual asset so that the customer would buy a service from the company rather than the help of an individual professional (Jaakkola, 2011). Other authors (Sipilä, 1999; Valminen & Toivonen, 2012) have also emphasized this goal of reducing the person-centricity of KIBS companies. Productization can affect the individual employee in other manners too. Daily work routines can be systemized and the amount of time spent on unproductive and routine work decreased. This increases the value and excitement that professionals attach to the substance of their work. (Jaakkola, 2011)

Industrialization of services, as suggested by Levitt (1972), can be seen as a way to standardize the service processes. Lovelock (1996) explains an industrialized service as a service that has only one permissible process

manner and order, with automated parts, and employees having no permission to modify or change the service process at all. However, as Sundbo (1994) argues, pure standardization without any customization could spoil the close customer orientation, which is especially important for KIBS companies. Industrialization of services might therefore be more suitable for service companies that do not operate in the KIBS sector, such as fast food restaurants. Instead, other tools and methods can be used to systemize and standardize KIBS companies' service offerings. Jaakkola (2011) lists ready-made document templates, process charts, databases, and analysis methods as such tools. One tool that is commonly associated with productization is the service blueprinting tool (e.g. Lehtinen & Niinimäki, 2005; Salmi et al., 2008). Service blueprinting will be discussed in more detail later in this study in chapter 2.7.

2.5 Internal and external productization

Some authors differentiate between internal and external (or inbound and outbound) productization. Reviewing this division is beneficial for a successful productization process, as Simula, Lehtimäki, and Salo (2008, 9) write: "Identification of external and internal productization task[s] is a novel way for a firm to better understand their internal processes and to create an unambiguous offering that serves customers better."

According to Simula, Lehtimäki, and Salo (2008) the main purpose of internal (inbound) productization is to harmonize and systemize the company's offering delivery process and its outcomes within the company. They call internal productization as the ability to make something, that is, to turn a certain technology or knowledge into a core product or service. Internal productization involves tasks such as product data management, assembly instructions and product or service design specifications. The purpose of external (outbound) productization on the other hand is to improve the visibility and concreteness of the product or service offering for the customers. It is the ability to sell something. (ibid)

Simula et al. (2010) argue, that before an organization can start external productization activities, it needs to have successfully performed internal productization. This is logical, since if the company has not clearly defined what it is trying to sell to its customers and how this product or service will be produced, it is useless to start adding extra features or qualities to the product. If the core product or service does not work properly, additional features will add little to no value to it, and therefore external productization should be performed after internal productization.

Reflecting Jaakkola's (2008) model of productization to internal and external productization, it can be said that there is a connection between them. The first step in Jaakkola's model is to standardize and specify the service offering, which is exactly what internal productization is performed for: to harmonize and systemize the offering delivery process of the service. The second step, tangibilizing and concretizing the service offering, is comparable to external productization: both share the same goal of making the service or product easier to sell. Finally, the third step in Jaakkola's model, systemizing and standardizing processes and methods, can again be said to be internal productization, as it aims to standardize the service delivery processes and methods, which is one of the main goals of internal productization.

2.6 Modularization of services

As discussed earlier, the first step in productizing a knowledge-intensive business service is to standardize the service offering. This can be a challenging task due to a few reasons. First of all, the co-production of the service together with the customer may lead to very different and customized service processes between different customers. Second, the heterogeneous nature of services caused by the variation in employee performance and in the needs and expectations of the customers often lead to non-standard service outcomes, whose quality depend on the specific customer and service context. These together lead to the dilemma where the customer seeks for a customized and individual service, while

the company wants the service to be efficient, or as Rahikka, Ulkuniemi and Pekkarinen (2011, 357) write: "The present challenge for many service firms is to develop an offering that is flexible and open for tailoring and at the same time achieves efficiency through standardizing processes."

Modularity has been suggested (e.g. Rahikka, Ulkuniemi & Pekkarinen, 2011; Sundbo 1994; 2002; Torkkeli et al. 2005) as a means for companies to achieve the benefits of both standardization and customization by dividing the service offering into small, individual parts. By creating these highly standardized service components, customization of the whole service process can be achieved by combining these components depending on the specific service situation.

Traditionally modularization literature has focused on production, product design, and organizational design (Campagnolo & Camuffo, 2010), and the practical application of services modularization remains still an unexplored subject (Geum, Kwak & Park, 2012). However, according to Hänninen et al. (2012, 10), modular product development "can just as well be implemented to services and solutions." Accordingly, some authors use the results found in engineering and production management literature (Rahikka, Ulkuniemi & Pekkarinen, 2011) or from service science, industrial engineering, and software engineering (Böttcher & Klingner, 2011) to contribute to services modularization research.

Modularization of services was originally introduced by Sundbo (1994), who defined it as a means that combines standardization and customization of service products, by using modules which the customer can combine together. Baldwin and Clark (1997) went into more detail by defining service modules as small subsystems that can be designed independently but function together as a whole product offering. A more modern definition of service modularity is offered by Rahikka, Ulkuniemi and Pekkarinen (2011). They define a service module as the smallest service unit that can be offered to a customer as is by itself or as a part of

a larger service offering, which creates the value that the customer perceives.

Restaurant service is a typical example of a modularized service often used as an example in literature (Geum, Kwak & Park, 2012; Parantainen, 2011). Restaurants compose their services, meals, from different modules or parts of the meal, such as side and main dishes and drinks. Without modularization a restaurant would either fully standardize their offering and therefore offer a number of dishes without any possibility for customization, not even the drink, or would fully customize their offering and cook whatever the customers ask for. Providing the latter type of service would be unfeasible for a restaurant, but it is something that many KIBS companies still do (Parantainen, 2011). By modularizing their services, KIBS companies can achieve the benefits of standardization: more focused service offering, less time and money spent on providing highly customized services to individual customers and overall better results. However, it has to be noted that modularization may differ according to the company's type, and mass services, such as restaurant meals, are more likely to be modularized than professional services, such as marketing services (Geum, Kwak & Park, 2012).

There are many potential benefits available to companies who modularize their service offerings. These include among others cost savings, bigger and better product variety, increased flexibility, economies of scale, faster service delivery times, increased visibility of service, facilitating the buyer's buying process (e.g. Geum, Kwak & Park, 2012; Gerhenson, Prasad & Zhang, 2003; Miozzo & Grimshaw, 2005; Rahikka, Ulkuniemi & Pekkarinen, 2011; Torkkeli et al., 2005). Geum, Kwak and Park (2012) mention two key benefits of modularization: enabling costs savings and focusing more on the customer's needs. This is explained by the restaurant example mentioned above.

2.7 Service blueprinting

As discussed in the previous chapter, the productization of KIBS consists of standardizing and specifying the service offering, tangibilizing and concretizing the service offering, and systemizing and standardizing processes and methods. All of these three steps need to be completed in order to successfully productize a knowledge-intensive business service. However, completing these phases can be a challenging task. For example as Salmi et al. (2008) note, due to the intangible nature of services, prototype development is impossible. Therefore a tool that takes the intangible nature of services into consideration is needed. Service blueprinting is a tool that companies can use to describe their service concepts, because it takes both tangibilization and the service offering into consideration. In this chapter service blueprinting will be discussed and its connection to service modules analyzed.

Service blueprinting is a method invented in the 1980s by Shostack (1984, 1987). It was further developed by Kingman-Brundage (e.g. Kingman-Brundage, George & Bowen, 1995) and by Fließ and Kleinaltenkamp (2004), who visualized the service processes. Zeithaml and Bitner (2003, 233) describe service blueprint as "a picture or map that accurately portrays the service system so that the different people involved in providing it can understand and deal with it objectively regardless of their roles or their individual point of view." Lovelock (1996) on the other hand distinguishes between service mapping (portraying an existing situation) and service blueprinting (planning a new or revised process and prescribing how it ought to function). In this thesis no separation is made between service mapping and blueprinting. A basic service blueprint template is shown in figure 5. It is a generic model of the service blueprint that has the most common components normally included in service blueprints.

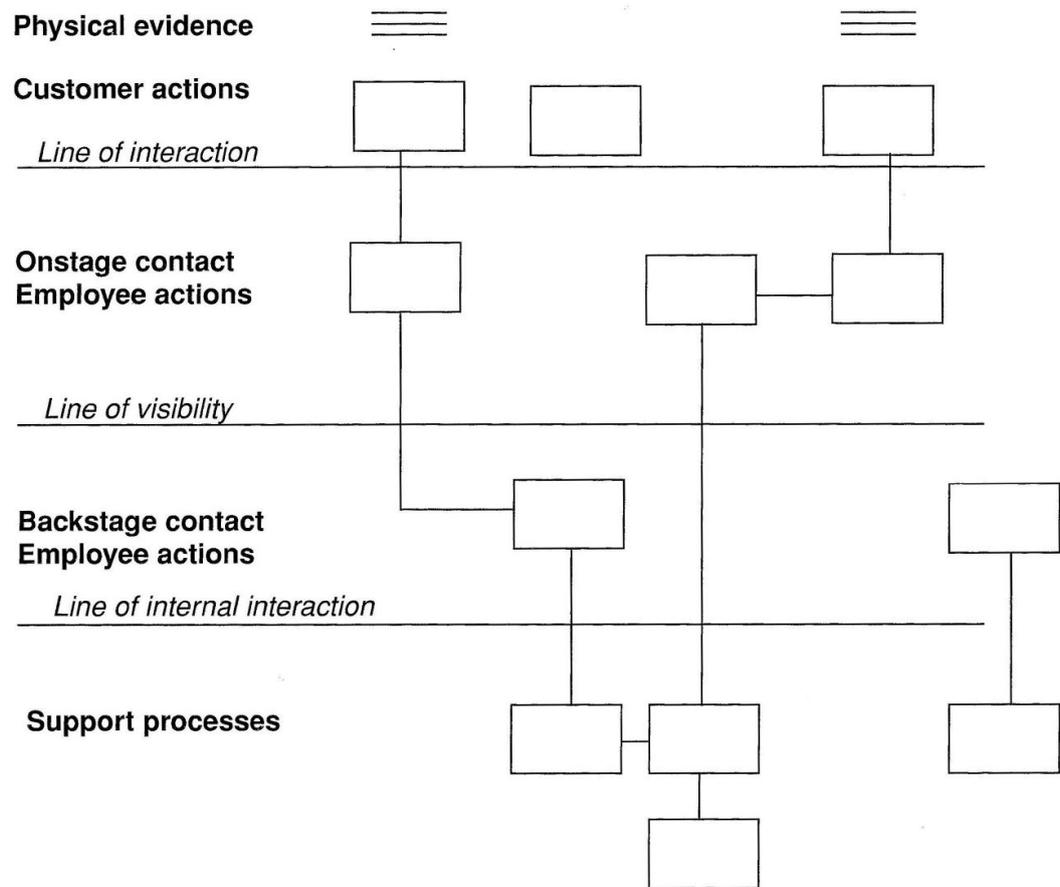


Figure 5. A basic service blueprint template (Zeithaml & Bitner, 2003, 234).

Service blueprinting was originally introduced as a process control technique for services that offered many advantages: it was more precise than pure verbal definitions, it could help in preemptively solving problems, and it was able of identifying failure points in a service operation. Later it was developed by separating the customer and organizational processes, by distinguishing between onstage and backstage activities, and by adding physical evidence into the mix. (Bitner, Ostrom & Morgan, 2008).

Service blueprints are made from the viewpoint of the customer, not the organization (Milton & Johnson, 2012), and they illustrate simultaneously not only the delivery process of the service, but the points of customer contact, the roles of the employees and customers, and the visible elements of the service. Therefore blueprints are particularly useful during the design and redesign stages of service development. (Zeithaml & Bitner, 2003) The actors in the blueprint are not only people but they can

also be technology, such as web sites (Milton & Johnson, 2012). The blueprint is most commonly a drawing, but according to Bitner, Ostrom and Morgan (2008) more sophisticated solutions have been developed, such as blueprints with links to video material of service elements in a hotel and resort setting.

The benefits of service blueprinting are multitude and both the company and its customers can benefit from blueprinting. Blueprinting enables the company to understand what parts in the service process are visible to the customer and hence effect the customers perceptions of the service quality (Hoffman & Bateson, 1997). Blueprints show how the customers and employees interact, and how these interactions are supported by the company's backstage activities and systems. This can help to bring together different departments (such as marketing, human resource management, operations) within the company. Blueprints can pinpoint stages in the service process where customers commonly have to wait. (Lovelock, Wirtz & Chow, 2009) Blueprinting highlights the fail points in the service process and enables managers to take steps to prevent the failures, either by designing fail-safe processes or by building sub processes to correct possible errors (Shostack, 1984). This decreases the chance of something going wrong and increases the service quality.

2.7.1 Layout of a service blueprint

A service blueprint reads out as a flowchart of sorts. However, it is more complex than just a flowchart which describes an existing process in a simple manner (Lovelock, Wirtz & Chew, 2009). Instead, it gives special attention to customer interaction at the different levels of the service process. Service blueprinting has similarities with other process modeling approaches in that it depicts business processes visually with symbols that represent actors and activities and it can be modified depending on its usage from high-level overviews to individual sub processes (Bitner, Ostrom & Morgan, 2008). One major advantage of blueprinting is that it is not as complex or as formal as some business modeling tools, such as

Unified Modeling Language (Siau & Loo, 2006), but it is relatively simple and produces uncomplicated graphs that all stakeholders involved can understand, modify, learn, and use (Bitner, Ostrom & Morgan, 2008).

The basic service blueprint template shown previously in figure 1 is explained below. As mentioned, it is a generic model that has the most common components, which are normally included in service blueprints. More complicated versions have been developed, some of which are introduced in brief at the end of this chapter.

Service blueprinting differs from other mapping or flowchart techniques in the way the customer actions are depicted. They are a central part in the creation of the blueprint and "are typically laid out first so that all other activities can be seen as supporting the value proposition offered to or co-created with the customer." (Bitner, Ostrom & Morgan, 2008, 72)

Service blueprint consists of five components: customer actions, onstage (visible) contact employee actions, backstage (invisible) contact employee actions, support processes, and physical evidence. These areas are separated from one another by lines (Bitner, Ostrom & Morgan, 2008; Zeithaml & Bitner, 2003). The horizontal axis represents the chronology of actions the service customer and provider conduct and the vertical axis distinguishes between different areas of actions, or the previously mentioned components (Fließ & Kleinaltenkamp, 2004).

The line of interaction separates customer actions (every effort customers make as part of the service delivery process) from onstage contact employee actions, and whenever it is crossed a moment of truth (customer interaction) happens. Crossing the line of visibility, which separates the onstage and backstage actions, means something that the customer can perceive has happened even though they were not directly involved. The line of visibility separates the activities of the contact employees between those that are done face-to-face together with the customer and, those which take place without the customer. It is important to notice that a backstage action can have interaction with the customer, for example by

phone or email. Therefore, the defining factor of onstage action is personal contact with the customer. The line of internal interaction distinguishes between front office and back office activities, and determines the parts of the process which require cooperation between different departments or function in the company. (Bitner, Ostrom & Morgan, 2008; Fließ & Kleinaltenkamp, 2004; Zeithaml & Bitner, 2003)

Physical evidence and support processes differ from other parts of the model as they do not depict actions. For each customer action and every moment of truth, the physical evidence the customers come in contact with is described at the top of the blueprint. They are the tangibles that customers are exposed to during the service process that can influence their perceptions of the service quality. Support processes on the other hand cover all the activities carried out by individuals and units within the company who are not contact employees. However, these actions are necessary for the successful delivery of the service. (Bitner, Ostrom & Morgan, 2008)

As a sign of the flexibility of the service blueprinting technique, it has been further developed in many ways. Boughnim and Yannou (2005) suggest using blueprinting as a method to depict the development of "Product-Service Systems", which are combined offerings of services and products aimed at providing sustainable consumption and production. Other authors have emphasized the importance of service processes and their connections to the relevant background functions. A fourth horizontal line, the line of implementation, has been developed by Kingman-Brundage (e.g. Kingman-Brundage, George & Bowen, 1995), which visualizes the management activities relevant to fulfilling the service by separating them from the support activities. Fließ & Kleinaltenkamp (2004) have added a fifth line, the line of order penetration, which separates customer-induced activities from customer-independent activities. The line of order penetration allows the blueprint to be used for better efficiency management, because it "refers rather to the value chain of services than

to the organizational structure of service operations" (Fließ & Kleinaltenkamp, 2004, 398).

2.7.2 Creating a service blueprint

When creating a service blueprint it is important to remember the central role of the customer. Therefore customer information needs to be collected and implemented into the blueprint. Other stakeholders that are relevant to the process or service being blueprinted also need to be involved. (Zeithaml & Bitner, 2003)

The process of creating a service blueprint consists of six steps, illustrated in figure 8.

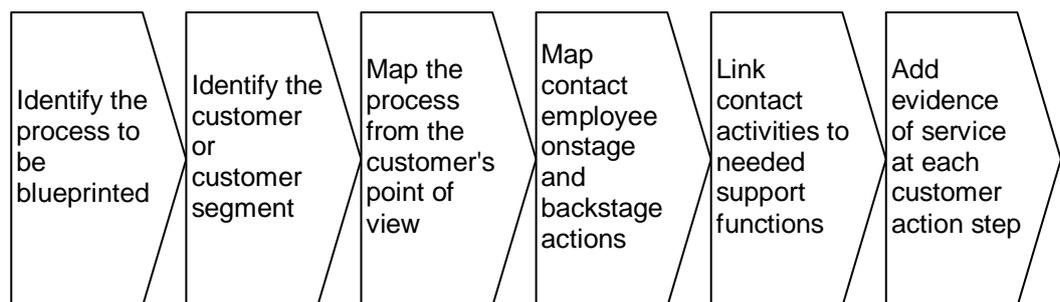


Figure 6. Building a service blueprint (Zeithaml & Bitner, 2003, 239, adapted).

Because blueprints can be created for many different purposes and at a variety of levels, the first step is to identify and define the service process or sub-process to be blueprinted. By doing so it is easier to manage the blueprinting process and to identify the correct information to add into the blueprint. For example, the blueprint could be used to either depict the current service process or the desired and improved process, but not both. By agreeing and defining the exact process and desired outcome of the blueprint on the starting point, later on it is easier to build a correct modeling of the service process. (Bitner, Ostrom & Morgan, 2008; Zeithaml & Bitner, 2003)

The second step in creating a blueprint is to identify the customer or customer segment, for which the blueprint will be made. The basic idea behind segmentation is that each segment has different needs, wants, and requirements and therefore variations in the service are necessary. Consequently, different customers may receive the service differently, which necessitates creating separate blueprints for each segment. This avoids confusion and maximizes the usefulness of blueprints. (Bitner, Ostrom & Morgan, 2008; Zeithaml & Bitner, 2003)

The actual mapping of the blueprint starts with depicting all the actions the customer performs and everything they experience during the service. This helps in avoiding concentrating on steps and processes that the customer has no contact with. After the customer actions have been depicted on the blueprint, the lines of interaction and visibility are drawn. The line of visibility helps in mapping out the service process by separating the visible onstage actions from the invisible backstage actions. (Zeithaml & Bitner, 2003)

The fifth step is drawing the line of internal interaction and identifying the links between contact activities and internal support functions. This step has two main roles; first of all it helps in clarifying the supporting processes' role in fulfilling the service processes, and secondly it identifies the unnecessary steps in the process. (Zeithaml & Bitner, 2003)

Finally, all the physical, tangible evidence the customer comes into contact with during the service process are added into the blueprint. Each customer action and every moment of truth should be analyzed in order to recognize the physical evidence that can influence the customer's perceptions of the service quality. These physical evidence are then described at the top of the blueprint. (Bitner, Ostrom & Morgan, 2008)

2.8 Revised theoretical framework

According to Jaakkola's (2009) model, the second step in productization is to tangibilize and concretize the service offering. However, in service

blueprinting, physical evidence is only added into the blueprint in the last step (Bitner, Ostrom & Morgan, 2008; Zeithaml & Bitner, 2003). Since service blueprinting as a tool is used to depict the service offering and to help in preemptively solve problems and identify failure points, as Bitner, Ostrom and Morgan (2008) write, the theoretical framework of this work is revised and depicted in Figure 7.

In the revised framework, more emphasis has been given to blueprinting the service offering. Therefore, steps two and three in Jaakkola's (2009) model have been switched with one another in the framework. Systemizing and standardizing processes and methods focuses more on internal productization, while tangibilizing and concretizing the service offering is concentrated on external productization. Besides switching the places of steps two and three, the processes related to them have changed. Previously tangibilizing and concretizing the service was done by adding tangible elements to the service, which as a process is rather vague and generalized. In the revised framework, this process has been made more concrete by connecting it to service blueprinting. Tangibilization is now achieved by the last step of service blueprinting: adding the physical evidence of the service into the blueprint.

This change in the phases of productization is supported in the literature. For example, according to Sipilä (1999), the first stage of productization is productizing the internal working methods. Accordingly, Simula et al. (2010) argue, that before an organization can start external productization activities, they need to have successfully completed internal productization. These arguments support the revision of the original theoretical framework into a new and updated framework, where all the internal productization activities are performed before starting external productization.

As emphasized by Valminen and Toivonen (2012), the customer-centricity of KIBS productization is still included in the revised theoretical framework in the upper row. Customer information and customer understanding can be achieved by using the service blueprinting tool.

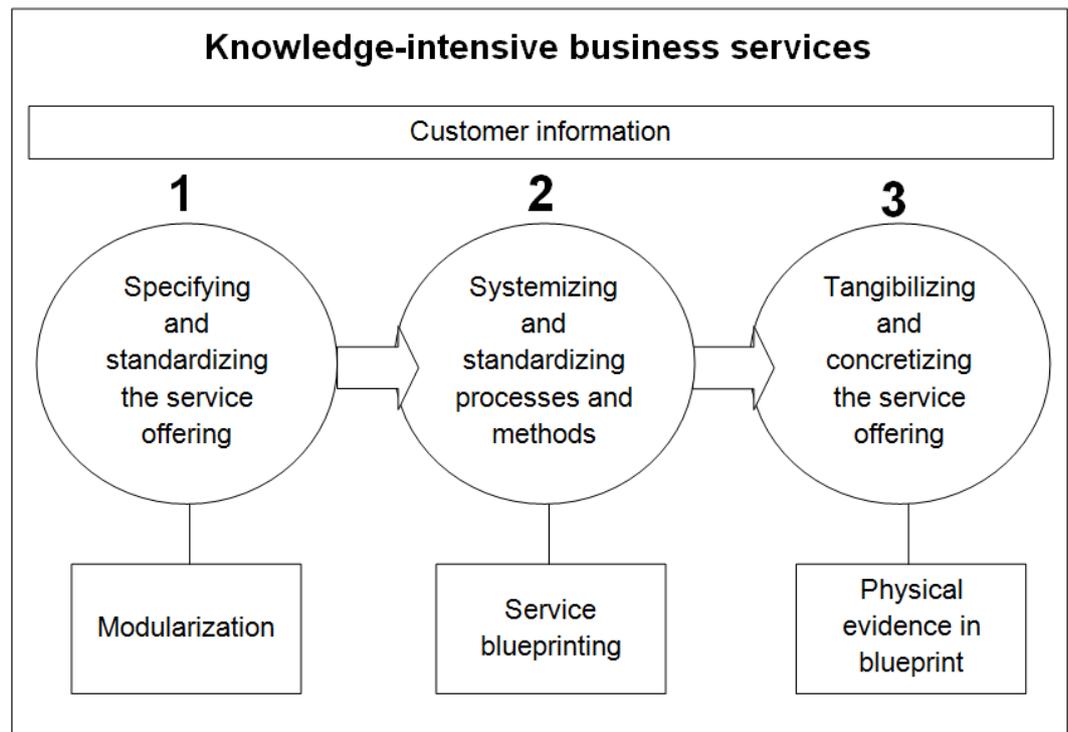


Figure 7. The revised theoretical framework.

3 CASE COMPANY X: PRODUCTIZING KNOWLEDGE-INTENSIVE MARKETING SERVICES

The main research question of this thesis is:

How can professional marketing services be productized through service blueprinting?

A theoretical framework was created using the most relevant existing theories related to the productization of knowledge-intensive business services. The theoretical framework was later updated, as it was discovered that the original framework did not progress in a proper order.

The role of the empirical part of this thesis is to verify this updated framework's applicability in practice, by using it in the productization process of a professional marketing company. In this chapter, the background of the study and the case company are presented. Additionally, the current state of services productization in the case company is reviewed. After the introduction, a service blueprint of the selected service process is created. This blueprint is then used in analyzing the company's service delivery process. After the service blueprint has been analyzed, the chapter is concluded with the suggestions for the future service productization procedures at the case company. As always with blueprinting, it has to be remembered that the blueprint depicts one service situation. With professional marketing services, and other KIBS, service production is often customized and consequently service situations differ from one another. The blueprint made for this study is an example of a generic, ideal service situation, and therefore the reality of a specific service situation can differ from what is discussed here.

3.1 Background of the study

The case company is a private marketing agency that operates in Finland. They have differentiated themselves from the general competition by

focusing on offering marketing services to Finnish companies, which are interested in international advertising. Even though the company focuses on international advertising operations, their customer base is wholly formed of Finnish companies and they operate only inside Finland. The company's competitive advantage comes mostly from their employees. They employ both Finns, who specialize in international markets and consumer interests, as well as foreign nationals. The company also has very good and broad relations with foreign companies, such as IT and advertising companies. These international partner companies are used for outsourcing all the operations that take place outside of Finland, such as advertising operations abroad.

The case company is a subsidiary of a bigger Finnish marketing agency. The relations between the subsidiary and the parent company are good, and both use each other's services regularly. This creates cost advantages for both companies. The subsidiary can operate with less staff, and the parent company can benefit from the tacit knowledge of foreign markets possessed by the subsidiary's employees. All in all, the subsidiary and parent companies employ between 25 and 30 people.

The purpose of the thesis is to provide concrete recommendations for the service development for the case company. The CEO of the case company had recognized some problem areas in the company's service production processes and service offering, which so far had not been systematically addressed. By creating a service blueprint, these problem areas can be visualized, and with the help of productization they can be addressed and improved.

3.2 Data collection

The empirical part of the thesis is carried out as a qualitative, normative case study. Qualitative study is suitable for this research, because the topic of KIBS productization is still a rather new topic (Jaakkola, Orava & Varjonen, 2009). As Boeije (2010) writes, qualitative research is applicable

for studies with an explorative nature, in other words, studies that research and explain something new. This is the situation with this study. Case studies, on the other hand, are qualitative studies, which combine several different data sources, and try to answer "how?" or "why?" questions. Therefore, a case study is the proper form of qualitative research, as this study's research question is a "how?" question, and several different sources of data are used in this study.

The empirical data of this study consists of two main sources: the existing company materials and the interviews conducted with the company's personnel. The analyzed company materials include offers, contracts, reports, internal documentation and guidelines. Overall, several hundred pages of documentation was read and studied. Most of the documents are old offers and contracts, but several guidelines were also reviewed. These documents include the official company guidelines as well as standardized operating manuals for different services.

Several interviews were conducted during this research. The interviews had two main objectives. First, they reveal the interviewees' roles and tasks related to the service production process. Second, they provide the interviewees a possibility to influence the productization process with their own ideas and comments. The interviews conducted during this research are listed in Table 2. Overall, six different people were interviewed during this research. The case company's CEO was interviewed several times, and these interviews were one of the main sources of information for drawing the service blueprint. After the blueprint had been drawn, the CEO was interviewed again. This interview was done to verify that the blueprint depicts the reality of the company's service production. The project manager, programmer, key account manager and AD were interviewed after the blueprint was completed. These interviews provided information regarding the challenges of service production, which had been identified from the blueprint. The durations shown are approximates, rounded to the nearest 15 minutes. All of the interviews were conducted in Finnish.

Table 2. List of interviews.

Interviewee's role	Date of interview	Duration of interview
CEO, parent company	November 17, 2013	15 minutes
CEO, subsidiary	November 17, 2013	1,5 hours
CEO, subsidiary	November 28, 2013	1 hour
CEO, subsidiary	March 23, 2014	2 hours
CEO, subsidiary	April 3, 2014	1 hour
CEO, subsidiary	May 15, 2014	1,5 hours
Project manager	May 15, 2014	45 minutes
Programmer	May 16, 2014	1 hour
Key account manager	May 20, 2014	1 hour 45 minutes
AD	May 20, 2014	30 minutes

3.3 Productization in the case company

The first phase of the empirical part of this thesis was to assess, whether the theoretical framework could be applied to the case company's productization actions or not. The top management of both the subsidiary and the parent company were interviewed. This was done in order to clarify their understanding of the processes involved in productization. Additionally, these interviews made certain that both the researcher and the case company's management had the same expectations of the productization actions' outcomes. The interviewed personnel were the CEOs of both the parent company and the subsidiary.

The two interviewees had slightly different ideas of what the benefits and the goals of productization are. However, both of them highlighted aspects discussed in the academic literature. The CEO of the parent company (2013) had a very clear opinion of what one of the outcomes of productization is:

For us, one of the end results of a productized service is a clear and short presentation on an A4 sheet of paper, which will help our sales people in selling our expert services to our customers.

The CEO emphasized one of the main reasons that Jaakkola (2009) has listed as a motivation for KIBS to productize their services - facilitating sales. As the service has been productized, simple and reusable sales materials can be made based on the productization efforts. The sales material facilitates sales by making the sales process easier for the company's employees. On top of that, it also serves as a concrete and tangible evidence of the service, which can alleviate the buyers' decision-making process. This is the final step of productization: tangibilizing and concretizing the service offering. This step is also called external productization, as earlier discussed. After the blueprint is drawn, the physical evidence of the service is added into it. This step is mostly left out in this thesis, as the focus is on internal productization.

On the other hand, the case company's CEO (2013b) had a broader idea of what the benefits of productization will be for the case company. She emphasized the difficulties the company was dealing with in their internal processes:

Sometimes we work on an ad-hoc basis and design the service delivery process from scratch, depending on the customer's needs. For example, we have dozens of different kinds of approaches for designing and launching websites.

Due to the nature of the case company's services and the expectations of the customers, every service delivery process has been customized to some extent according to the customer's wishes. Some standardization actions have been performed in the case company, resulting in process guidelines or the official company guideline. However, the case company's CEO pointed out multiple times that the company operates in an industry, which requires very creative and customized work, and that productizing the services is difficult or at times even impossible.

The subsidiary's CEO (ibid) identified other problem areas as well, which related to her own work and selling the services:

I have to write customized offers to each customer and it takes a lot of my working time. It is very frustrating when I spend several hours writing an offer, which in the end, is refused by the customer.

Together with the need to facilitate sales (by using less time on writing offers), she underlined two other main reasons as listed by Jaakkola (2009): facilitating management and making the internal processes more efficient. By modularizing their services, the case company could write standardized offers for each service module, which can then be combined together. This way they would achieve the benefits of standardization and customization at the same time. Some standardized offers exist, but further standardization is needed, as exemplified by the CEO's quote.

Based on the preliminary interviews with the two CEOs, it was decided together with the subsidiary's CEO that the productization project will be undertaken. The focus of the empirical research was decided to be on productizing the subsidiary's internal processes.

Prior to the thesis, the case company had performed some productization actions. The case company has outlined the service development process, but it is rather vague. According to the official company guidelines (Case company, 2011), the service development process has four phases in it:

1. An employee suggests an idea by filling in a suggestion form and returning it to the suggestion box;
2. An employee suggests an investment directly either to the IT-supervisor or to their closest superior;
3. In the subsidiary's office, employees suggest ideas directly to the development manager;
4. Finally, the executive team decides on new investments.

There are several problems with the current service development process. Practically, there are only two steps in the process: first, an employee

suggests a new investment idea, and second, the executive team decides on whether or not to approve of the new investment. Important phases between are completely left out, such as sketching the idea or building a prototype of it. Because the first three phases are practically the same, they can confuse employees by making them wonder how and to whom they should suggest their idea to. Additionally, in reality, services development in the case company differs from the process outlined in the guideline. According to the case company's CEO (2014c), development ideas are fuelled by real-life situations encountered during service production, and their development is more straightforward. No suggestion boxes are used, and ideas are communicated directly to the management. By updating the development process guideline, the company can guarantee a unified service development process between different ideas, that correlates with how services are actually developed. Having outdated guidelines provides no value for the company. The importance for a new service development process guideline was also highlighted during another interview (Programmer, 2014):

We have many development ideas, but we lack concrete results. The ideas are often forgotten and dismissed. We need somebody, who will make clear timelines and goals for development projects. This person has to have time to follow through the development projects and the ability to make decisions based on them.

In addition to updating the service development guideline, the case company should think about employing a development manager. They could either hire a new person who is responsible for development projects, or they could devote some manager's time purely for these projects. As mentioned in the interview, the main problem in current service development is the lack of a person, who is responsible for them and who will see the development projects to the end.

Current productization practices at the case company are mostly related to different materials. Sales materials can often be reused, such as the case company presentations or previous references (Project manager, 2014),

while others are always tailor-made specifically for the customer. In some service delivery situations, the instructions and processes can be reused. Even though the case company has materials they can reuse, their services are still customized to the extent that sometimes projects have to be built from scratch (Case company's CEO, 2013b). This can be explained by two reasons. First, some standardized materials are hard to find and they can be spread around in archives, wikis and so on (Case company's CEO, 2014c). Second, the standardized materials are ignored by some people (Programmer, 2014):

In the web team we have lots of standardized documents and process materials. I have created a web service process depiction with written instructions and a checklist to be used with different web projects. Even though it would help our work and reduce the amount of ad hoc activities, not all managers use it when they're selling web services.

There is no value in having standardized documents and guides, if they are not used. The web service process depiction is a very detailed document, which includes all the necessary information related to web services. The company needs to emphasize the importance and usefulness of these documents to all the employees, as they facilitate the work of both managers and professionals.

3.4 Standardizing and specifying the service offering

The first phase of productization is standardizing and specifying the service offering. This includes dividing the service offering into smaller, highly standardized service modules, which is called modularization. By combining these individual, standardized service modules, the firm can achieve the benefits of both customization and standardization simultaneously.

The case company's service offering is divided into six parts: marketing strategy development, advertisement design, e-business, social media, international marketing services, and AV and studio services. The

subsidiary specializes in international marketing services, but they also offer the other services when needed. For services that they cannot produce within their own team, such as AV and studio services, they can use the personnel of the parent company. (Case company's CEO, 2013a)

Each of the six service offerings is further divided into several smaller modules. For example, e-business includes e-mail marketing, website design, search engine marketing and optimization. Therefore, it can be said, that the case company is currently in the first phase of productization - standardizing the service offering.

3.5 Systemizing and standardizing processes and methods

The second step in productization is to systemize and standardize the processes and methods. As discussed earlier, service blueprinting was chosen as the method for achieving service process standardization. To understand the case company's service offering, the researcher got acquainted with the different services the company offers. Due to ongoing strategic changes within the company and their service offering, blueprinting individual services and externally productizing them was redundant at the time of this research. Because of this, the focus was decided to be on internal productization. As a result, it was possible to make the blueprint from a general service delivery process, instead of focusing on a single service. This blueprint will work as a general guideline for service production, while acting as a model for future blueprinting operations and service development projects.

The starting point for systemizing and standardizing processes and methods was challenging. Since a general service delivery process was chosen to be blueprinted, it was difficult to decide, which tasks should be included into the blueprint. Sometimes the company's services are done on an ad-hoc basis (Case company's CEO, 2013a; 2013b), meaning there can be a lot of variance between the service production within one service, let alone between different services. Therefore, it was also decided, that

the service blueprint will be made to depict an ideal service situation instead of the current situation. This is more beneficial for the company, as they can use the blueprint as a tool for their current strategy and service portfolio renewal.

3.5.1 Creating a service blueprint of a general service delivery process

As discussed earlier, the case company is currently in the first phase of productization, standardizing the service offering. However, all the three main phases of productization were analyzed during this research. Normally it would be more fruitful for the company to concentrate on one of the main steps of productization at a time, before moving onto the next step. However, since the case company has no previous experience in productizing its services through service blueprinting, it was decided that all the three main steps of productization would be tested. This serves as a learning experience and future reference for the case company. Additionally, by testing all the three main steps, the usability of productization as a service development framework from the case company's perspective is verified. To test if knowledge-intensive marketing services can be standardized, service blueprinting was used as a tool.

In creating the service blueprint for the general service delivery process, the six steps of blueprinting identified in the theoretical section of the thesis were used:

1. identifying the service process to be blueprinted;
2. identifying the customer or customer segment;
3. mapping the process from the customer's point of view;
4. mapping contact employee onstage and backstage actions;
5. linking contact activities to necessary support activities;
6. tangibilizing and concretizing the service offering by adding physical evidence to the blueprint.

Creating the service blueprint was challenging, since the focus was on a general service delivery process instead of one, single service. However, by creating a blueprint of the ideal service process, it was easy to identify problem areas the company is currently facing. Additionally, some new development ideas were realized. These are discussed in the following chapters along with the creation of the service blueprint. The final blueprint is presented in Appendix 2. The service blueprint created in this study is based on the interviews conducted with the case company's CEO, as well as the secondary company material. The other interviews were conducted after the blueprint was made, and their objective was mostly to comment on the problem areas of the service process.

As always with blueprinting, it is important to remember that the blueprint depicts only one service situation. With professional marketing services, and other KIBS, service production is often customized. This leads to highly varied service situations. As the blueprint made for this study is an example of a generic and ideal service situation, the reality of services production can differ from what is shown here.

3.5.2 Identifying the service process to be blueprinted

The first stage of service blueprinting is to identify the service process to be blueprinted. As discussed earlier, the blueprint was decided to be made from a general service delivery situation. Additionally, it was decided that the blueprint would represent an ideal service situation, instead of the current service delivery process.

Before blueprinting can be started, the scope of the blueprint needs to be decided upon. Even though service blueprinting is used to map the service delivery process, it was decided that the sales process would be included in the blueprint. Because this blueprint acts as a general guideline for service production, as well as a learning tool for new employees, adding the sales process brings value to the blueprint. Furthermore, some parts of the actual service delivery are done already during the sales process,

such as getting to know the customer and defining the possible goals of the service.

3.5.3 Identifying the customer or customer segment

The second stage of service blueprinting is to identify the customer or the customer segment. Since the blueprint made for this study is a blueprint of a generic service delivery situation, customer segmentation was not performed. However, the blueprint was made from the perspective of a new customer, as they are more challenging for the case company. The key account managers have often formed good relationships with the old customers, and communication with them and service delivery is often more informal than with new customers. Additionally, the blueprint was made from the perspective of a customer, who contacts the case company themselves. The blueprint would have been different, if the customer had initially been contacted by a salesperson from the case company.

As this is the first blueprint made within the company, its value is more in learning the use of the tool and identifying the biggest problem areas. Therefore, very detailed segmentation is not even needed. It is more important for the company to first clear the bigger problems, before concentrating on smaller issues related to individual customer segments.

3.5.4 Mapping the process from the customer's perspective

The third stage in service blueprinting is to map all the actions and processes that the customer performs and is involved in. This is the stage, when the actual drawing of the blueprint begins. The process in this research started with a thorough review of the case company's existing materials, including old offers, contracts, presentations and manuals. Overall, several hundred pages of material was researched. Most of the material consisted of old offers and contracts, but some guidelines and operation manuals were also studied. These include, among others, the company official guideline and online service process guideline. The case

company had not blueprinted or mapped any of its service processes beforehand. Sometimes the case company's salespeople draw a timeline or rough sketch of the service delivery process, but otherwise no visual mapping had been used. Naturally, this means that the most important aspect of service blueprinting - the customer's processes and actions - had never been illustrated. Therefore, the blueprint in this research is the first detailed analysis and documentation of a customer's actions.

One important thing to note is that in this research, only secondary customer data was used. No customer interviews were made, nor did the customers partake in the drawing of the blueprint. Customer information was obtained through the company materials and by interviewing the case company's CEO.

The service starts with the customer contacting the case company. They might either ask for more information regarding the service or for an offer directly. Particularly public organizations operate in this way, since they are required to do a competitive bidding on public projects, but private organizations also contact the case company from their own initiative.

After the customer receives the offer, the next step is a meeting with the case company's key account manager or salesperson. During this meeting, the customer orders the service and the specific goals and objectives of the service are reviewed together with the case company's representative. This is an important phase, because many crucial elements of the service delivery process are agreed upon, such as the timeline, the production team, additional features and services and price. The customer meeting is also the best possibility to convince the customer of the case company's expertise. The importance of the customer meeting was brought up during an interview. The AD (2014) mentioned, that there are too many ad hoc situations, where tasks are given with fast deadlines:

We have too many tasks which 'have to be completed by today'.

These tasks delay the completion of other tasks and make scheduling more difficult. To avoid this, the person selling the service should be able

to determine the overall schedule of the service more accurately with the customer when the service is sold. (ibid)

During the service delivery process, the customer often gets a draft for commenting. The draft varies depending on the service: for a website renewal, it might be the new website; for a print ad, it might be a sketch of the advertisement. The number of draft rounds depends on the specific service and the customer's needs. During the draft round, additional services are often ordered by the customer.

Depending on the service, the customer might have to test if the delivered final service works. This is mostly the case with digital services, such as social media applications, email marketing and new websites. However, in this blueprint, testing the service covers a larger spectrum of tasks, which the customer performs after the service has been delivered, such as the final review of a print advertisement. Therefore, in this blueprint, testing means more than just verifying the workability of electronic applications - it represents the customer receiving and approving the finished work. Before the customer has to test the final service, it is tested by the company's employees. This step is discussed in more detail later during the contact employee actions.

As of now, the case company does not systematically collect feedback from its customers. However, since the case company is currently undergoing strategic changes and wants to be perceived more as a strategic partner than an advertisement agency, giving feedback was added as the last step in the customer actions. There have been some discussions within the management about collecting feedback more systematically, but so far these discussions have not led to any concrete actions. Currently the feedback is mostly based on the results achieved by services, such as website conversion rates and so on. (Case company CEO, 2014a) In order to be perceived as a strategic partner, the case company has to collect feedback: it gives the company's customers a feeling that they are valued by the company. Additionally, collecting feedback will facilitate further development of the case company's services

(Parantainen, 2008). This was also pointed out in an interview (Programmer, 2014):

I do not get enough feedback from my work. Feedback helps in learning and development, both on personal and organizational levels. We should somehow save what we learn into a collective memory to avoid doing the same mistakes we have done before. This is very important in campaigns with short deadlines, where we have to achieve a lot in a small time.

As emphasized by the interviewee, both personal and organizational learning depend on getting feedback. Transferring tacit knowledge into organizational knowledge is important for an organization that wants to grow. This was also mentioned in the literature (Valminen & Toivonen, 2012) as one of the key reasons to productize services.

The best way to collect feedback depends on the customer. The project manager (2014) stressed that the process of giving feedback has to be easy and fast for the customer. The company could have a standardized feedback form, but in practice the questions are asked by a company representative. By making the process of giving feedback as easy as possible, the customers will be more likely to give it. Online forms might therefore not be the best possible alternative. (ibid)

Due to the fact that the blueprint is done of a general service delivery situation, it is impossible to determine an average service delivery time. There are many factors, which affect the delivery time, one of which is customer input. Because the case company is a KIBS company that operates in close relation with its customers, missing information or material from the customers inevitably delays the delivery process. The key account manager (2014) mentioned, that missing or late customer information and documents cause delays in other projects and create unnecessary ad hoc situations. This is in line with Zeithaml and Bitner's (2000) findings, that customer input or the lack of it can affect the amount of time needed to successfully finish a project. To avoid these delays, the company should implement a general guideline on how to deal with late

customer information. This should be clearly communicated to the customers, so that they know, what effects their delays cause to the project. Ideally, it would decrease the amount of situations when service production is late or rushed because of the customer's actions.

3.5.5 Mapping contact employee actions

After the customer's actions are mapped, the next step in service blueprinting is to map both the onstage and the backstage actions of the contact employees. First, the onstage actions are mapped. They are all the actions that are visible to the customer, and therefore, they are drawn above the line of visibility in the blueprint. These actions are separated from the customer by the line of interactivity. Second, the backstage actions, which are invisible to the customer and happen under the line of visibility, are mapped.

The onstage, visible contact employee actions are receiving the order and defining the goals and timeline of the service. Due to the nature of professional marketing services, most of the contact employee actions take place below the line of visibility. The backstage, invisible contact employee actions are writing the offer, sending a draft to the customer, testing the service, communicating and implementing any possible changes and billing the customer.

Depending on the actual service, collecting feedback can either be a visible action, if done during a final customer meeting, or an invisible action, if done online with a questionnaire or by phone. Deciding how to collect feedback is challenging and depends on the actual service. However, in most of the cases, the company does not organize a specific, final meeting. Therefore, it was decided that in this blueprint, feedback collection is a backstage action. Moreover, as the company does not currently collect feedback actively, it is more important to include it into this ideal service process, rather than debate whether it is an onstage or backstage action. This way, it is taken into account in the company's future

development projects. Feedback collection was discussed in more detail earlier in the customer's actions.

The first contact employee action is done backstage. The sales process starts with the customer contacting the company, either for more information or directly for an offer. Based on this contact, the key account manager writes the offer. This step includes getting to know the customer's business, competitors, customers, operating environment and so on, as well as defining what the customer's current problems are and how the company can solve them. The next step is a customer meeting, which is an onstage activity. During this meeting, the key account manager receives the order, and together with the customer, defines the goals and outlines the timeline of production.

The next contact employee actions happen after the service has been produced. A draft is sent to the customer for review. If applicable, the service is tested. This is the case mostly with online services, such as new websites or applications. However, testing can also be done for other services. An example is the printing of a new leaflet or booklet to test that the colors work, the material is correct and so on.

After the customer gives feedback, the key account manager communicates the necessary changes to the production team, which implements these changes. Both of these actions happen typically backstage. However, the key account manager might receive the changes in a customer meeting, in which case it would be an onstage activity. However, as with feedback collection, most often there is no interim meeting, and therefore this step is drawn as a backstage activity in this blueprint.

After the service is produced and delivered, the customer is billed. The key account manager is responsible for ensuring that the customer is billed on time and for the correct amount. As already discussed, the final step is collecting feedback from the customer. This research does not go into more detail on how the company should collect the feedback, but it is

recommended that the company implements this last step into their regular activities.

The scope of the blueprint from the contact employees' viewpoint is rather broad: individual e-mails, phone calls and so on are left out, and the focus is on more general activities. This is necessary when blueprinting such a broad entity, otherwise all the small details and steps will grow the blueprint into a huge, impossible to read picture. Also, as emphasized in the literature, it is important to keep the focus on the customer at all times during the blueprinting process (Bitner et al., 2008; Valminen & Toivonen, 2012). In practice, this was rather easy, as the customer's activities are already defined and drawn into the blueprint, and all the other activities can easily be linked to them. Other than the lack of feedback collection, no major pitfalls or challenges in service production were identified in the contact employee actions.

3.5.6 Linking contact activities to necessary support activities

The fifth and the second last stage of service blueprinting is linking the contact activities to the necessary support activities. As Bitner et al. (2008) describe, support activities are those activities that are completely invisible to the customer and are performed by individuals who are not contact employees. However, they need to happen in order for the service to be successfully delivered.

Due to the nature of professional advertizing and marketing services, most of the service production takes place in the support activities stage: the services are produced in a manner that is not visible to the customer, until the final service is ready and delivered. The support activities are writing the brief, creating the project to the CRM software, team meeting, internal draft, the whole actual service production, updating customer information to the CRM software for billing and final team debriefing.

Writing the brief was considered as the biggest challenge in the production process. This is because this phase includes choosing the production

team for the service. Due to the parent and subsidiary division, using professionals from the other company requires permission from that professional's line manager.

We always try to complete projects by using members from our own team. However, this is not always possible and then we need to use somebody from another team. This is problematic, because I cannot issue work to somebody who is not on my team without the permission from that team's manager. This creates problems for scheduling, because some parts of the project can only be started after a certain part is finished. Then I have to communicate with other managers to find out, if a copywriter or an AD has free time at the right time. If they don't, I might have to outsource that part of the project. (Case company's CEO, 2014b)

Even though every manager has access to the workload of all the professionals, they cannot issue work to people who are not in their team. In case a certain professional has upcoming work from their own line-manager, the other managers might not be aware of this, and they might have already planned on using this professional. In the worst case, this means that the manager has to outsource this part of the service, in order to have it finished on time. Therefore, communication between the managers is vital for successful service production. (ibid)

The team meeting is the second support activity that is somewhat challenging. According to the programmer (2014), the different responsibilities and tasks of the project members are not discussed enough:

Giving responsibility is shallow and during large projects nobody is responsible for anything. Common responsibility equals no responsibility at all. There should be someone, who is responsible for the whole project or a specific part of the project, and who has an understanding of the big picture, with enough hours reserved for project management.

The first team meeting is held, in order to ensure that all the professionals have a clear understanding of their duties. This team meeting is also a

possibility for them to comment the manager's plans and point out any problems or challenges that the manager might have overlooked. Based on the interview (ibid), more emphasis needs to be given to the responsibilities and tasks of individual professionals.

The other support activities are fairly straightforward. Creating the project in the CRM software is easy, after the team has been selected. Before the customer sees a draft, an internal draft is done and the manager comments on it. After the service has been delivered, the CRM software is updated so that the customer can be billed for the service.

The service ends with the manager debriefing the team. This final step is part of the feedback collection activity, and currently it is not regularly performed in the case company. However, feedback can both motivate and serve as a learning tool for the professionals, and should be included into future projects.

As mentioned earlier, the scope of the support activities is rather broad. Therefore, producing the service has been left as one large activity. It would in fact be impossible to depict it in detail, because the blueprint made in this study is of a general production process. Moreover, due to the KIBS nature, each service process is at least somewhat customized to the customer's wishes, and therefore is unique. Visualizing the actual production process in more detail can be done later for each different service the company provides.

3.6 Tangibilizing and concretizing the service offering

The last step in creating a service blueprint is to add the physical evidence of the service into the blueprint. This step is also the third and the final phase of services productization: tangibilizing and concretizing the service offering. As discussed earlier in this study, one of the main defining characteristics of services is often said to be their perishability, or that they cannot be stored or saved for later use. However, as was later discovered, there are often some aspects in services, which do in fact make them

storable, such as physical manifestations like ATM's or DVD's. Even if a specific service could not be stored in any way, it still has some physical aspects, which are tangible to the customer, such as the person performing the service.

While blueprinting the case company's general service delivery process, five different aspects of physical evidence were recognized. The first one is the case company's website. The website is what gets the customer interested in the company and their offering, provides them with more information, showcases past references and acts as a medium for the customer to contact the company. It is therefore a very significant aspect of the blueprint.

The second aspect of the blueprint is the offer, which is written based on the customer's inquiry. Old offers can often be used as a basis for new ones, but offers are always customized to some extent for each situation. Currently the company has a good amount of standardized offers. However, one development idea regarding offers was brought up during an interview. Reference materials of old cases are often attached to offers as evidence of the company's past cases. The need for more reference materials of past cases was identified, ideally grouped by industry or service. (Project manager, 2014)

The third aspect is the draft of the service. Most often, customers have one draft revision round, during which they can give their comments and feedback on the current progress of the service. However, depending on the specific service and customer, there might be several draft rounds.

The fourth aspect, instructions, is the rarest aspect. It is mostly viable only when the company provides some technical services, such as a website renewal. For example, there is rarely a need to provide instructions when the company designs newspaper advertisements, since these are most often sent straight to the correct newspaper by the case company's employees. However, as this is a general service delivery blueprint, this aspect was also decided to be included.

The fifth and the final aspect is a combination of two parts: invoice and the finished and delivered service. The invoice is sent to the customer after the service is finished and delivered. The finished and delivered service represents any outcome that results from the company's service production: newspaper advertisement, new website, flyer and so on.

One aspect of service productization discussed in the theory is adding simple physical items to the service. For example, Jaakkola (2011) and Parantainen (2011) discuss the possibility of adding items such as flyers or brochures to tangibilize the service. The aim is to facilitate the buyer's purchasing process. Writing short, one or two A4 page leaflets with past references and testimonials is something that the company should consider, as it can be used as an icebreaker in a meeting.

3.7 Summarizing the benefits of productization through service blueprinting for case company X

The top management of the case company and its parent company had a good understanding of what productization is and what its possible benefits are. However, before this study, the case company had not performed any activities in blueprinting their service delivery processes. By creating and analyzing the service blueprint, several new development areas and ideas were identified. The problem areas were recognized during the conducted interviews, and they are presented in Table 3.. Earlier parts of this chapter offer more detailed discussion related to them.

Now that the service delivery process is visually mapped and the problem areas are identified, it is easier for the case company to address these challenges. Furthermore, future blueprinting activities will be faster and easier, which should result in better service development activities. Along with the service blueprint and the suggestions for future development activities, a concrete result of this study for the case company is the 'Internal service delivery process guide'. This guide was written by the researcher based on the service blueprint and its analysis, and includes all

the steps visualized in the service blueprint. It is written as a detailed Code of Conduct, to help both new and old employees in any problematic situations they might face during the service production process. The guide's contents are shown in Appendix 3.

This study confirms that it is possible to create a service blueprint from a professional marketing service. Even though the blueprint was created from a general service delivery process without going to minute detail, it could easily have been made from the perspective of one single service and with more steps. The case company can utilize service blueprinting in the future for both internal and external productization efforts.

Table 3. Identified problem areas and their recommended solutions.

Problem	Solution
<p style="text-align: center;">Feedback is rarely collected</p> <ul style="list-style-type: none"> • Programmer (2014): "I do not get enough feedback from my work." • Key account manager (2014): "Often the feedback concentrates on finding the negative sides, instead of being constructive criticism." 	<p>Implement a feedback collection method, that is utilized with:</p> <ol style="list-style-type: none"> 1) every major service production process and 2) every new customer
<p style="text-align: center;">Tangible aspects of the service are lacking</p> <ul style="list-style-type: none"> • Parent company's CEO (2013): "For us, the end result of a productized service is a clear and short presentation on an A4 sheet of paper." 	<p>Add more tangible elements into the service, such as brochures with past references</p>
<p style="text-align: center;">Standardized documents are hard to find and they are ignored</p> <ul style="list-style-type: none"> • Case company's CEO (2014c): "We have standardized documents, but they can be hard to find." • Programmer (2014): "In the web team we have lots of standardized documents and process materials... not all managers use it when they're selling web services." 	<p>To achieve unified service quality and facilitate work:</p> <ol style="list-style-type: none"> 1) collect all standardized materials to one, easy to find source; 2) emphasize the importance of using standardized documents to all employees in the company
<p style="text-align: center;">Current service development guidelines are outdated</p> <ul style="list-style-type: none"> • Key account manager (2014): "We have no tool or method, with which to drive our ideas forward. There is no incentive in developing the services or processes." 	<p>Implement an updated service development guideline, which is easy to use, and foster a positive environment for brainstorming new ideas</p>

4 DISCUSSION AND CONCLUSIONS

This chapter is a conclusion to this study and includes the major findings, the theoretical and managerial implications of the study and suggestions for further research. As already mentioned, service activities provide the majority of jobs, GDP and productivity growth in Europe. The service sector accounts for approximately two thirds of employment and GDP in developed countries. (EU Commission, 2007) However, service innovations have historically played a significantly small role in service companies, and the failure rate of new services remains at a high 43 per cent (Alam & Perry, 2002; Edvardsson et al. 2013). To provide a new perspective for service innovations, this study researched the productization of professional marketing services through service blueprinting.

4.1 Summary and major findings

The objective of this study was to find an answer to the main research question, which is:

How can professional marketing services be productized through service blueprinting?

The main research question was supported by two sub-questions. The first sub-question is:

How do the characteristics of professional marketing services affect their productization?

By analyzing knowledge-intensive business services, the defining and unique attributes of KIBS and their effects on productization were identified. KIBS companies are defined by their reliance upon professional knowledge, co-production nature of the service together with the customer and the customization nature of individual service delivery situations.

By acknowledging these attributes, the two most suitable productization frameworks were identified. Both frameworks have been created specifically for the productization of KIBS companies' services. The first framework has been created by Jaakkola (2011), and the second by Valminen and Toivonen (2012). Both models are based on successful productization efforts undertaken by Finnish KIBS companies. Jaakkola's model serves as the basis for this research's initial theoretical framework, by providing the three main components of productization. Valminen and Toivonen's model contributes to the theoretical framework by emphasizing the importance of customer information and understanding throughout the whole productization process.

The second sub-question is:

What are the implications of the service blueprinting tool when used for productization?

Services are often defined as being intangible, which creates many problems related to their production, development and sales. By using the service blueprinting tool, KIBS companies can add tangible elements to both their productization process and their service offering. By visualizing the service delivery process from the customer's perspective, the company gets a better understanding of the challenges and problems they currently have. The visual depiction therefore helps in developing the company's services. Blueprinting has other added benefits too. It can be used as training material for new and old employees, it helps the management in keeping a customer oriented approach and so on.

While researching service blueprinting, it was identified that the original theoretical framework created for the study had to be updated. The steps in Jaakkola's model were in conflict with the service blueprinting model. In Jaakkola's model, tangibilization of the service offering is the second step out of three, while in blueprinting adding physical evidence is the last step. Interestingly, productization literature agrees with the service blueprinting framework, as internal productization has to be finished before external

productization efforts can be started. Therefore, the theoretical framework was updated, so that it better matches the ideal productization process of KIBS companies. The updated theoretical is shown in Figure 7, on page 58. This updated theoretical framework is the major theoretical contribution of this study, as it combines three different elements together. The first one is service blueprinting, which is a well-known service development tool. The second one is modularization, which is a concept that combines the advantages of both customization and standardization. The third one is a productization framework, which was created by combining two separate productization frameworks, and which is designed specifically for the use of KIBS companies.

As a result, with the help of the sub-questions, the main research question can now be answered. Based on the empirical results of this study, professional marketing services can be productized by using a productization framework, which is created specifically for the use of KIBS companies. Due to the unique and defining characteristics of KIBS companies, using basic productization methods will not result in the best possible outcomes. A new productization framework was created in this study, which can be used when productizing professional marketing services, or other knowledge-intensive business services.

The productization framework that was created in this study's theoretical part was tested empirically by using it in the case company's productization process. After the usability of the framework had been verified, a service blueprint was created. This blueprint was based on interviews with the case company's CEO and existing materials, such as old contracts and offers. The blueprint helped in identifying the main challenges related to the company's current service delivery process. After having identified these challenges, the company can now easily react to them. The blueprint is shown in Appendix 2, and can be used as a reference for other blueprinting exercises.

4.2 Managerial implications

Professional marketing services, and KIBS in general, are defined by their people-centricity and the customized and heterogeneous nature between each service delivery situation. This is illustrated by Fährnich et al. (1999) in Figure 3, on page 31. Because of these and other characteristics of KIBS, productizing them is challenging. As Torkkeli et al. (2005) argue, it is often impossible to fully productize knowledge-intensive business services in the traditional meaning of the word. However, certain levels of productization are achievable, and KIBS companies should not ignore the possibilities offered to them by productizing their services. By using the service blueprinting tool, several challenges and development areas were recognized in the case company's service delivery process. Because of the relative ease of use of the service blueprinting tool, it is applicable in any service situation, regardless of the service or business the company is involved in.

Due to the highly customized nature of KIBS, blueprinting them can be challenging. As service delivery situations vary depending on the customer and their wishes, drawing a blueprint of a typical service situation is difficult. This can be circumvented with what was done in this case study. By blueprinting the ideal service situation, the current situation can be compared to what the ideal service would be. By doing so, the current pitfalls and problem areas can easily be recognized. The ideal blueprint will also act as a reference and reminder to how the service should ideally be produced and delivered in the future. Additionally, since KIBS are often customized according to the customer's wishes, modularization has an even more important role than with "traditional" services. By modularizing their service portfolio, a company can achieve internal standardization without losing the benefits of customization from the customer's viewpoint.

The theoretical framework created in this study was applicable to the case company's situation. Applying this framework to similar development situations in other marketing companies should prove to be beneficial. The

framework should be usable in the productization efforts of other KIBS companies too, which operate in a different field compared to the case company. The framework is relatively straightforward and progresses in a logical manner. As discussed earlier, internal productization is a requirement for external productization. Even if a specific company could not fully productize their service, they can still make use of the framework, as it takes into account the proper order for internal and external productization efforts. This is an update to the original theoretical framework, where external productization was started before internal productization was finished.

The recommendations presented in Chapter 3 regarding the future development of the case company's services are the climax of this study. These recommendations follow the order of a proper productization process, presented in the theory part of this thesis. By first standardizing their internal processes, a company will achieve many benefits compared to their current situation. These benefits include, but are not limited to, faster training of new employees, easier and faster sales process, less problem situations during service delivery process and better communication between employees. Besides this thesis, the other major managerial contribution of this study to the case company was the 'Internal service delivery process guide', which was written to the case company based on the findings of this study. The guide's purpose is to act as a source of information for both new and old employees on all the steps involved in the company's internal processes. The guide starts from the first activities of the key account manager or salesperson to the very last activities of billing and collecting feedback. Because the guide includes strategically important information regarding the company, only its contents have been added into this thesis as Appendix 3. The guide was written based on the service delivery process outlined in the blueprint. Creating a comparable guide for the use of other companies should be fairly easy, after the processes have been visualized by the blueprinting tool.

4.3 Limitations and suggestions for further research

This research studied the productization of professional marketing services by using the service blueprinting tool. Because of the delimitations of this research, some interesting aspects were left out. The main one of these is customer participation while creating the service blueprint. The blueprint that was created during the empirical part of this study had only secondary information related to the customer's processes and the physical evidence visible to them. By interviewing the customers, different or perhaps more detailed blueprints could be made. Having the customer present during the blueprint exercise could prove as a valuable source of information for future service development.

Along with customer information, the on-going and cyclical nature of services productization was ignored. As discussed earlier, productization is not a single and separate project, but it is part of an ongoing sequence within the company. The overall strategy of the company, customer input and opinions and various other internal and external factors all affect successful productization.

The empirical results are based on the findings of only one case company. The productization framework presented in this study was applicable to the case company's situation. However, it would be interesting to research the framework's viability for other KIBS companies, not only for marketing companies. Additionally, verifying the framework's viability by using it for several other marketing companies could provide for an interesting research topic.

REFERENCES

Aarikka-Stenroos, L. & Jaakkola, E. 2012. Value co-creation in knowledge intensive business services: A dyadic perspective on the joint problem solving process. *Industrial Marketing Management*, Vol. 41, No. 1, pp. 15-26.

AD, 2014. Interview conducted on May 20th, 2014.

Alam, I. & Perry, C. 2002. A customer-oriented new service development process. *Journal of Services Marketing*, Vol. 16, Iss. 6, pp. 515-534.

Baldwin, C. Y. & Clark, K.B. 1997. Managing in an age of modularity. *Harvard Business Review*, Vol. 75, No. 5, pp. 84-93.

Baxter, P. & Jack, S. 2008. Qualitative Case Study Methodology: Study Design and Implementation for Novice Researchers. *The Qualitative Report*, Vol. 13, No. 4, 544-559.

Bettencourt, L. A. & Brown, S. W. 2013. From goods to great: Service innovation in a product-dominant firm. *Business Horizons*, Vol. 56, No. 3, pp. 277-283.

Bettencourt, L. A., Ostrom, A. L., Brown, S. W. & Roundtree, R. I. 2002. Client Co-Production in Knowledge-Intensive Business Services. *California Marketing Review*, Vol. 44, No. 4, pp. 100-128.

Bitner, M. J., Ostrom, A. L. & Morgan, F. N. 2008. Service Blueprinting: A Practical Technique for Service Innovation. *California Management Review*, Vol. 50, No. 3, pp. 66-94.

Boeije, H. 2010. *Analysis in Qualitative Research*. London: SAGE Publications Ltd.

Böttcher, M. & Klingner, S. 2011. Providing a method for composing modular B2B services. *Journal of Business & Industrial Marketing*, Vol. 26, No. 5, pp. 320-331.

Boughnim, N. & Yannou, B. 2005. Using Blueprinting Method for Developing Product-Service Systems. International Conference on Engineering Design ICED 05, Melbourne, Australia, August 15-18, 2005.

de Brentani, U. 1999. Success Factors in Developing New Business Services. *European Journal of Marketing*, Vol. 25, No. 2, pp. 33-59.

Bullinger, H.-J., Fähnrich, K.-P. & Meiren, T. 2003. Service engineering—methodical development of new service products. *International Journal of Production Economics*, Vol. 85, No. 3, pp. 275-287.

Campagnolo, D. & Camuffo, A. 2010. The Concept of Modularity in Management Studies: A Literature Review. *International Journal of Management Reviews*, Vol. 12, No. 3, pp. 259-283.

Case company, 2011. Code of conduct. Updated 16.5.2011.

Case company's CEO, 2013a. Interview conducted on November 17th, 2013.

Case company's CEO, 2013b. Interview conducted on November 28th, 2013.

Case company's CEO, 2014a. Interview conducted on March 23rd, 2014.

Case company's CEO, 2014b. Interview conducted on April 3rd, 2014.

Case company's CEO, 2014c. Interview conducted on May 15th, 2014.

Clemes, M., Mollenkopf, D. & Burn, D. 2000. An investigation of marketing problems across service typologies. *Journal of Services Marketing*, Vol. 14, No. 7, pp. 573-594.

Day, E. 1992. Conveying Service Quality Through Advertising. *The Journal of Services Marketing*, Vol. 6, No. 4, pp. 53-61.

Den Hertog, P. 2000. Knowledge-intensive business services as co-producers of innovation. *International Journal of Innovation Management*, Vol. 4, No. 4, pp. 491-528.

Docters, R., Reopel, M., Sun, J.-M. & Tanny, S. 2004. Capturing the unique value of services: why pricing of services is different. *Journal of Business Strategy*, Vol. 25, No. 2, pp. 23-28.

Dolfsma, W. 2004. The process of new service development — issues of formalization and appropriability. *International Journal of Innovation Management*, Vol. 8. No. 3, pp. 319-337.

Edvardsson, B., Meiren, T., Schäfer, A. & Witell, Lars. 2013. Having a strategy for new service development - does it really matter? *Journal of Service Management*, Vol. 24, No. 1, pp. 25-44.

EMCC - European Monitoring Centre on Change. 2005. Knowledge-intensive business services - what future? [www-document]. [Referenced 13.11.2013]. Available <http://www.eurofound.europa.eu/emcc/content/source/eu05011a.htm>

EU Commission. 2007. *Fostering Innovation in Services - A Report of the Expert Group on Innovation in Services*. Brussels.

Fitzsimmons, J. A. & Fitzsimmons, M. J. 2011. *Service Management - Operations, Strategy, Information Technology*. 7th international ed. New York: McGraw-Hill.

Fließ, S. & Kleinaltenkamp, M. 2004. Blueprinting the service company: Managing service processes efficiently. *Journal of Business Research*, Vol. 57, No. 4, pp. 392-404.

Gallouj, F. 2002. Knowledge-intensive business services: processing knowledge and producing innovation. In: Gadrey, J. & Gallouf, F. (eds.). *Productivity, Innovation and Knowledge in Services — New Economic & Socio-Economic Approaches*. Cheltenham, UK: Edward Elgar Publishing.

Gerhenson, J. K., Prasad, G. J. & Zhang, Y. 2003. Product modularity: definitions and benefits. *Journal of Engineering Design*, Vol. 14, No. 3, pp. 295-313.

Geum, Y., Kwak, R. & Park, Y. 2012. Modularizing services: A modified HoQ approach. *Computers & Industrial Engineering*, Vol. 62, No. 2, pp. 579-590.

Gummesson, E. 2000. Evert Gummesson. In: Fisk, R. P., Grove, S. J. & John, J. (eds.). *Services Marketing Self-Portraits: Introspections, Reflections, and Glimpses from the Experts*. Chicago, Illinois: American Marketing Association.

Hänninen, K., Kinnunen, T., Muhos, M. & Haapasalo, H. 2012. Rapid Productization — Empirical Study on Preconditions and Challenges. Working Papers in Department of Industrial Engineering and Management 1/2012. University of Oulu.

Heusinkveld S. & Benders, J. 2005. Contested commodification: Consultancies and their struggle with new concept development. *Human relations*, Vol. 58, No. 3, pp. 283-310.

Hipp, C. Knowledge-Intensive Business Services in the New Mode of Knowledge Production. *AI & Society*, Vol. 3, No. 1-2, pp. 88-106.

Hoffman, K. D. & Bateson, J. E. G. 1997. *Essentials of Services Marketing*. Orlando: The Dryden Press.

Hoffman, K. D., Turley, L. W. & Kelley, S. W. 2002. Pricing retail services. *Journal of Business Research*, Vol. 55, No. 12, pp. 1015-1023.

Höltkä-Otto, K. 2005. Modular product platform design. Doctoral Dissertation, TKK Dissertations 10. Helsinki University of Technology, Department of Mechanical Engineering.

Huang, C.-Y. & Ji, L. 2013. Knowledge-intensive business services and economic growth with endogenous market structure. *Journal of Macroeconomics*, article in press.

Huberman, A. M. & Miles, M. B. 2002. *The Qualitative Researcher's Companion*. Thousand Oaks, California: SAGE Publications Inc.

Inklaar, R., Timmer, M. P. & van Ark, B. 2008. Market services productivity across Europe and the US. *Economic Policy Journal*, Vol. 23, No. 53, pp. 139-194.

Jaakkola, E. 2009. "Productizing" in professional services — Do practitioners and academics disagree? 20th Nordic Conference on Business Studies NFF 2009, August 17-21, Turku, Finland.

Jaakkola, E. 2011. Unraveling the practices of "productization" in professional service firms. *Scandinavian Journal of Management*, Vol. 27, No. 2, pp. 221-230.

Jaakkola, E., Orava, M. & Varjonen, V. 2009. *Palvelujen tuotteistamisesta kilpailuetua: Opas yrityksille*. Helsinki: Tekes.

Junarsin, E. 2010. Issues in the Innovation Service Product Process: A Managerial Perspective. *International Journal of Management*, Vol. 27, No. 3, Part 2, pp. 616-627.

Kaitovaara, P. 2004. *Packaging of IT Services — Conceptual and Empirical Studies*. Doctoral Dissertation, TUCS Dissertations. University of Turku, Department of Information Technology.

Key account manager, 2014. Interview conducted on May 20th, 2014.

Kingman-Brundage, J., George, W. R. & Bowen, D. E. 1995. "Service logic": achieving service system integration. *International Journal of Service Industry Management*, Vol. 6, No. 4, pp. 20-39.

Kurvinen, J. 2008. Tuotteistaminen lisää kannattavuutta. *Hämeen yrityssanomat*, 1/2008, pp. 15.

Lampel, J. & Mintzberg, H. 1996. Customizing Customization. *Sloan Management Review*, Vol. 38, No. 1, pp. 21-30.

Lehtinen, U. & Niinimäki, S. 2005. *Asiantuntijapalvelut — tuotteistamisen ja markkinoinnin suunnittelu*. Helsinki: Werner Söderström Osakeyhtiö.

Levitt, T. 1972. Production-line approach to service. *Harvard Business Review*, Vol. 50, No. 5, pp. 41-52.

Lovelock, C. H. 1996. *Services Marketing*. 3rd ed. London: Prentice Hall International.

Lovelock, C. & Gummesson, E. 2004. Whither Services Marketing? In Search of a New Paradigm and Fresh Perspectives. *Journal of Service Research*, Vol. 7, No. 1, pp. 20-41.

Lovelock, C. H. & Young, R. F. 1979. Look to consumers to increase productivity. *Harvard Business Review*, Vol. 57, No. 3, pp. 168-178.

Lovelock, C., Wirtz, J. & Chew, P. 2009. *Essentials of Services Marketing*. Singapore: Prentice Hall.

Miles, I., Kastrinos, N., Flanagan, K., Bilderbeek, R., den Hertog, P., Huntik, W. & Bouman, M. 1995. Knowledge-Intensive Business Services: Users, Carriers and Sources of Innovation. *European Innovation Monitoring System (EIMS)*. EIMS Publication No. 15. Luxembourg.

Miozzo, M. & Grimshaw, D. 2005. Modularity and innovation in knowledge-intensive business services: IT outsourcing in Germany and the UK. *Research Policy*, Vol. 34, No. 9, pp. 1419-1439.

Mitra, K., Reiss, M. C. & Capella, L. M. 1999. An examination of perceived risk, information search and behavioral intentions in search, experience and credence services. *The Journal of Services Marketing*, Vol. 13, No. 3, pp. 208-228.

Monroe, K. B. 1973. Buyers' Subjective Perceptions of Price. *Journal of Marketing Research*, Vol. 10, No.1, pp. 70-80.

Muller, E. & Doloreux, D. 2009. What we should know about knowledge-intensive business services. *Technology in Society*, Vol. 31, No. 1, pp. 64-72.

Muller, E. & Zenker, A. 2001. Business services as actors of knowledge transformation: the role of KIBS in regional and national innovation systems. *Research Policy*, Vol. 30, Is. 9, pp. 1501-1516.

Parantainen, J. 2008. *Sissimarkkinointi*. 3rd edition. Helsinki: Talentum.

Parantainen, J. 2011. *Tuotteistaminen: rakenna palvelusta tuote 10 päivässä*. 5th edition. Helsinki: Talentum.

Parent company's CEO, 2013. Interview conducted on November 17th, 2013.

Pekkarinen, S. & Ulkuniemi, P. 2008. Modularity in developing business services by platform approach. *The International Journal of Logistics*, Vol. 19, No. 1, pp. 84-103.

Petersen, N. J. & Poulfelt, F. 2002. *Knowledge Management in Action: A Study of Knowledge Management in Management Consultancies*. In: Buono, A. F. (ed.). *Developing Knowledge and Value in Management Consulting, Volume 2: Research in Management Consulting*. Greenwich: Information Age Publishing.

Programmer, 2014. Interview conducted on May 16th, 2014.

Project manager, 2014. Interview conducted on May 15th, 2014.

Rahikka, E., Ulkuniemi, P. & Pekkarinen, S. 2011. Developing the value perception of the business customer through service modularity. *Journal of Business & Industrial Marketing*, Vol. 26, No. 5, pp. 357-367.

Reddy, A. C., Buskirk, B. D. & Kaicker, A. 1993. Tangibilizing the Intangibles: Some Strategies for Services Marketing. *The Journal of Services Marketing*, Vol. 7, No. 3, pp. 13-17.

Ritala, P., Hyöttylä, M., Blomqvist, K. & Kosonen, M. 2013. Key capabilities in knowledge-intensive service business. *The Service Industries Journal*, Vol. 33, No. 5, pp. 486-500.

Rope, T. 2005. *Suuri markkinointikirja*. 2nd ed. Helsinki: Talentum.

Rope, T. 2006. Menesty konsulttina: konsultoinnista kukoistavaa liiketoimintaa. Helsinki: Talentum.

Rust, R. T. & Miu, C. 2006. What academic research tells us about service. *Communications of the ACM*, Vol. 49, No. 7, pp. 49-54.

Salmi, P., Torkkeli, M., Ojanen, V. & Hilmola, O.-P. 2008. New product creation process of KIBS firms: a case study. *International Journal of Services and Standards*, Vol. 4, No. 1, pp. 16-32.

Santamaría, L., Nieto, M. J. & Miles, I. 2012. Service innovation in manufacturing firms: Evidence from Spain. *Technovation*, Vol. 32, No. 2, pp. 144-155.

Santos-Vijande, M. L., Gonzáles-Mieres, C. & López-Sánchez, J. Á. 2013. An assessment of innovativeness in KIBS: implications on KIBS' co-creation culture, innovation capability, and performance. *Journal of Business & Industrial Marketing*, Vol. 28, No. 2, pp. 86-102.

Shostack, G. L. 1977. Breaking Free from Product Marketing. *Journal of Marketing*, Vol. 41, No. 2, pp. 73-80.

Shostack, G. L. 1984. Designing services that deliver. *Harvard business review*, Vol. 62, No. 1, pp. 133-139.

Shostack, G. L. 1987. Service Positioning Through Structural Changes. *Journal of Marketing*, Vol. 51, No. 1, pp. 34-43.

Simula, H., Lehtimäki, T. & Salo, J. 2008. Re-thinking the product - from innovative technology to productized offering. Proceedings of the 19th international society for professional innovation management conference, Tours, France, June 2008.

Simula, H., Lehtimäki, T., Salo, J. & Malinen, P. 2010. Uuden B2B-tuotteen menestyksekkäs kaupallistaminen. Helsinki: Teknologiainfo Teknova. Suddaby, R. & Greenwood, R. 2001. Colonizing knowledge: Commodification as a dynamic of jurisdictional expansion in professional service firms. *Human Relations*, Vol. 54, No. 7, pp. 933-953.

Sipilä, J. 1999. Asiantuntijapalvelujen tuotteistaminen. 2nd edition. Porvoo: WSOY.

Stevens, G. A. & Burley, J. 2003. Piloting the rocket of radical innovation. *Research Technology Management*, Vol. 46, Iss. 2, pp. 16-25.

Sundbo, J. 1994. Modulization of service production and a thesis of convergence between service and manufacturing organizations. *Scandinavian Journal of Management*, Vol. 10, No. 3, pp. 245-266.

Sundbo, J. 2002. The Service Economy: Standardisation or Customisation? *The Service Industries Journal*, Vol. 22, No. 4, pp. 93-116.

Toivonen, M. 2004. Expertise as business: Long-term development and future prospects of knowledge-intensive business services (KIBS). Doctoral dissertation series 2004/2. Helsinki University of Technology, Laboratory of Industrial Management.

Torkkeli, M., Salmi, P., Ojanen, V., Länkinen, H., Laaksolahti, A., Hänninen, S. & Hallikas, J. 2005. Asiantuntijapalvelun johtamisen haasteet: Opas suunnittelu- ja konsultointiyriytysten liiketoimintaosaamisen kehittämiseen. Research Report 168. Department of Industrial Engineering and Management, Lappeenranta University of Technology, Finland.

Valminen, K. & Toivonen, M. 2009. Productisation of services: What, why and how? International Conference of RESER, Budapest, Hungary, September 24-26, 2009.

Valminen, K. & Toivonen, M. 2012 Seeking efficiency through productisation: a case study of small KIBS participating in a productisation project. *The Service Industries Journal*, Vol. 32, No. 2, pp. 273-289.

Vargo, S. L. & Lusch, R. F. 2004a. Evolving to a new dominant logic for marketing. *Journal of Marketing*, Vol. 68, No. 1, pp. 1-17.

Vargo, S. L. & Lusch, R. F. 2004b. The Four Service Marketing Myths - Remnants of a Goods-Based, Manufacturing Model. *Journal of Service Research*, Vol. 6, Is. 4, pp. 324-335.

Verma, R. 2000. An empirical analysis of management challenges in service factories, service shops, mass services and professional services. *International Journal of Service Industry Management*, Vol. 11, No. 1, pp. 8-25.

Yin, R. K. 2009. *Case Study Research: Design and Methods*. 4th ed. Thousand Oaks, California: SAGE Inc.

Zeithaml, V. A. & Bitner M. J. 2003. *Services Marketing - Integrating Customer Focus Across the Firm*. 3rd ed. New York: McGraw-Hill.

Zeithaml, V. A., Parasuraman, A. & Berry, L. L. 1985. Problems and Strategies in Services Marketing. *Journal of Marketing*, Vol. 49, No. 2, pp. 33-46.

APPENDICES

Appendix 1. Basic outline of the interview questions.

Common questions:

1. Define your role in the company?
2. Do you know, how the services are currently developed?
3. How would you like to develop the company's internal processes in the future?
4. How would you like to develop the company's services in the future?
5. What are the biggest weaknesses and challenges in the company's current service production process?
6. Should service production be standardized more, i.e. does the company currently operate too much on an ad hoc principle?
7. Would more standardized procedures make your work easier?
8. If you have development ideas regarding the company's processes or services, how do you act?
9. Does the blueprint match the reality of the service production process?

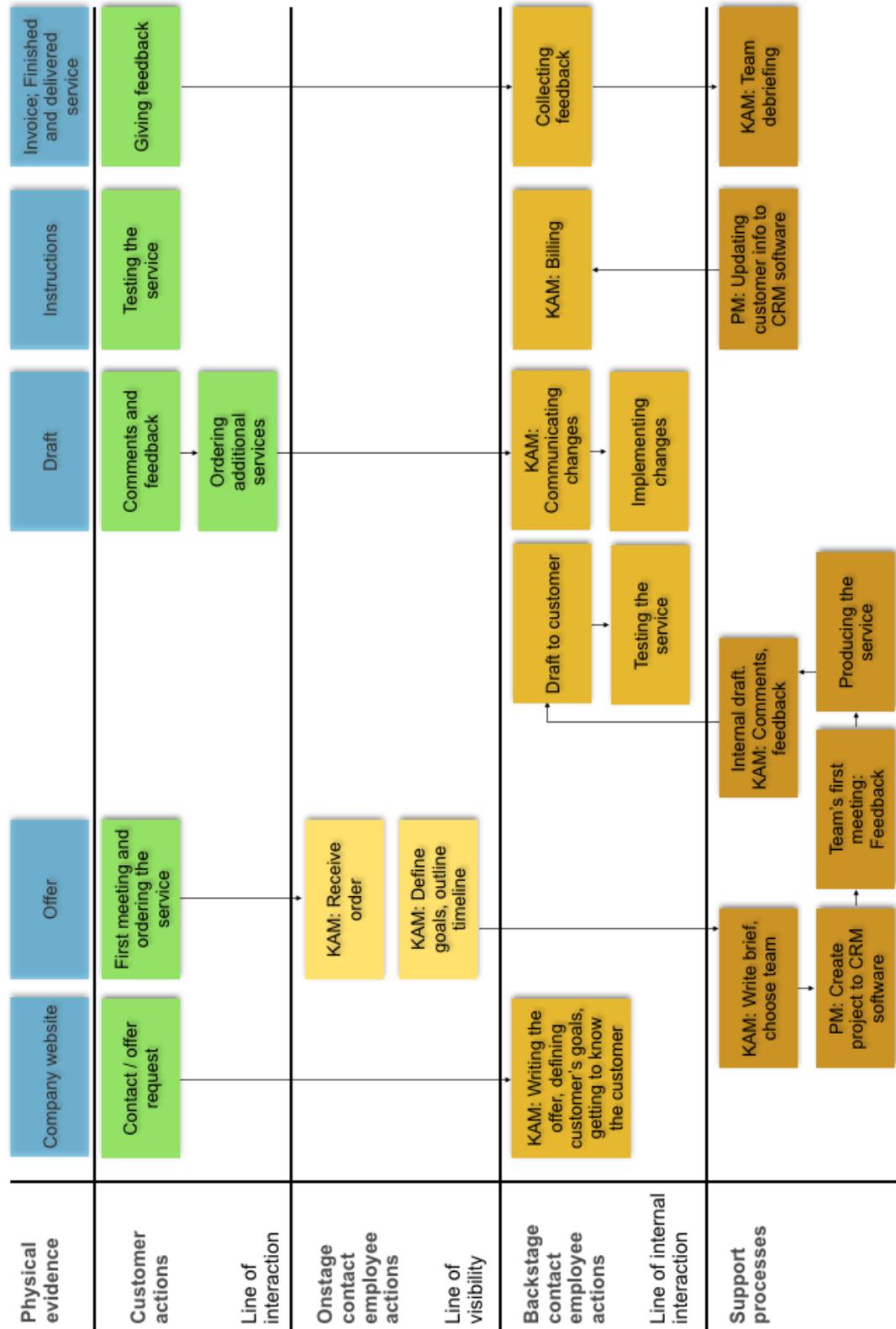
Questions for management:

1. Does the blueprint match the reality of the sales process?
2. What are the biggest challenges related to sales?
3. Should the company collect more feedback from its customers?
4. Do you have readymade sales materials?
5. Which sales materials would you like to have more?

Questions for professionals:

1. How would you like to be involved in the process of making an offer to a customer?
2. What information do you need, so that you can make an estimate of the time you require for the service production?
3. When making a time estimate for a project, do you include all the time that you spend on the project into the estimate, including meetings?
4. How should a brief be given?
5. Is there a certain type of 'best possible brief', or does the best brief style depend on the service situation?
6. Do you feel like you receive enough feedback from your work?
7. How would you want to communicate within a production team?
Should there be more team meetings or is the best way of communication for example by email?
8. Do you have certain process guides?
9. How do you use the existing company guides and material in your work?

Appendix 2. Service blueprint of an ideal, general service delivery situation.



Appendix 3. Contents of the 'Internal service delivery process guide'.**Contents:**

1. Introduction
 - 1.1. CRM-software
2. Service blueprint
3. Seller's processes
 - 3.1. Processes before contacting the customer
 - 3.2. Using the CRM-software
4. Receiving an order
 - 4.1. Customer meeting
 - 4.2. Brief
 - 4.3. Choosing the team
 - 4.4. Using members from other teams
5. Creating the project into the CRM-software
6. Team's first meeting
7. Producing the service
8. Outsourcing
 - 8.1. Outsourcing from abroad
9. Billing