LAPPEENRANTA-LAHTI UNIVERSITY OF TECHNOLOGY LUT School of Business and Management Business Administration Supply Management

Hamzah Al-Qatawneh

# PUBLIC SERVICE PROCESS IMPROVEMENT USING SERVICE BLUEPRINTING METHOD

Master's Thesis

2019

Examiners: Professor Jukka Hallikas

Associate Professor Mika Immonen

#### **ABSTRACT**

Author: Hamzah Al-Qatawneh

Title: Public service process improvement using

service blueprinting method

Faculty: School of Business and Management

Master's Programme: Supply Management

Year: 2019

Master's Thesis: Lappeenranta-Lahti University of Technology

LUT, 85 pages, 17 figures, 6 tables, 1 appendix

Examiners: Professor Jukka Hallikas

Associate professor Mika Immonen

Keywords: Public sector, public services, service process,

process improvement, service blueprinting,

municipality

The aim of this master's thesis is to improve the case organization's service process to become more customer-oriented and structured. This objective is achieved by identifying customer needs, describing the current process and identifying areas for improvement. As a result of the thesis, an improved service process model and development proposals for the case organization, the city of Imatra, are presented.

The theoretical part of the thesis examines the topics that require a deeper understanding for the empirical part. The theoretical part deals with service characteristics and urban services, process management, change management, service improvement and customer needs. These lead to a consistent approach and the necessary tools to improve the service process. The selected tool for service modeling and development is the service blueprinting method and the customer need analysis was performed using the modified QFD method. The study focuses on the process of business establishment offered by the city of Imatra. In conclusion, it was found that the development of the service process requires process management and continuous clarification of customer needs. Service modeling revealed that the biggest weaknesses of the current process are related to the lack of process management, the high workload of the customer, and the lack of proactive internal communication. Suggestions for development included adopting process management practices and appointing a process owner and directing the customer to the right contact person.

## TIIVISTELMÄ

Tekijä: Hamzah Al-Qatawneh

Tutkielman nimi: Julkisen palveluprosessin kehittäminen service

blueprinting -menetelmää käyttäen

Tiedekunta: Kauppatieteellinen tiedekunta

Maisteriohjelma: Supply Management

Vuosi: 2019

Pro gradu -tutkielma: Lappeenrannan-Lahden teknillinen yliopisto

LUT, 85 sivua, 17 kuvaa, 6 taulukkoa, 1 liite

Tarkastajat: Professori Jukka Hallikas

Apulaisprofessori Mika Immonen

Avainsanat: Julkinen sektori, julkiset palvelut,

palveluprosessi, prosessikehitys, service

blueprinting, kunta

Pro gradu -tutkielman tavoitteena on kehittää case-organisaation palveluprosessia asiakaslähtöisemmäksi ja selkeämmäksi. Tähän tavoitteeseen pyritään pääsemään asiakastarpeiden selvityksellä, nykyprosessin kuvaamisella ja kehityskohteiden etsinnällä. Tutkielman lopputuloksena esitetään paranneltu palveluprosessimalli ja kehitysehdotuksia case-organisaatiolle, Imatran kaupungille.

Tutkielman teoreettinen osuus tarkastelee kokonaisuuksia, joiden syvällisempää ymmärrystä tarvitaan empiriaosuudessa. Teoreettinen osuus käsittelee aiheita: palvelujen ominaispiirteet ja kaupunkipalvelut, prosessijohtaminen, muutosjohtaminen, kehittäminen asiakastarpeiden palvelujen ja selvittäminen. Valittu työkalu palvelunmallinnukseen ja kehittämiseen on service blueprinting -menetelmä ja asiakastarve -analyysi suoritettiin pelkistetyllä QFD -menetelmällä. Tutkielma keskittyy Imatran kaupungin tarjoamaan yritysten sijoittumisprosessiin. Johtopäätöksenä palveluprosessin kehittäminen havaittiin, että vaatii prosessijohtamista asiakastarpeiden jatkuvaa selvittämistä. Palvelunmallinnuksen avulla selvisi, että nykyprosessin suurimmat heikkoudet liittyvät prosessijohtamisen puuttumiseen, asiakkaan suureen työkuormaan, sekä proaktiivisen sisäisen kommunikoinnin puutteeseen. Kehitysehdotuksina esitettiin mm. prosessijohtamiskäytäntöjen omaksumista ja prosessinomistajan nimittämistä, sekä asiakkaan ripeää välittämistä oikealla yhteyshenkilölle.

**ACKNOWLEDGEMENTS** 

I will complete my business studies in LUT with this thesis research. I would like to thank

the city of Imatra for the opportunity to conduct this research. The positive and

collaborative attitude throughout the process truly amazed me. Special thanks to my

supervisor professor Jukka Hallikas for his support and guidance.

Thanks also go to my family who has always supported and encouraged me on my study

journey.

In Espoo, 1.9.2019

Hamzah Al-Qatawneh

## **TABLE OF CONTENTS**

1. INTRODUCTION	1
1.1 Background	2
1.2 Research problem, objectives and scope	3
1.3 Structure of the report	4
1.4 Conceptual framework	5
2 SERVICE PROCESS IMPROVEMENT	6
2.1 Defining service	6
2.1.1 Characteristics of public services	11
2.2 Process management	15
2.3 Change management	20
2.4 Service process improvement	26
2.5 Customer needs and expectations	35
3 ESTABLISHMENT SERVICE PROCESS IMPROVEMENT	40
3.1 Case City of Imatra	40
3.1.1 Improving establishment service process	40
3.2 Research methodology and case study	41
3.2.1 Data collection	42
3.2.2 Semi-structured interview	43
3.2.3 Focus group discussion	44
3.2.4 Customer survey	45
3.3 Validity and reliability of the study	
3.4 Findings	46
3.4.1 Service blueprinting the current establishment process	48
3.4.2 Understanding customer needs through QFD analysis	52
3.5 Identified challenges	56
3.6 Service process improvement suggestions	59
4 DISCUSSION AND CONCLUSIONS	65
4.1 Answering to the research questions	65
4.2 Evaluation of the results	67
4.3 Suggestions for further research	67
REFERENCES	68
ADDENDICES	77

## **Figures**

- Figure 1. Research limitations
- Figure 2. Thesis framework
- Figure 3. FTU framework for service provision
- Figure 4. FTU and particularization of the IHIP characteristics
- Figure 5. Mandatory and optional services of a municipality
- Figure 6: Process-thinking pattern
- Figure 7. The six core elements of BPM
- Figure 8. Kubler-Ross change curve
- Figure 9. Innovation and improvement
- Figure 10. Continuous process improvement
- Figure 11. Characteristic activities of business process improvement
- Figure 12. Service blueprint components
- Figure 13. House of quality
- Figure 14. Establishment service process blueprint
- Figure 15. Modified QFD matrix
- Figure 16. Service design priority ranks and weights
- Figure 17. Suggestion for improved service process

## Tables

- Table 1. Reasons for failures in implementing major information system.
- Table 2. Customer service expectations
- Table 3. Understanding customer needs
- Table 4. Features of Qualitative Research
- Table 5. Data collection
- Table 6. Establishment service process providers

## 1. INTRODUCTION

Competition between companies in the modern business world is unprecedented due to many reasons, such as globalization and technologization. Not only the business enterprises compete with one another, but also cities are increasingly engaging into competition with one another at various levels. Cities strive to become as competitive as possible, in order to compete with other cities. Brooksbank and Pickernell (1999) argue that there is no consensus as to how to define competitiveness in the context of local or regional economies. According to Porter (1996) the only meaningful understanding of competitiveness at national level is national productivity. As cities are the local regulators of the nation, this reasoning also applies to them. Productivity in the context of cities relates to their ability to produce goods and services, which meet the test of international markets, to its people over the long term. It is also measured by factors such as level of innovation, R&D, investments, service quality and employment rate. (OECD, 1996)

Cities, or municipalities, as public administrators are bound by various regulations from the government. As such, they do not have full control over their competitiveness. They are obliged by the law to offer certain services to their residents and there are limited amounts of things that the city can do to affect their performance. (Kresl, 1995) Cities also operate as a business regarding their nonmandatory activities, and over these they do have way more control. Regulations on public procurement affects these activities as well though. Even though cities operate under many regulations, they can affect their performance. In addition to cities performing well in their processes and services, there are other ways to increase the competitiveness. One of the most important ways is to create and support business within the area. Attracting new businesses and residents is also part of this. Another megatrend that affects cities is urbanization, which means the increase of the urban population share from the total. In countries like Finland which only got few big cities, it can pose a threat to the smaller ones. It has been already seen that some smaller cities and municipalities have lost their competitiveness and vitality due to migration. This fact further emphasizes the role of competitiveness in smaller cities.

Organizations of all kind ought to organize and manage process in new and efficient ways to compete in the market. In order to survive the competition and the complex requirements of business environments, practitioners are forced to improve their processes. (Adesola & Baines, 2005) Cities must also develop their processes to stay competitive. Tinnila (1995) summarizes business process as a group of logically related activities, that use the

resources of the organization to provide defined results to support the organizations objectives. In the case of cities this regards all the activities that are related to the productivity of organization and the whole region.

## 1.1 Background

The domination of services in the world's economies have led to the growing emphasis in businesses on creating meaningful and memorable customer experiences. Firms can no longer compete solely on providing superior value through their core offerings, but rather they must create unique and tailored customer experiences that create long-term bonds with their customers. (Crosby & Johnson, 2007) Bitner et al. (2008) argue that all business are service businesses at some level, due to the new characteristics and trends in business world. These new factors include internationalization, technologization and various support process that firms are adopting.

In order the firms to create superior value through customer experiences, there is a compelling need for service innovation. In practice however, innovation in services is less disciplined and creative than in the manufacturing and technology sectors. Reasons for this phenomenon lie on history and the nature of services. The industrial revolution and the focus on tangible value has been driving product innovation for decades. Services on the other hand, provide often less tangible value and include greater amount of human interaction. As services are fluid and dynamic, the traditional protocols and design techniques used for physical goods, for improvement and innovation efforts, do not work often as intended. (Edvardsson et al. 2000)

The case of this thesis is a city called Imatra. It is a town in eastern Finland and is very close to the Russian border. Imatra has been improving its processes and is proactively trying to answer the challenges it is facing. The city is confident of its own capabilities as an industry city and strives to bring this up to public knowledge. They are sure that they can offer everything that a company needs. As of now, the city has been able to attract new companies to its territory but wishes to pursue for more. In order to draw the attention of potential companies, the city has been engaging in activities related to publicity. In addition to this, Imatra wants to be capable of locating any interested and potential business to their city. For this business establishment process to be as efficient as possible, a process improvement was considered necessary. The current establishment process is seen quite functional, but there is always room for improvement. The process is to be developed to

respond the future opportunities and challenges. It is also intended to match the city slogan "We will take care of it", and therefore be clear and customer friendly.

## 1.2 Research problem, objectives and scope

This thesis aims to clarify how the case city can map and improve their establishment service process and develop it into more customer-oriented direction. As such the objective of this study is to bring forward a service process improvement suggestion. This objective is being pursued through careful study of literature and theory, and by conducting a qualitative empirical research. The main objective is supported by two additional sub-objectives, which both are there to broaden the understanding of the field of service process mapping and improvement. First support research question regards the proper approach that ought to be taken when considering service process improvement actions. The second support question is about understanding the customer needs and meeting them with the service process.

Main research question of the study:

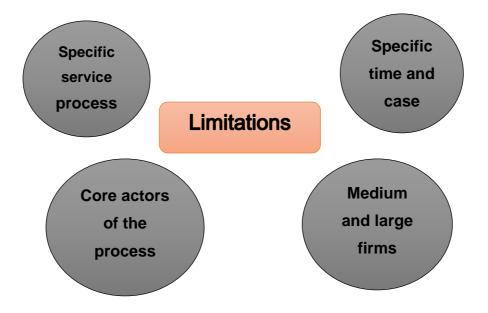
How can the case organization improve its establishment service process?

Support research questions:

- What is the most appropriate way to approach service process improvement?
- How to meet customer needs with a service process?

This research is limited to this specific case organization, City of Imatra. It is also limited to specific time and process. The process studied is the business establishment service process, and the time limitation refers to the current state of the process. The main focus of the thesis is on the empirical part and qualitative case study: the results are not meant for wide generalizations. The case organization is also public administrator, which makes the research even less suitable for generalizations, due to its unique nature. The research is also limited to the core establishment service process provided by the city and its group companies. All other activities that are not in the core of this specific process, are left out of the study. Customer segment of the process is also limited to medium and large enterprises.

Figure 1. Research limitations



#### 1.3 Structure of the report

The structure of this study follows the general characteristics of academic research. The research structure is also shaped to respond to the problem of the case company as effectively as possible. The first chapter presents the background of the work and the research problem, as well as the limitations and conceptual framework. The second chapter discusses theory relevant to the research. Theory examines the characteristics of services as process and the specific features of public services provided by municipalities. Process management is discussed next, following service process improvement, as well as understanding the customer requirements. The main purpose of selected theory dimensions is to deepen the understanding of service process improvement and gather required skills for the empirical study. The third chapter presents research methods of qualitative empirical research and the process and results of empirical research itself. The empirical study examines the case organization and the chosen process. The goal is to understand the process comprehensively and find solutions to improve it. The fourth and last chapter summarizes the study and the conclusions are drawn. The research questions are answered, the results are evaluated and suggestions for future research are given.

## 1.4 Conceptual framework

The theoretical framework of this study aims to present overall picture of the research process. The framework emphasizes process perspective, as it is an essential factor in this study: qualitative research itself is a process, the improvement area of the case company is the process of establishment, and the mapping and improvement of functions also proceeds as a process. The theoretical framework of the thesis also presents a customer perspective, the understanding of which is important in the development of services. At the heart of the development of services and operations is also the understanding that development is an ongoing process.

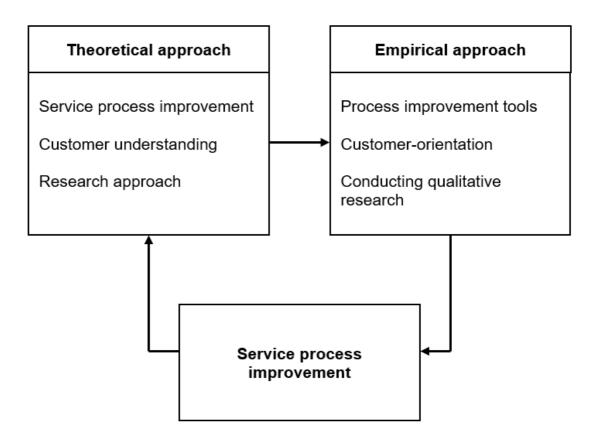


Figure 2. Thesis framework

## 2 SERVICE PROCESS IMPROVEMENT

This chapter discusses the theoretical part of the research. First, the nature of service as a process, public services and process management are examined. Then moving on to service process and improvement using service blueprinting method, and finally understanding the customer needs and expectations.

## 2.1 Defining service

Service is a concept that can be discussed from many perspectives. Grönroos (2000) defines service as a process which consists of chains or series of activities aiming to provide value for the customer. These activities mostly happen in interaction between the customer and service provider's resources, such as people, goods and infrastructure. Services are most often intangible and abstract, and the offering that is sold to the customer is often a process. Flipo (1988) also considers service as series of activities. Services can also be classified into different types according to their focus. Ylikoski (2000, 26-30) divides services into consumer services and business services. Former refers to services offered to households and individual consumers. Latter consists of services that firms sell to other firms. The service provider can also be either individual organization or public administration. Last rough classification regarding services relates to the motives. Public and private services can be divided into two groups: profit or nonprofit. First group is focused in generating profit through their activities, latter has some other motives, such as public welfare.

D'Agostino et al. (2006) proposed an additional classification within the service sector to enhance the understanding of the field. Consequently, they consist of:

- 1) wholesale and retail trade, restaurants and hotels;
- 2) transport, storage and communication;
- 3) finance, insurance, real estate and business; and finally
- 4) community, social and different personal services

Services differ from one another, but some basic features have been recognized. Tuulaniemi (2011) argues that the similarities of services are:

- solves customer`s problem
- is a process
- is experienced
- is an interaction

Parasuraman et al. concluded that most services share four basic characteristics; Intangibility, Heterogeneity, Inseparability and Perishability. This categorization is also known as IHIP and it defines how the services differ from goods due to their named special characteristics. Services are mostly intangible. They are series of activities that are subjective and hard to measure. Services are also often accompanied with physical elements, whilst the main offering is still intangible. (Grönroos 1998, 53)

Heterogeneity of services refer to the fact that the quality of the service differs, due to changing circumstances, such as variation in performance, different customer etc. Because of this, it is hard to standardize services and measure them. This leads to different services for each customer. It is challenging for the firm to provide equal quality for all customers, because many factors related to the service quality is out of their control; customer could express their wishes inadequately etc. (Zeithaml, Bitner & Gremler 2009, 21)

Inseparability of services means they are delivered and consumed simultaneously. Services cannot be stored as physical goods and their quality differ due to the interaction of different customer and service provider's resources. As the service cannot be stored, it is harder to answer the inconsistent customer demand. This can lead to long waiting times and to customer dissatisfaction. (Grönroos 1998, 327)

Services are also perishable. Onkvisit and Shaw (1991) highlight that services are very time dependent and it makes them very perishable. As discussed earlier, Generally, services cannot be stored for future use. Services are a results of interaction processes and each process has variants which makes it unique. Common characteristic of many services is the high degree of human interaction. Customers are involved in the service process delivery and this impacts their perception of the service received. The output of the service emerges from the coordinated efforts of service provider and customer. (lengnick-hall et al. 2000) As services are more or less co-constructed by both participants, the customer should be seen as an active participant in the service process, rather than just service recipient. The extent to which customers choose or can co-produce the service varies, but they ought to be still seen as integral part of it. Even if the actions of the customer do not directly

contribute or add value to the service process, they are still co-constructing their service experience. (Lengnick-Hall, 1996)

Since products and services increasingly include digital technologies, it has become progressively harder to disentangle digital products and services from their underlying information technology (IT) infrastructures. (Furtmueller et al., 2010) Lovelock & Gummeson (2004) and many other authors have criticized the four IHIP characteristics and find it incapable of explaining the nature of services in current times. There are two main reasons for this conclusion. First, the focus of service marketing has changed and secondly the development and expansion of information and communication technology. The initial approach of services marketing research has predominantly focused at personal services or low-tech service. This focus implied the clear distinction between manufactured tangible goods and intangible, heterogeneous, inseparable and perishable services. The changes in general conditions, mainly the development of technology, water down the applicability of the IHIP classification even further. Today, the perishability of services and the inseparability of production and consumption can often be overcome using technology-based solutions, such as web-based lectures in distance learning or minimally invasive surgery performed from a distance. (Moeller, 2010)

As the dissatisfaction of IHIP paradigm has grown due to the shifting focus and technology development, the definition of the core term "services" remains unclear for many. As some researchers still hold on to the IHIP classification, others have abandoned it or tried to develop the framework further, to match the current business context. Literature has often taken the middle ground regarding this issue. Edvardsson et al. (2005) for example state that the characteristics of services shouldn't be generalized too much, but rather use them when they are relevant and in in situations when they are useful. Understanding the conditions under which they apply is crucial. Moeller (2008) proposes a new FTU (facilities, transformation and usage) framework, which illustrates how the IHIP characteristics can be further exemplified. The FTU framework consists three stages of service provision: facilities, transformation and usage, and two types of resources: customers' and providers' resources. The FTU framework is illustrated in figure 3.

The first stage of the FTU framework is "facilities" and it is the foundation of value creation. It includes all provider resources, such as machines, people and know-how, which are required for the service provision to become feasible. These resources can be tangible or intangible and could also be called the prerequisites for services. (Mayer et al., 2003) The second stage if called "transformation" and it can occur on customer or provider resources.

The transformation of provider resources is understood as indirect service provision (goods as distribution mechanisms) for service provision and transformation of customer resources is seen as direct service provision. In contrast, the production of goods contains only provider resources. (Moeller, 2008) Customer resources can be the customer themselves as a person (e.g. haircut), their physical objects (e.g. car maintenance), their rights (e.g. law issues) or their data (e.g. taxes) (Fließ and Kleinaltenkamp, 2004). The third stage of FTU model is the so-called "usage". The outcome of the service provision is an option of the customer to make use of the transformation of resources and create value for them. The outcomes of the transformation are often a bundle of different elements, which are either pre-pared within the provider facilities, e.g. standardized brochure, or are co-produced by the customer and provider, e.g. individual offering. (Fließ and Kleinaltenkamp, 2004)

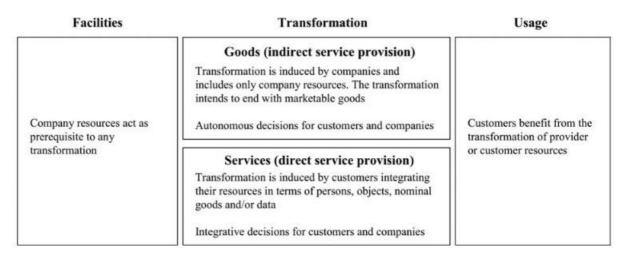


Figure 3. FTU framework for service provision (Moeller, 2008)

Lovelock & Gummeson (2004) argue that the IHIP characteristics cannot be applied to all types of services in order to differentiate them from products; there are always exceptions which contradict the generalizability of the IHIP -criteria. The FTU framework allows IHIP to be utilized in specific aspects of services and not assigned to services as a single entity. Figure 4 illustrates how IHIP characteristics of services are suitable if they are applied in specific points of reference. (Moeller, 2008)

Perishability of service provider's capacity or customer resources ought to be recognized and managed accordingly. Intangibility has been assigned to service offering because of the restriction in selling them in the future. The buying decision related to services contains an elevated level of uncertainty, as there is more uncertainty related to services than already

completed goods. The heterogeneity of the outcome is also distinctive feature of most services. According to Moeller (2008) the heterogeneity of customer resources is mostly the cause of the heterogeneity of an outcome and thus, something that should be considered. Inseparability also has implications for capacity management. Capacity issues are often larger if human beings service as resources to be transformed, as opposed to objects or information. On the other hand, when the customer resource is the object to be transformed, such as car, the customers are often more flexible as they do not need to involve be present in the process. (Moeller, 2008)

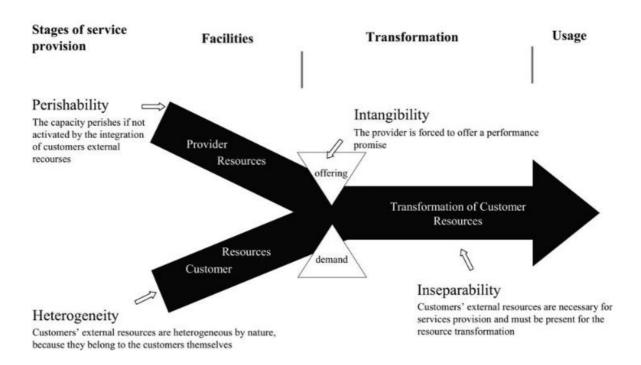


Figure 4. FTU and particularization of the IHIP characteristics (Moeller, 2008)

As the management field has been mainly trying to describe services, Vargo & Lusch (2004, 2008) challenge the traditional service-view and highlight that services are taking the center-stage in business field. They argue that new "service-dominant logic" is becoming the new dominant logic. The S-D logic claims that the prevalent approach in business is now putting the customer in the center of its activities and is always a collaborating party. Service provision rather than goods is the fundamental to economic exchange. The focus on interaction between service provider and service receiver is in join effort in making the service transaction meaningful. The conception of services being something unproductive

and not helping society's advancement in Smith's view, to being regarded as the center of all economic transactions in the S-D logic view. (Segelström, 2010)

S-D logic and other recent changes in market dynamics have blurred the division between services and goods. Scholars and practitioners are aware that competitive advantage can be enhanced through service (Karmarkar, 2004). S-D logic inverts the role of goods and service by turning service into superordinant to goods. Service can be provided directly or through goods - appliances. Competition occurs through service provision, as firms compete in how they can provide applied operant resources to meet the customer needs, relative to another firms. (Lusch et al., 2007) Servitization, term introduced by Vandermerwe & Rada (1988), is widely recognized as the process of creating value by adding services to products. Even though the interchangeability between products and services has a long history, the change in business models and escalation of S-D logic has been particularly rapid. Baines et al. (2009) define servitization as an innovation in organizational capabilities and processes to better create mutual value through shift from selling product to selling Product-Service Systems. Manufacturing companies have realized the added value that services can provide and have increasingly integrated their goods with closely related service offerings (e.g. insurance, maintenance). These so-called product-service systems are "bundles" of offering combinations that are aimed to create superior value. (Tukker, 2004) Services are also being scaled up via "productizing" which refers to adding of products to the service (e.g. hairdresser products). Regardless the fact, the prevalent trend has leaned towards servitization and product-service direction in the spirit of S-D logic and will most probably continue doing so. (Wilkinson et al., 2009)

#### 2.1.1 Characteristics of public services

Governmental organizations that form the public sector can be divided into three different categories: government-organization, autonomous public organizations and other public organizations. Municipalities and cities are autonomous public organizations, that execute state authority. (Kiviniemi, 1995) Local administrative units, municipalities, have two main areas of tasks, political tasks and service tasks. These both are aimed for the well-being of the residents of the municipality. Kiviniemi (1989) has divided the tasks of municipalities as follows:

- administrative customer service
- welfare services
- control and monitoring services
- infrastructure execution

As municipalities are autonomous, their field of activities is divided into two domains. Figure 5 presents the division of the municipality services. First one relates to the tasks municipalities are legislatively required to execute (mandatory), and the second refers to autonomously executed tasks (optional). Municipalities have more discretion on the tasks under optional domain. (Oulasvirta, 1996) Legislative tasks of municipalities are social and health services, education and culture services and technical services. Social and health services include basic social security and elderly care. Education and culture services comprises services such as elementary school and library. Technical services are crucial to the development of the municipality and include essential services, such as infrastructure and city planning. (Kuntaliitto, 2015)

Optional tasks of municipalities are part of the autonomy of the municipality and is written in the constitution. The Finnish law does regulate the optional tasks in very general level. General law principles, principle of sustainable development, law of public procurement are few examples of such regulations. (Mäenpää, 2013) Municipalities can also choose whether they want to provide discretionary tasks, like high schools. These tasks are legislated in the law but not mandatory upon municipalities. One of the basic tasks of municipalities have traditionally been enhancing the business life. This happens by supporting business within the area or creating conditions for such activities. Municipalities can enter the markets as an actor but are regulated up to some degree. They cannot operate for example in totally profit-seeking way. Mainly municipalities are expected to provide services of commongood, like electricity. (Harjula & Prättälä 2015)

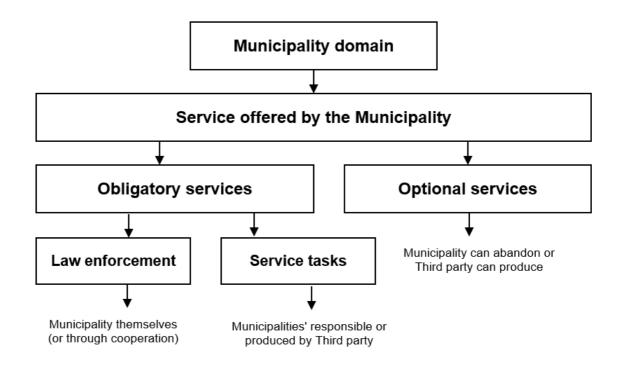


Figure 5. Mandatory and optional services of a municipality (Suomen kuntaliitto, 2001)

Public organizations have distinctive features compared to private sector such as (Kiviniemi, 1989):

- 1. Activities are directed by societal policy goals.
- Activities are statutory.
- 3. Activities are budget-bound.
- 4. Organizational structure is multi-tiered, as public services are nationally directed.
- 5. The management and direction of public services is directed by various administrative levels, which cases the service structures to be sectioned and specialized, within the state and the municipalities.

Because of the aforementioned features, the central goals and aspects of public administrator's activities relate to communal issues: activities are aimed for the benefit of the nation or specific demographic group. Term "public services" can imply the entirety of activities offered by public organizations. The service offered by public organization is often something else than selling and buying, which is the case in private organizations. Thus,

the public service can be very hard to standardize and measure its quality. (Pollitt & Harrison, 1994) Many public services do not include interaction between the customer and contact person, or it is not crucial part of the service. Also, different types of associated and support services, such as customer service process are proven to be problematic, as it is sometimes impossible to separate these "supporting" service from the core service. Oulasvirta (1993)

Customer service process regards all the stages, in which the customer deals with the organization to solve their matter or get a certain service. Customer service process includes only the customer service part of the service, not the actual core service the customer tries to reach. The concept of customer service process is useful when considering the quality of the service, as it emphasizes all the steps within the service process that the customer has to undergo before getting the actual service the customer came for. Customer service process also includes the service features prior to customer receiving active service. These aspects are often neglected when discussing service quality, as the focus is mostly on the active process. (Oulasvirta, 1993)

According to Lumijärvi & Jylhäsaari (1999), most public organizations are professional organizations, which emphasizes the role of specialists. Specialist services solve complicated problems and develop new things. These services are consumed because the customer is not able to do something by themselves. Specialist services are basically exchange of knowledge and expertise and are mostly aiming to maximize benefits and reduce risks. The customer is helped to improve their situation, wealth, health or market position. Core characteristic of specialist service can be considered advising. Specialists advice and direct the customer to what they see is best. Sometimes the customer does not know what they want or understand their situation. (sipilä, 1998)

Municipalities have mostly the freedom to choose how to produce their services (Kuntaliitto, 2017):

- Municipality arranges and produces the service by themselves.
- Municipality arranges and produces the service in cooperation with other municipalities.
- Municipality establishes a corporation or other corporate body or foundation to produce the service or is part of one.

 Municipality acquires the service from another municipality, federation of municipalities or private service provider.

When discussing the tasks of municipalities, it is necessary to differentiate between two terms: service arrangement liability and service production. Former means that the municipality has to make sure that services are available for the residents, and that the municipality finances these services. The municipality is free to decide the way these services are provided. Service production on the other hand is done by the municipality or some other actor with arrangement liability. Very often the most efficient and economic option to provide services is to cooperate with other municipalities, communities or companies. Federation of municipalities is the most preeminent form of cooperation. (Kuntaliitto, 2017)

## 2.2. Process management

The operational environment and challenges of organizations are in constant change. Globalization and global competition, technology development and digitalization, and constantly changing customer demands are few examples of such radical changes the world is undergoing. The success of companies is decreasingly dependent on their production capacity or the size of the organization. Agility, expertise and innovativeness have become the main factors in the pursue of success and profitability. Organizations are reacting to the complexity of operational environment by specialization and collaboration. In the new complex and changing environment, it is not possible to create long-lasting success by formulating new plans and strategies one after another. Process management is an approach which tries to solve the complexity of current business environments. Understanding the organizational activities as value-creating processes, and continuous identification and improvement of these processes to create superior value to the customer, are central principles of process management. Process-thinking has established itself strongly in the developed world during last decades. (Laamanen & Tinnilä, 1998)

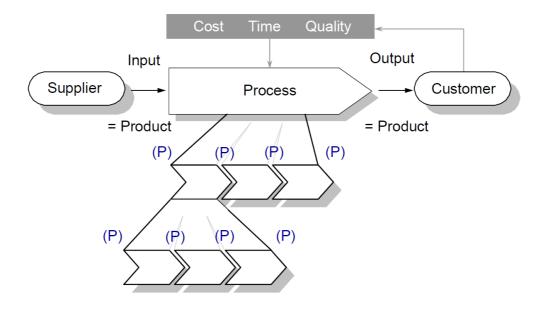


Figure 6: Process-thinking pattern (Rosemann & Brocke, 2015)

Process management does not formerly focus on cost-effectiveness, but also considers speed and flexibility as crucial factors. Rather than focusing on personal achievements, organizational co-operation and development of methods and teams are emphasized. Suppliers and customers are also seen as partners in value-creation process. The goal of process management is to model the business logic of the organization for processes and focus on them. Developing these processes results in better service for the customer and activities that do not generate value added are eliminated. Understanding the business as a chain of processes also helps better understanding and managing the business entity. (Laamanen & Tinnilä, 1998) The means to achieve these goals differ significantly between process management and previous management approaches. The goals of process management do not differ much from the general goals of management, such as:

- Good financial result
- Customer satisfaction
- High productivity
- Active input, motivation and discipline. (Laamanen & Tinnilä, 1998)

Organizational activities are considered as processes which flow through traditional functional boundaries. The functional approach creates barriers to achieving customer satisfaction and makes the departments vulnerable to poor integration and communication.

Process management in contrast improves customer focus and avoids the limitations of managing by vertical functions. Successful organizations have understood the importance of moving from traditional function-based management approach to managing through a set of clearly defined customer-driven processes. (McAdam, 1996)

Process management or also called, business process management (BPM), has become a holistic management discipline, and thus it requires various issues to be addressed for its successful and sustainable application. While BPM has been proven to be beneficial for companies, there is also an increase in the expectations to deliver the pursued results. In order to approach BPM in a proper and holistic way, Rosemann & Brocke (2015) introduced a model illustrated in figure 7, which distinguishes the six core elements critical to BPM. These elements represent critical success factors for business process management. The elements ought to be considered by the organization striving for success with BPM.

Strategic Alignment	Governance	Methods	Information Technology	People	Culture
Process Improvement Planning	Process Management Decision Making	Process Design and Modelling	Process Design and Modelling	Process Skills and Expertise	Responsiveness to Process Change
Strategy and Process Capability Linkage	Process Roles and responsibilities	Process Implementation and Execution	Process Implementation and Execution	Process Management Knowledge	Process Values and Beliefs
Enterprise Process Architecture	Process Metrics and Performance Linkage	Process Monitoring and Control	Process Monitoring and Control	Process Education	Process Attitudes and Behaviours
Process Measures	Process related standards	Process Improvement and Innovation	Process Improvement and Innovation	Process Collaboration	Leadership Attention to Process
Process Customers and Stakeholders	Process Management Compliance	Process Program and Project Management	Process Program and Project Management	Process Management Leaders	Process Management Social Networks

Figure 7. The six core elements of BPM (Rosemann & Brocke, 2015)

**Strategic alignment**: BPM has to be aligned with the overall strategy of an organization. Processes should be designed, execute, managed and measured according to the strategic priorities. Changes in process capabilities may lead to process-enables strategy designs.

**Governance**: BPM governance establishes appropriate and transparent accountability regarding roles and responsibilities for different levels of process management.

**Methods:** Related to BPM and are defined as the set of tools and techniques that support and enable activities in the process lifecycle and within the enterprise-wide BPM initiatives. Examples include methods that facilitate process modeling or process analysis and process improvement techniques, such as Six Sigma.

**Information Technology**: IT-based solutions play a significant role in BPM initiatives. Such IT solutions increasingly manifest themselves in the form of process-aware information systems, which have an explicit understanding of the process executed.

**People**: People are the core element of BPM are defined as individuals and groups who continually enhance and apply their process management skills and knowledge in order to improve business performance.

**Culture**: Relates to the collective values and beliefs regarding the process-centered organization. Culture is about enabling and creating an environment that complements the various BPM initiatives. (Rosemann & Brocke, 2015)

Davenport & Short (1990) define business process as "a set of logically related tasks performed to achieve a defined business outcome". Similar definitions are widely adopted in the literature, but many also emphasize the role of the customer. Hammer & Champy (1993) view business process as "a collection of activities that takes one or more kinds of input and creates an output that is of value to the customer". Processes within an organization can be classified using different criterion. Business processes can be divided into three categories: primary processes, secondary or support processes and tertiary or managerial processes. 1) Primary processes are the core business processes of a company and they usually generate the revenues for profit companies. 2) Secondary or support processes are processes that are there to support or maintain the primary business processes. 3) Tertiary or managerial processes direct and coordinate the primary and secondary processes. (Reijers, 2003)

Business process management is dedicated to analyzing, designing, implementing and continuously improving the processes of an organization. BPM provides an integrated set of methods, tools and techniques to continuously improve business processes in order to meet business targets. When a process has clear end-to-end design, people can perform it consistently, and managers can improve it in a disciplined way. Establishing a precise process design leads to a boost in performance because resources and time are allocated

properly. Process management also leads to benefits by aligning everyone around a common, customer-oriented goal. It also provides a framework for re-engineering, the deliberate and holistic redesign of work. Enterprise success depends on the successful performance of well-designed processes. Continuous improvement requires an improved design. (Hammer, 2002)

Hammer (2002) presents six steps to efficiently starting process management:

- 1. Identify organization processes, typically five to ten.
- 2. Make people throughout the organization aware of the processes and what is their part in them.
- Create and deploy measures of end-to-end process performance, derived from customer and shareholder needs. Assess current process performance and set goals.
- 4. Designate process owners: managers with authority in the process and responsible for ensuring consistent high performance. The process owner establishes the process design, ensures that the design is followed, obtains required resources for the process and intervenes as needed to improve the process.
- 5. Select two or three processes for redesign and improvement. Implement those new designs in a staggered style.
- 6. Over time, align the company's management system with the new prominence of its processes.

Process management highlights the importance of ceasing to focus on the optimization of individual tasks and departments, and instead organize the tasks in the organization as value-creating processes. It is also crucial to shift towards horizontal management approach, which focuses on the customer. As processes cut through different departments, the management of operations should be based on processes. (Grönroos, 2009)

Process owner is the central figure in the process management. Such person should be appointed from the executive management group. Process owner is responsible for the performance of the process and coordinates it. Often, in addition to the process owner, a process manager is also appointed to coordinate the process at an operational level. (Hannus, 1994) The process owner ensures that people performing in the process understand it, are qualified, have the required tools and are following the specified design.

The process owner makes minor changes to the process design in order to fix a flaw or to address issues. In case of major gap between the current performance of the process and the desired performance, the process owner leads an effort to create and entirely new process design. Such situation would be called re-engineering project. (Hammer, 2003)

Accurate and complete representation of business processes are crucial to the success of BPM. There are various techniques and tools for characterizing and analyzing business processes. Business process modeling (BPM) plays an important role in representing and enacting business processes. Process modeling facilitates understanding of the process, serves as a basis for process improvement and management by supporting the analysis related to processes, and it can automate process guidance and execution support. (Curtis et al. 1992) Various methods have been used to model business processes. Examples of such methods are data flow diagrams (DFD), process maps, action workflows and role activity diagrams (RAD). Each method implies a different set of notations and thus the selected method should be most suitable for the process at hand and the general objectives. (Luo & Tung, 1999)

#### 2.3. Change management

As companies improve and innovate their processes, change is inevitable. According to Barnes (2004) change is an ever-present feature of organizational life. As there is no doubt regarding the importance of this phenomena, the necessity for appropriate management arises. Change management can be defined as the process of continuously renew organization's direction, structure and capabilities, to serve the constantly changing needs of external and internal customers. (Moran & Brightman, 2001) Due to the great importance of organizational change, its management have become a high required skill, and it has even been argued that change management is the primary task of management today. (Graetz, 2000)

There is common understanding that the pace of change has never been greater than in the current continuously and rapidly evolving business environment. The management of organizational change has been found to be currently very reactive, rather than proactive. It has been reported that the failure rate of all change programmes initiated is around 70 per cent. (Balogun & Hailey, 2004) This indicates lack of valid approaches and frameworks of how to successfully implement and manage change. Currently there is available wide range of contradicting and confusing theories and approaches, which mostly lack empirical

evidence. (Todnem, 2005) Table 1 presents examples for possible reasons for failures in an implementation of major information system. There is typically no single cause for failures, rather a snowball effect is often seen. Communication deficiencies and failure to develop user ownership are two commonly observed causes. (Lorenzi & Riley, 2000)

Category	Examples		
Communication	Ineffective outgoing communication		
	Ineffective listening		
	Failure to effectively prepare the staff for the new system		
Culture	Hostile culture within the information systems organization		
	Hostile culture toward the information systems area		
	No strategies to nurture or grow a new culture		
Underestimation of complexity	Missed deadlines and cost overruns		
	Lost credibility		
Scope creep	Failure to define and maintain original success criteria		
	Failure to renegotiate deadlines and resources if criteria do change		
Organizational	No clear vision for the change		
	Unintended consequences		
	Ineffective reporting structure		
	Staff turnover		
	Staff competency		
	Provision of a technical "fix" to a management problem		
	Lack of full support of "boss(es)"		
	Roles and responsibilities not clearly defined or understood by every		
	Several people vying to be "in charge"		
	Adequate resources not available from the beginning		
	Failure to benchmark existing practices		
	Inability to measure success		
Technology	System too technology oriented		
	Poor procurement		
	Lure of the leading (bleeding) edge		
	Inadequate testing		
Training	Inadequate or poor-quality training		
	Poor timing of training—too early or too late		
Leadership issues	Leader too emotionally committed		
	Leader's time over committed		
	Too much delegation without control		
	Failure to get ownership in the effort		
	Leader's political skills weak		
	"Lying" to get initial approval		

Table 1. Reasons for failures in implementing major information system. (Lorenzi & Riley, 2000)

Early approaches and theories regarding organizational change management suggested that organizations could not be effective or improve performance if they were to constantly change. It was claimed that people need routines to be effective and able to improve their performance. Today the shared view is that it is of vital importance to organizations undergo continuous change. (Rieley & Clarkson, 2001) Different authors have employed different

terminology when categorizing the types of changes. A common classification for changes is by the rate of occurrence: discontinuous and incremental change. Former refers to change which is characterized by rapid shifts in strategy, structure or culture, or in all three. One-time events which take place through large initiatives. Also seen as defensive behavior, which creates situations where major reform is often required. (Luecke, 2003) Incremental change refers to an approach to change where organization responds to the external and internal environment in small steps as an ongoing process. The continuous change is a pursue to keep change as an ongoing process to keep up with faced challenges. (Burnes, 2004)

Organizational changes have also been divided into microchanges and megachanges. Improvement efforts, modifications and upgrades in systems are usually called microchanges, whilst new procedures or systems are major changes and thus, called megachanges. Classifying the magnitude of the changes seem to work surprisingly well and supports the management. It is important to note that sometimes one person's microchange can be other persons megachange. Impact of the change affects individuals and process in different ways. (Lorenzi & Riley, 2000)

Changes in an organization can often be categorized as one of four types, with high possibility of overlapping: Operational changes, strategic changes, cultural changes and political changes. These types of change typically have great impacts at different levels of the organization. For example, operational changes tend to have greater impact at the lower levels of the organization. Understanding the different types of changes, their dynamics and impacts, should guide the management decisions. (Lorenzi & Riley, 2000)

- Operational changes affect the way the ongoing operations of the business are conducted, such as the automation of a particular process.
- Strategic changes occur in the strategic business direction, e.g. moving from an in-patient to an out-patient focus.
- Cultural changes affect the basic organizational philosophies by which the business is conducted, e.g. implementing a continuous quality improvement (CQI) system.
- Political changes in staffing occur primarily for political reasons of various types, such as those that occur at top patronage job levels in government agencies.

The term "change resistance" is frequently used in the research, as the negative reaction to a change within an organization. Many researchers such as Dent and Goldberg (1999) have challenged the traditional view and argue that the organizational members resist negative consequences (e.g. losing one's job) and not necessarily change in itself. Belief, that people resist change can hinder organizations' chances of understanding and deal with real organizational problems. People react differently to changing situations and many of those reactions have been linked to personality and attitudes. Tichy (1983) suggests topics which very likely impact employees' reactions and evaluations: Power and prestige, job security. intrinsic rewards, change process, trust in management, information and social influence. As change implies doing things slightly or totally differently, the role of learning is highlighted. Schein (1992) argues that there are two issues within every individual undergoing change: learning anxiety, which is associate with learning something new (Will I fail? Will I be exposed?), and survival anxiety which concerns the pressure to change. Schein lists some associated fears:

- **Fear of temporary incompetence**: the conscious realization of one's lack of competence to deal with the new situation.
- Fear of punishment for incompetence: the apprehension that you will somehow lose out or be punished when this incompetence is discovered or assessed.
- Fear of loss of personal identity: the inner turmoil when your habitual ways of thinking and feeling are no longer required, or when your sense of self is defined by a role or position that is no longer recognized by the organization.
- Fear of loss of group membership: in the same way that your identity can be defined by your role, for some it can be profoundly affected by the network of affiliations you have in the workplace. In the same way that the stable equilibrium of a team or group membership can foster states of health, instability caused by shifting team roles or the disintegration of a particular group can have an extremely disturbing effect.

Every organization needs changes in its management and policies. But in addition to the improvement of systems, there must be a change in people as well. Organizations need to understand and support the employees undergoing changes. Transformations can be traumatic and maybe involve a lot of issues. Figure 8 depicts the Change curve (Kubler

Ross, 1969), and is commonly used model in business to understand change and personal stages associate with it. The model is also known as the 5 stages of grief and shows the various stages of emotions by a person going through a change or other highly stressful situation. (Cameron & Green, 2015)

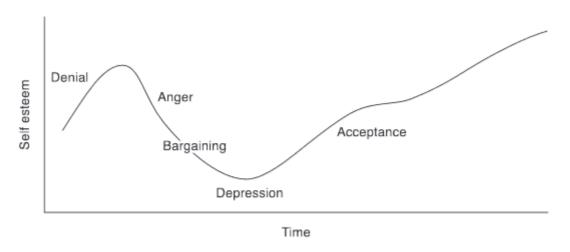


Figure 8. Kubler-Ross change curve (Kubler-Ross, 1969)

#### 1) Denial

People facing potentially huge changes are often not able to accept the communication and they would deny it to themselves. People could become emotionally numb and have a sense of disbelief.

## 2) Anger

Once people acknowledge what is happening, they typically enter the second stage, anger. They begin to ask questions, such as "why me?". Anger and frustration are usually external, and people start blaming themselves. Anger is another way of displacing our real feelings about the undesired situation.

## 3) Bargaining

Third stage is called bargaining and starts usually when people have exhausted themselves by attacking others or themselves. It is typically a conversation by themselves and person is desperately looking around for something, to remedy the situation.

#### 4) Depression

Once person becomes certain that no amount of bargaining is going to provide an escape from the situation, the fourth stage kicks in. Depression refers to mourning and grieving,

for the loss we are facing. At this stage one is ready to give up everything and feels mainly sadness.

### 5) Acceptance

Many people move out of the depression stage and enter fifth stage of acceptance. This is not necessarily a happy stage, but it is a stage where people can in some ways come to terms with the reality of the situation. They are prepared to face the new undesired or previously undesired situation, change. (Kubler-Ross, 1969)

Although some scholars (Pettigrew & Whipp, 1993) argue that there are no universal rules to leading and managing change, many others advocate the emergent approach which suggests a sequence of actions that organizations should comply with. Kotter (1996) is one these authors and suggests Eight-Stage Process for Successful Organizational Transformation. The model has been criticized for providing too little details and not being general enough for some types of changes. However, these criticisms have been tempered by the observation that no single model can provide a one-size-fits-all solution. (Pollack & Pollack, 2014) The Eight Stage process is commonly used model as it describes a series of steps to be taken to achieve organizational changes. Kotter's (1996) Eight Stage Process of Creating a major change is summarized as follows:

- 1. Establishing a sense of urgency
- 2. Creating the guiding coalition
- 3. Develop a vision and strategy
- 4. Communicating the change vision
- 5. Empowering broad-based change
- 6. Generating short-term wins
- 7. Consolidating gains and producing more change
- 8. Anchoring new approaches in the culture

**The first stage** is creating an awareness of the need for organization to change. It is crucial to establish a sense of urgency to gain needed cooperation. Kotter (2008) argues that the failure in this stage is the single biggest error when trying to change organizations. Considerable efforts may be required to motivate and convince the

organizational personnel to invest their time and effort and deal with the inconveniences of change. The second stage involves forming a group with enough power to lead the change. These guiding coalitions should be created at multiple levels and the role of change program sponsor is vital. (Remington & Pollack, 2007) Developing a vision and strategy is *the third step* in Kotter's model. This stage is crucial in pursuing broad and common acceptance of the need to change. It should highlight the goals and benefits of the change program, but also state the negative consequences of inaction. (Sherman, 2008) Fourth stage is to communicate the vision for change. Kotter (1996) claims that managers underestimate the amount of communication required to develop a consistent understanding. Inconsistent messages often hamper the change implementation. Repetition and efforts should be devoted spreading the message and developing visibility for the program. The Fifth stage in Kotter's process involves removing obstacles to change, changing structures or systems that undermine the vision, and encouraging innovativeness. Business units should be helped to remove the structural barriers to empowerment. (Kotter, 1996) Short-term wins help to demonstrate the viability of the change and build momentum. These wins need to be made visible and clearly related to the direction of change. **Seventh and eighth stages** are about ensuring that all groups involved in the project are brought under the same banner and the momentum of change is maintained. The job should not be let up before it is done, otherwise critical momentum can be lost, and regression may follow. Changes and new practices should be driven into the culture. (Kotter, 1996)

## 2.4. Service process improvement

Services dominate the global economies and drive economic growth, but yet in practice, innovation in services is less disciplined than in manufacturing and technology sectors. Companies can no longer compete only on providing superior value through their offerings, but rather they must move into customer experience management and create long-term, emotional bonds with their customers through co-created experiences. (Crosby & Johnson, 2007) Notion of customer experience has been widely used in recent years. It refers to "the cognitive, affective, and behavioral reactions associate with a specific service event." (Padgett & Allen, 1997) According to Carbone (1994) customers cannot help having

experiences and services create experiences. An issue has risen whether companies have the capability of systematically manage that experience. Meyer & Schwager (2007) argue that companies approaching customer experience management with clear vision of the design and development process are more likely to achieve improved customer and organizational outcomes.

One of the main characteristics of services is their process nature. Service process is a chain of activities needed to produce the service. It consists all the processes that contribute in providing value to the customer. Service process is an interaction between the service provider and the customer, as the customer is also contributing to the outcome of the service. (Edvardsson & Olsson, 1996) Some parts of the service process are visible to the customer, others are invisible. Analysis of the customer's service consumption and co-creation process, interactions with the service provider and the support systems is essential to managing and improving the chain of service activities. While many of the activities that support the service are invisible to the client, understanding their role in value proposition is essential. (Bitner et al. 2008)

Definitions of improvement and innovation are often used together. Some writers use them as synonymously, but others such as Bessant (2003) makes a difference between the two. They reserve the notion of innovation for radical or large-scale changes in the organization. These innovations bring something new to the organization and may or may not improve the processes. Improvement term is usually associated with smaller incremental changes, which mostly focus on existing processes and activities of the organization. As such, generally the extensiveness and uniqueness of the change influences the choice of wording used. Figure 9 depicts the relationship between improvement and innovation. The main points derived are the difference between continuous improvement and innovation, and the fact that not all innovations bring forth improvements to the organizational operations. The best practices pursue in adopting an approach, which aims simultaneously for both transformational changes and continuous improvement. (Hartley, 2005)

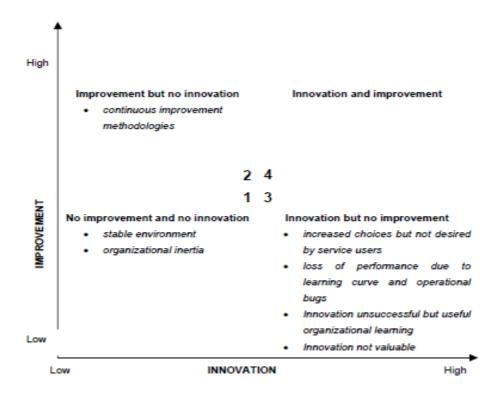


Figure 9. Innovation and improvement (Hartley, 2005)

Improving the service process of a company happens by improving all the processes that contribute to the outcome. Processes can be seen as chains of activities or events that have clear beginning and end, and which are used to turn inputs into outputs. Process differs from project that it is ongoing and not unique. (Lecklin, 2006) First step in service improvement process is the mapping of the current state. Understanding the current situation is a prerequisite for successful service improvement. This is done by outlining the processes, process mapping and assessment of current process. Undergoing these steps precisely will lead to comprehensive understanding of the situation and help with later steps of the improvement process. (Lecklin, 2006)

Process analysis step aims to create solutions to improve the current process. Solving possible problems, benchmark evaluations and choosing suitable improvement tools are examples of possible actions. After the process is analyzed and new approach is chosen, a plan for improvement is made and implemented. When the improved process is implemented, it is time to start mapping and evaluating again, thus named continuous improvement. (Lecklin, 2006)

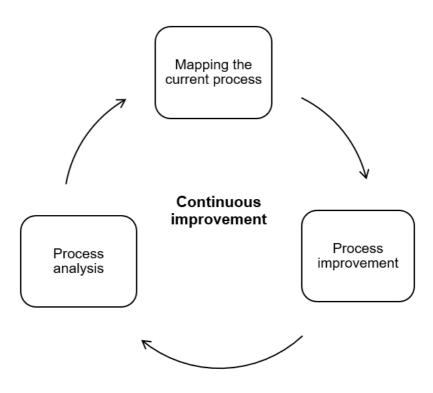


Figure 10. Continuous process improvement (Lecklin, 2006)

Business process improvement (BPI) as a term originates from process management and is commonly used in the literature. Harrington (1991) defines BPI as an approach to increase the effectiveness and efficiency of business processes that provide output to external and internal customer. There are numerous different BPI approaches and models for process improvement. The level of details of the procedures vary a lot, depending on the author and their area of focus. Curatolo et al. (2013) studied 13 articles related to BPI procedure models and combined their observations into 11 activities. These activities were quoted in at least 50 percent of the articles and provide a comprehensive list of characteristic activities of BPI:

- 1) **Understanding the environment**: various articles specified the importance of understanding the environment of the organization before launching BPI activities: understanding the organization's main business process, strategic objectives, employees, customer needs and competition.
- 2) **Selecting process to improve**: most articles mentioned this activity and suggested that the selected process to be improved ought to be referenced to process performance, the process impact on client's needs or to the objectives of the organization.

- 3) **Establishing top management support**: the authors argue that actively involving the top management will guarantee the success of the BIP approach.
- 4) **Organizing a project team**: a team much be composed of actors actively involved in the selected process. Selecting project team, training team members of BPI basics and planning the project are steps to be taken at this stage.
- 5) **Understanding the selected process**: vast majority of the authors suggest graphically mapping the process to be improved. The mapping should be created by multidisciplinary team in order to be relevant and reliable.
- 6) **Measuring**: this refers to activity of collecting data in order to measure the process performance.
- 7) **Analyzing**: to analyze the process, the authors suggest an identification of the activities with non-added value and problems (e.g. bottlenecks, lack of efficiency).
- 8) **Improving**: suggested actions to improve a process are benchmarking, streamlining of the process and assessment of need for new technologies.
- 9) **Managing the change**: this activity includes actions aiming to ease the implementation of the new process: e.g. communication and training staff.
- 10) **Implementing**: planning the implementation of the new process is suggested, as well as pilot testing before the actual implementation.
- 11) **Monitoring**: the final activity consists of identifying performance indicators, collecting data and controlling the indicators. A new BPI process ought to be started if a problem is verified and as such, continuous improvement is achieved. (Curatolo et al. 2013)

These activities can be divided into two categories: core operational activities and support activities. The main characteristic activities of a BPI approach are shown in figure 11. Core operational activities are directly linked to the process (in the center of the figure) and are performed in a planned pattern when a need for process improvement arises. Support activities are important for the success of the BPI approach but are not directly linked to the process. These activities should be performed continuously to guarantee the success of the improvement project. (Curatolo et al. 2013)

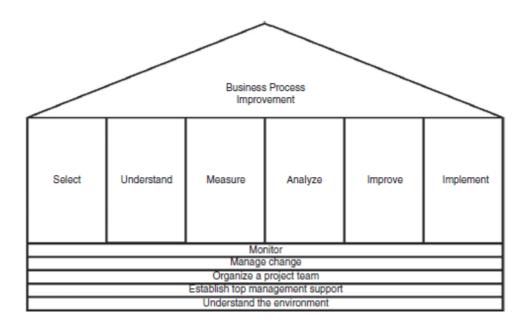


Figure 11. Characteristic activities of business process improvement. (Curatolo et al. 2013)

Special characteristics of services, such as intangibility and heterogeneity, as well as human interaction, makes developing and improving services challenging. Many of design techniques and tools used for physical goods, hard technologies and software do not work well with services. (Edvardsson et al. 2000) In order to improve the service process, and create superior value and experience to the customer, it is crucial for the company to identify the critical parts of the service process and map them. (Zeithaml et al. 2009)

Service blueprinting is a flexible approach helping the managers with service process design and analysis. Service blueprinting is a method developed to innovate and improve service processes. It provides an overview of an entire service process and helps understanding the customer experience. Its purpose is to create a visual service description. It is an objective map depicting the chain of activities from both sides, customer and provider. Service blueprint allows the members of an organization to visualize the entire service process and coordinate it accordingly. The advantage of service blueprinting is its accuracy compared to word-based service descriptions, the ability to help notice problems and the ability to identify risk factors in the service process. (Bitner et al. 2008) Service blueprint is an evaluative and prescriptive tool that can be used to refine and improve the service delivery system, its different elements and processes. It can assist in identifying the crucial elements and processes, and also possible "fail points" that are impacting negatively

to the service performance and quality. Identifying and resolving these failures will increase the quality of the service execution. (Shostack, 1982)

Service blueprints help companies to reinforce customer-orientation among employees, as the method highlights the role of the customer in the service process. Blueprints also helps clarifying interfaces across different departmental lines and distinguish between onstage and backstage activities. Service blueprints are relatively simple and easy to comprehend by all stakeholders. There are five components of standard service blueprint (Bitner et al. 2008):

- Physical Evidence
- Customer actions
- Onstage/visible employee actions
- Backstage/Invisible employee actions
- Support processes

Figure 12 depicts the key components of service blueprint. Physical evidence refers to the contact interfaces in which the customer comes in contact with the company. These are the tangible elements that customers are exposed to, such as website or customer service lobby. Customer actions include all the actions the customer takes as a part of the service delivery process. The actions are presented in chronological order across the top of the blueprint. Service blueprinting differs from other flowchart approaches that it regards customer as the central to the blueprint and other activities are barely supporting the value proposition offered to the customer. Onstage/visible employee actions are those actions that occur in the encounters between contact employees of the company and the customer. This step is separated from the customer by the line of interaction and every time the line of interaction is crossed, a moment of truth occurs. Backstage/invisible contact employee actions, which are separated from the onstage actions by line of visibility and refers to actions that contact employee does in order to serve the customer or is part of their responsibilities. Actions that appear above line of visibility is seen by the customer, whereas everything below it is invisible. Support processes are separated from contact employees by internal line of interactions. These activities are carried out by people or units within the company who are not in contact with the employees but are crucial for the service to be delivered. Different kinds of management systems that are needed in the service process are an example of support processes. (Bitner et al. 2008)

Service B	lueprint Components
Physical Evidence	
Customer Actions	Line of Interaction
Onstage/ Visible Contact Employee Actions	Line of Visibility
Backstage/ Invisible Contact Employee Actions	Line of Internal Interaction
Support Processes	

Figure 12. Service blueprint components (Bitner et al. 2008)

Radnor et al. (2014) suggest that building of service blueprint starts with the identification of key touchpoints. These are the physical elements in which the customer comes in contact with the company. After this, each stage of the service system is analyzed in depth providing details for the front-stage and back-stage dimensions of the system. Analyzing the service process should include the exploration of the target performance and timings for each stage of the service process. Comparing these targets and actual performance can provide useful starting point for defining minimum standards of the service. Next step is identifying the points where users may perceive failure in the service delivery. These fail points related to the quality and performance of the service, whether they are actual technical performance factors or perceived ones. Service blueprint can also help discovering the areas of excessive wait. These are often regarded as fail points within a service and, also target for

elimination. Blueprints can help understanding the inevitable risks that part of service delivery and an approach for addressing risks within the system is also often required.

Shostack (1987) who first suggested service blueprinting for service process analysis, proposed similar approach for designing service blueprint:

- Identifying process of service delivery. Level of details depend on the complexity and nature of the service.
- Identifying fail points. The actions necessary to correct or eliminate must be determined and procedures to reduce the likelihood of them occurring again should be developed.
- 3) Establishing time frame. Setting of standards against which the performance of process steps might be measured.
- 4) Analyzing the profitability of the service delivered, in terms of the number of customers served during a particular period of time.

As the main objective of service blueprinting is to create solid foundation for service improvement across the whole service system, it is important to clarify the targets of performance and improvement clearly. These targets ought to be implement as a coherent package of service improvement and should include training for staff to understand the significance of these targets for successful service delivery. Addressing the approach in the case of service failure is also a core feature of effective service delivery. (Radnor et al. 2014)

Martinich (1997) listed six benefits of successfully using service blueprinting:

- Visual representation
- Customer contact points
- Service failure points
- Tool for training employees
- Identifying needed equipment and materials
- Continuous evaluation and improvement

The visual representation of service process makes it easier to determine which activities are truly necessary and provide value to the customer. Identification of activities that should be eliminated or modified is also easier with visual picture of the service. Customer contact

points are clearly identified in service blueprint. This helps to point out the activities that are crucial, that can be performed separately and where opportunities for co-processing activities exist. Possible service failure points are also clearly identified. This helps developing plans to minimize the chance of failure and identifying corrective actions or improvements. Service blueprint is a great tool for training workers. They can see which activities are crucial and must be performed. It also equips them with understanding of failures and activities preventing or correcting them. Blueprint is useful for identifying equipment and materials needed, and how service facilities should be arranged to facilitate the services. Service blueprints are often reconstructed regularly and used to evaluate and improve the service system over time. This is helpful especially in recent times as new technologies and services are constantly emerging and organization ought to keep up with the change through innovation and improvements. (Martinich, 1997)

Shostack (1987) argues that service blueprinting makes processes more transparent and it is a powerful tool for practitioners to encourage creativity and problem solving within an organization. The visual representation of a service is also far more precise than a verbal definition. (Shostack, 1982) Bitner et al. (2008) claim that service blueprinting has evolved to include not just the process elements of a service, but also physical artefacts, and has also integrated other process methodologies into its application, such as process modelling approaches. They do maintain that the core of service blueprinting is the creation of a graphical blueprint which should be kept simple and include all human elements of the service system, as well as evaluate the position of the service user within the service process.

#### 2.5. Customer needs and expectations

In order to companies deliver great value to customers in a competitive market, it is crucial to improve the customer experience and satisfaction. Managers of service businesses are facing a challenge to reduce service factors that lead to dissatisfaction and create service factors that deliver superior value to the customer. Businesses must strive for total customer satisfaction. Needs and expectations explain customer behavior. Expectations refers to things a person anticipates from a service encounter. Needs are things that one seeks from life as a person. These both must to be satisfied by the firm, as failing to meet them can cause dissatisfaction or even an outrage. (Schneider & Bowen, 1999)

Customers evaluate service quality by contrasting their perceptions of the service with their expectations. Customer service expectations can be categorized into five dimensions: reliability, tangibles, responsiveness, assurance and empathy. Table 2 defines these dimensions. As reliability is mostly related to the service outcome, the rest are concerned with the service process. Studies indicate that reliability is the most important dimension meeting the customer expectations, but the process dimensions seem to have more impact in exceeding customer expectations. Thus, the service process appears to be the best opportunity for the firm to perform beyond customer expectations. (Parasuraman & Berry, 1991)

Service Dimension	Definition
Reliability	Service outcome is as promised.
Tangibles	The appearance of service interface:
	facilities, equipment, personnel,
	communication
Responsiveness	Customer service and help available
Assurance	Trust and confidence regarding employee
	skills and knowledge
Empathy	Caring and individualized attention
	provided to customer.

Table 2. Customer service expectations (Parasuraman & Berry, 1991)

Parasuraman & Berry (1991) also suggest that customer expectations have two levels: desired and adequate. The desired service level is the service the customer is hoping to receive, and adequate level is that which customer finds acceptable. These service levels are separated by the zone of tolerance. Reliability is mostly regarded as core of the service and tend to have higher expectations for it and as such, the zone of tolerance is most certainly smaller. Desired service level also rises by customer experience and expectations towards the firm. Adequate service level is more changeable and influenced by circumstances such as number of service alternatives.

According to Schneider & Bowen (1999) purchase decisions are driven by two types of needs: functional and emotional. Former refers to needs that are satisfied by product functions and latter ones relate to deeper psychological needs, such as status and self-fulfillment. In order to provide superior value to the customer, firms ought to understand the

customer needs. Recognizing the customer needs and their influence on decision-making is crucial for long-term success of a company. Incomplete understanding of customer decision-making can be fatal to the business performance. (Stringfellow et al. 2004)

Companies can collect information on customer needs through various channels. In order to choose the most convenient channels of communication, two factors should be considered. First, firms ought to match customer's preferences for communication by providing multiple options for communication channels. Secondly, the chosen channels should match the type of information being collected. Identifying both types of needs, functional and emotional, require different types of channels. (Stringfellow et al. 2004) Business industry of the firm and the offerings also influence the choice of communication channels. Functional businesses can get benefit a lot from lean channels such as email and data bases, as they are efficient and convenient. More service-oriented firms, with emotional aspects linked to their offering, might want to consider using more complex channels and benefiting from non-verbal communication as well. A comprehensive full-spectrum information portfolio is also an option, as it provides wide range of customer information. It is a collection of approaches, and requires more investments to implement, but can provide long-term advantage for the firm. (Stringfellow et al. 2004)

Customer needs	Information characteristics	Communication requirements	Data collection methods
Functional needs	Well-defined; explicit; tangible	Lean channels	Transaction record and clickstream data; survey (if right questions are asked)
Emotional needs	Latent; fuzzy; subconscious; hard to articulate; intangible	Rich channels	Semi-structured interviews; archetype research; story-telling; picture drawing

Table 3. Understanding customer needs (Stringfellow et al. 2004)

Kotler & Armstrong (2001) suggest that market should be divided into segments, on the basis of customer needs. So called "benefit segmentation" entails that appropriate value propositions ought to be created for customer segments with differing needs. As this approach is harder to achieve than demographic segmentation, answering the precise needs of the customers can create more satisfied long-term customers. Customers desire

personalized and closer relationships with service providers. Customer relationships are crucial in exceeding the customer expectations.

Improving service processes is also seen as a way for firms to perform beyond customer expectations. Bridging this cap between firm's internal improvements and external measures of customer needs and satisfaction is an important process. Traditionally, external focus on customers have been the domain of marketers and internal process improvement has been the field of engineers. Increasingly, both areas have broadened their focus and started cooperating in pursue for increased business performance. Engineers have become more customer focused and marketers and consumer researchers have become more internally focused, trying to translate customer needs into action implications. (Herrmann et al. 2000)

Many approaches and models have evolved that are trying to link the customer needs into service or product design. One of the most used tools to define customer requirements and convert them into detailed specifications is Quality Function Deployment (QFD). QFD is a management tool as it provides a visual process to help firms focus on the needs of the customers throughout the whole product or process development cycle. It helps to develop or improve customer-oriented, high-quality products and services. (Bouchereau & Rowlands, 2000)

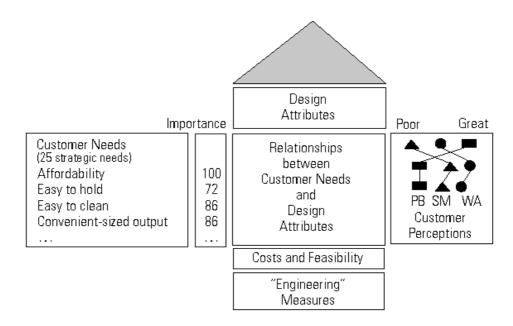
The principle of this concept is to systematically transform customer requirements and expectations into measurable product and process parameters. The customer needs are often called the "whats", the things QFD is ultimately supposed to improve. The model also determines "hows", which are the design requirements that determine how the "whats" are to be fulfilled. (Clausing, 1994) The QFD process involved typically four phases (Hwamg & Teo, 2001):

- 1. Customer requirements into product/service attributes.
- 2. Product/service attributes into design requirements.
- 3. Design requirements into process requirements.
- 4. Process requirements into processes.

QFD process priorities customer values and the voice of the customer directs the design of the product or service. After identifying the customer needs and the mechanisms to satisfy the customer, the relationships between these are weighted. Value weights are added to these relationships, using a matrix called as a house of quality (HOQ). (Pitman et al. 1996)

HOQ is used to understand the voice of the customer and translate it to the voice of the engineer. Figure 13 shows the modified HOQ of Puritan-Bennet, a company who used HOQ and QFD successfully improve their business in early 1990s. (Hauser, 1993)

Figure 13. House of quality (Hauser, 1993)



Cohen (1995) proposes that there are various benefits for using QFD approach:

- QFD is efficient compared to other design processes and it emphasizes the customer needs more.
- The structure of house of quality in QFD design process allows more systematic and step by step approach to planning.
- QFD compels towards systematic analysis between customer needs and product designs.
- Combining house of quality, forces the actors within company to discuss with one another and creates more overall understanding.
- House of quality leads to more documentation and improved capability to continuous improvement.

## 3 ESTABLISHMENT SERVICE PROCESS IMPROVEMENT

## 3.1 Case City of Imatra

Imatra is a town and municipality located in eastern Finland and was founded in 1948. The city is located near the Russian border and is known as an industrial city. It has about 27 000 inhabitants, of which the city employs 780. As a municipality, Imatra represents the local level of public administration in the country. Municipalities are responsible for various services, such as healthcare and social services. Thus, the City of Imatra operates as an organization, and has both profit and non-profit activities. Imatra has two areas of responsibilities: urban development, which includes technical services and business policy, and welfare and education services. Most of the former ones are offered by the city itself. All the activities, be they obligations or not, are to promote the well-being of the city

The management of the city has been undergoing changes in recent times. New mayor was chosen in summer 2018 and since then the city has taken new proactive approach. Imatra has been reforming its processes determinedly and is trying to make the city an attractive location for companies. The business establishment process was seen an important activity in improving the attractiveness of the city, and such this thesis is focusing on it. Considering the limitations of this study, the introduced establishment service process describes the ordinary process, which focuses on medium and large locating enterprises looking to rent business premises for their operations. Smaller companies or entrepreneurs, and situations where the need to search for private premises arises, are left out from this analysis.

## 3.1.1 Improving establishment service process

The city of Imatra has found the need to improve their service processes in the face of increasing competition. Companies are moving their factories into the most suitable locations and demand certain requirements, such as logistics, availability of workforce and ideal operating conditions. The city of Imatra wants to offer more than just a good location; they also want to provide a clear and concise service process for the companies. The current situation is not alarming, but the desire for proactive measures for service process improvements has gained a lot of support.

This research will analyze the current establishment service process that the city of Imatra provides to potential companies who are interested in starting or relocating their operations

in the city. A comprehensive process mapping is required in order to clarify the current process and gain deeper understanding of possible development areas. An analysis of customer needs is also executed in order to optimize most crucial service steps. After the bottlenecks and process trails are identified and analyzed, process improvement suggestion is introduced.

Imatra operates as a group company and this group includes subsidiaries. Together, this entity produces a variety of services. One of the city's services is the establishment service process for companies and entrepreneurs. In addition to city management, this service process includes three group companies: Mitra, IBC and Kehy, and separate actor Kake. The group organization is discussed in more detail further in this study.

#### 3.2 Research methodology and case study

Research methods are commonly divided into two categories, qualitative and quantitative. This thesis uses the former, qualitative approach to gather it's empirical data. The goal of qualitative research is to study interactions of things and understand different phenomena and perspectives. The relationship between different factors are analyzed in a clear context and the subjective perspectives are taken into consideration. Quantitative research methods on the other hand base their approach more on existing theories or models and often relate to terms such as validity or correlation. (Flick, 2014) Bogdan & Biklen (1997) defined qualitative research through five features (Table 4):

Features of Qualitative	Description
Research	
Naturalistic	Researchers try to observe and understand the specific
	setting in which the actions occur.
Descriptive data	Data in qualitative research often takes form in words and
	pictures rather than numbers.
Concern with process	More concerned with the process rather than simple
	outcomes.
Inductive	Data is analyzed inductively; not to prove or disprove
	hypotheses. Theory emerges during the research.
Meaning	Desire to understand the perspective of the participants
	more deeply.

Table 4. Features of Qualitative Research (Bogdan & Biklen 1997)

As the features in the table 1 indicate, qualitative research aims for comprehensive understanding of the setting. It is also suitable for situations where solutions and answers are being sought for practical problems. (Flick, 2007)

Case study is one of the approaches of qualitative research and the one that is chosen for the empirical part of this thesis. The subject of this study is a single case and thus, single-case study was conducted. According to Thomas & Myers (2015) single-case study is a suitable approach when the research results are meant to be applied within a single organization, rather than generalization. Yin (2003) explained case study as an empirical inquiry that examines a phenomenon within its real-life context, when the boundaries between the phenomenon and the context are not obvious and several sources of evidence are used. As the aim of this study was to analyze and improve the establishment service process of a specific organization, the selected research method is justified.

#### 3.2.1 Data collection

When conducting a qualitative study, it is crucial to choose the most suitable methods. Yin (2003) argues that multiple sources of data should be used to establish validity and reliability of the study. Yin (2009, 114-120) also presents three principles for case study data collection:

- Using more than one data source
- Creating a database for collected data
- Ensuring logical chain of reasoning between collected data and conclusions drawn

There are various methods of data collection in qualitative research, such as observations, different types of textual and visual analysis, and interviews (Gill et al. 2008, 291). In order to gain deep understanding of the case organization, selected service process and the research problem, an explorative approach was selected. As such, three data collection methods were used for the empirical part of this study; semi-structured interviews, focus group discussions and customer survey. The research question of this study asked: "How city of Imatra can improve their establishment service process?". In order to answer this question, it is essential to have a comprehensive insight of the situation. The main focus of the research was on the Imatra city's establishment service process, and there are several actors from Imatra Group that are involved in it. Understanding the role and vision of these

key actors was at the heart of the work. A total of five interviews were conducted, with Deputy Mayor. Group CEOs and Kake CEO. Two focus group discussions were also held with the city management team, including the Mayor. Additionally, customer survey was sent to two companies that have gone through the Imatra's establishment service process. Table 5 explains the process of data collection for this thesis.

Activity	Date	Participants
Interview	25.10.2018	Deputy Mayor
Interview	31.10.2018	IBC CEO
Interview	31.10.2018	Kehy CEO
Interview	31.10.2018	Kake CEO
Focus group discussion	24.1.2019	Part of the City management team, including Mayor
Focus group discussion	14.2.2019	City Management Team
Interview	7.3.2019	Mitra CEO
Customer survey answers	26.4.2019	Tetra Pak

Table 5. Data collection

Yin (2003) recommends that theory ought to be used in case studies to guide the data collection process. Following this thought, service blueprinting approach was embraced at very early stages of the process. Data collection of the study emphasized the understanding of participant's perspective and experience. Process improvement being at the heart of this study, the importance of mapping the current process is emphasized. Thus, seeing the process in the eyes of the participants not only bring great insight, but also helps in detecting possible improvement areas. In addition to the collected primary data, supporting secondary data was also utilized. This data was mainly acquired from the city website.

#### 3.2.2 Semi-structured interview

The case study started with interviews, one of which took place at LUT's premises in Lappeenranta and the rest at Imatra City Hall. The interview was conducted with the Deputy Mayor and CEOs of the Group companies. The aim was to create a general understanding of the activities and tasks of the city of Imatra and its subsidiaries, and especially their involvement in the investment process. At the start of the interviews, the service blueprint

approach was already selected through theory review to map the process. That is why the understanding of the current state of the establishment service process was emphasized, and the questions sought to create comprehensive understanding of the situation.

According to Gill et al. (2008) there are three fundamental types of qualitative research interviews: structured, semi-structured and unstructured. Semi-structured interview consists of several key questions that guide the interview but leaves room for follow-up questions. This interview format was selected for this study, as it allows the participants some flexibility and allows for the discovery or elaboration of information that was not previously thought of. Another reason for choosing semi structured interview over structured interview, was the nature of the case organization. The activities and systems of a public administrator is something that differs from ordinary business, and such many important things were expected to rise during the interviews. Most of the interviews were conducted at the beginning of the study. This helped to conceive the process of Imatra's establishment process and to understand the views and roles of different actors. There were a few key questions in the interview, but as expected, a lot of important information came outside the actual questions.

### 3.2.3 Focus group discussion

Another qualitative data collection method of the study was the focus group discussions. With the exception of one interview, these discussions were held after the interviews, when the theory had also been studied quite extensively. Focus group discussion is a method of qualitative research in which a small group of participants discuss a given subject to generate data. Objective of this method is to give the researcher an understanding of the different perspectives of the participants, as well as seek explanations and areas of improvement. (Wong, 2008, 256)

In the first focus group discussion, part of the city management team, including the mayor, was involved. The conversation was very free-form and only a few key questions were raised to guide the debate. The purpose of the discussions was to deepen the understanding of the establishment process and to identify possible areas for development. The second focus group discussion involved the whole Group Executive Team, excluding the Mayor. All those involved in the establishment process were involved in this discussion. The process mapping was very much done at this stage and the goal was to find all possible development areas. Participants were encouraged to give their views on the process and

development areas. An important part of this discussion was the workshop section, where participants were given a service blueprint frame, and were invited to describe their own view of the current process. Finally, the blueprints were discussed, and the causes of the differences were discussed and examined.

### 3.2.4 Customer survey

The final data collection method was customer survey. As is normal for qualitative research, the research approach is developing during the process. The customer survey was considered necessary on the basis of theory, and empirical data. A survey was sent to the two most recent corporate customers of the Imatra city's establishment process. The survey included four likert- statements with three to six questions, and 4 open questions. The aim of the survey was to find out the customers' experience of the establishment process and to find out their preferences.

# 3.3 Validity and reliability of the study

Validity and reliability are one of the most important aspects in research, as they determine the credibility of the study. These terms are approached from different angles in qualitative and quantitative research. Yin (2003) suggest that the quality of a case research is based on construct, validity, internal validity, external validity and reliability of the research design. Construct validity refers to the extent to which the selected set of measures serve their given purpose. In order to establish construct validity in a case study, two factors should be made clear. First, establishing clear chain of evidence is crucial to prove the logic behind the research process. Second, adopting multiple sources of evidence, by using appropriate data collection methods and data sources. (Yin, 1994) Internal validity refers to the analysis part of the research: is the logical reasoning compelling to support the reached conclusions. (Yin, 1994) External validity defines how well the results represent the studied phenomenon, or to which extent the findings can be generalized. In order to increase external validity, it is suggested that the analysis of the empirical data ought to be strongly theory-based. (Yin, 2003) *Reliability* of the research design refers to the absence of random errors; the extent to which the research process can be repeated and yield same results. Documentation and clarification of research procedures are emphasized, to accomplish possible replication of the study. (Yin, 2003)

In this study, objectivity has been sought in all parts of the research process. The researcher has given the interviewees the opportunity to talk free about the subjects at hand, without leading too much. The subjectivity of the interviewees must be taken into account. The problem with this issue is reduced by the fact that all the main actors in the establishment process were interviewed to get a reliable overall picture. The research process of this case study was made as clear and logical as possible. The research began with getting familiar with the organization's activities, and with the establishment process itself. The selected qualitative research approach and selected data collection methods were considered appropriate by the support of the theory. In addition to the internal viewpoints, external data was obtained through a customer survey. This, in addition to the other things mentioned, brings reliability to this research.

#### 3.4 Findings

The objective of the case study was to map the current state of the Imatra city establishment process and to suggest an improvement plan. As a public actor, Imatra produces a variety of city services and many of them are extraordinary in nature. Their goal is not necessarily to generate a profit, but to benefit the municipality as a whole. The selected process for this research is targeted at companies that are willing or interested in establishing their operations in Imatra. The effectiveness and efficiency of this process is important for the city for many reasons. Municipalities compete with each other for businesses and seek to attract them to their territory. The concerns of smaller municipalities in Finland have also risen due to the growing urbanization trend, as many municipalities have lost their vitality. The establishment of the service process also differs from conventional services quite a lot. It is a service provided by the city group, which manages the whole process related to the placement of the company in the city. So, there are many actors and organizations involved in the process, and this can raise some issues.

The course of this study is in line with the previously presented Lecklin (2006) process development model (Figure 9). This model emphasizes the perspective of continuous development, which has been understood, and taken into account by the City of Imatra. Continuous improvement is seen as an important factor for the success of the city.

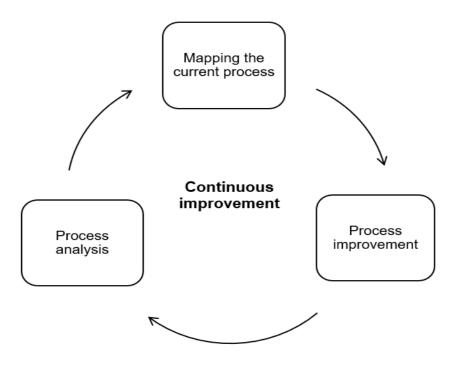


Figure 9. Continuous process improvement (Lecklin 2006, 134)

This Case study was started by following the process of continuous process improvement and by mapping the current state. The goal was to understand the current state of the establishment process, its implementers, and the whole context. The first step was also particularly important as it was needed to build a service blueprint, to clearly illustrate all the stages of the process. The process analysis step occurred through several activities. Focus group discussions after modeling the service path were used to discuss the process and analyze it among all the participants of the service. The researcher was also able to observe the discussion and recognize strengths and weaknesses of the process. Expectations and development ideas for the establishment process were also raised. In the service process, it is always important to take the customer's perspective into account and this insight was gained through the customer survey. There were only two companies in the sample, but the number of the customers in the particular process is very limited. After understanding the customer preferences and experiences, it was possible to form QFD customer needs analysis and to visualize the customer-valued features in the service, as well as potential development areas.

Next, the steps of the case study process and the results that emerged from them are reviewed. The description and analysis of the process is based on the conclusions of the researcher based on the data obtained from the research methods.

## 3.4.1 Service blueprinting the current establishment process

Compiling service blueprint means practically mapping the current process. Blueprint shows the steps and activities of both the customer and the service provider. At the beginning of this case study, the researcher had no prior understanding of the process of establishment or the actors involved, so process then began from a clean table. After obtaining a study assignment, the analysis of theory and other external data began. Through this, an insight was obtained as to how the research process should proceed. Case study started with interviews with the deputy mayor and three CEOs. Through these interviews, Imatra's city activities and particularly, the establishment service process was outlined.

Imatra as a public actor produces a variety of services. Some of them are profit-making and some are not profitable. The city's actions are strongly guided by legislation and there are services that Imatra is obliged by law to offer. The business establishment process is not a mandatory but otherwise indispensable service that the city offers. It keeps the city competitive and vibrant. In this process, several actors operate under the leadership of the city management. Some of these actors are in the process background, and others play a very important role. The property and construction company Mitra, the development and business services provider Kehy and the urban development and technical services company Kake are the key actors in this process. Other actors involved in the process are Imatra Base Camp (IBC), which sells and markets Imatra, as well as city heat and electricity companies. These among personnel working at the city hall are excluded from this study, as they are seen as support for the core process. Participants of the establishment process and their field of operations are presented in Table 5.

City management Supervision of the whole Imatra Group								
Mitra	Kehy	Kake						
Construction and real	Advisory services for	Urban development and						
estate services	current and starting companies	technical services						
- construction, rental	- licence issues, legal	- permits, monitoring,						
housing, property management	matters, financing	urban planning, zoning						

Table 6. Establishment service process providers

Top management of the city group consists of Mayor and deputy mayor. They are responsible for the management of the municipality, its general coordination, finances and talk on behalf the municipal board. Mitra is a group company, which is responsible for construction and real estate services, and also marketing and "selling" the city to external parties. Mitra is a key part of the business establishment process, as companies always need appropriate business premises to operate and Mitra is responsible for offering. Most of the companies limited to this study, medium or large enterprises, wish to rent business premises. In such cases Mitra either constructs required premises, rents one or look for private premises together with Kehy and Kake. Kehy offers supporting advisory services for companies. These services included consulting on several matters such as financing, working conditions, as well as juridical issues. Kehy also does market the City of Imatra for potential companies, through their invest in- website, phonecalls, divisible materials, fairs and collaboration with other cities. Mitra and Kehy do very close collaboration in marketing the city of Imatra, and also in processes related to companies. Kake is a separate company from the group and is responsible for urban development and technical services. Kake coordinates tasks such as environmental monitoring, land use planning and zoning. As of the most important task related to business establishment process, is zoning, which is the process of diving land in a municipality. Zoning specifies outright and conditional uses of land and determines where the construction of business premises is allowed. The process of zoning can be time-consuming at times, and companies might require their business premises in a speedy timetable. That is why, the role of Kake is crucial for efficient business placement. The city management and the CEOs of Mitra and Kehy are all part of the group

executive committee. The group executive committee gathers together quite frequently to discuss important matters, which creates the readiness for swift and effortless communication. In addition to that, all these participants of the business establishment service process are located under the "same roof", which makes the communication easier.

The business establishment service process begins with customer contact. The current business establishment process is illustrated in the figure 14. Company as a customer contacts the City of Imatra through website, email or phone call, and expresses their interest towards the city as a possible location for their business. These contacts might be directly about establishing business or generally inquiring about the City and possible opportunities there. Contacting is often directed to the Mayor or deputy Mayor, but also the CEOs of the group companies: Mitra and Kehy. Kake is also sometimes contacted and inquired about certain information. Sometimes other actors of the city are contacted as well, such as city lawyer or geodesist. The choice of contact method and person depends on the company and the person responsible reaching the City of Imatra.

Following the contacting, the needs and requirements of the customer are investigated. The customer is listened and sometimes directed to another person within the establishment process. An internal examination of the requirements is done next: permissions, prices, zoning etc. The customer is then contacted again or directed to contact people who are responsible for some crucial steps of the process. A person or multiple people from the City of Imatra contact the customer regarding meeting scheduling, guidance or offer. The service process consists several contacts between the customer and the City, which can be burdensome for the customer. Depending on the needs of the customer the different group companies are involved mostly in the process. Mitra as a constructor and premises provider plays the biggest role, but Kehy is also in close collaboration with them, as many companies require enterprise counseling in several matters. Kake and its zoning processes is also necessary through the importance of urban planning. These group Companies investigate and report to each other about the process and the things concerning it. Issues and requirements Group companies solve include lot offering for business premises, permissions related to environment, construction etc., zoning opportunities, price calculation for rents, construction and investment, as well as training and workforce availability. These matters are discussed within the group executive committee meeting, as well as personally between the actors. Currently the City does not have proper tracking system for the progression of establishment processes. Each actor in the process do their own documentation, but integrated monitoring is missing.

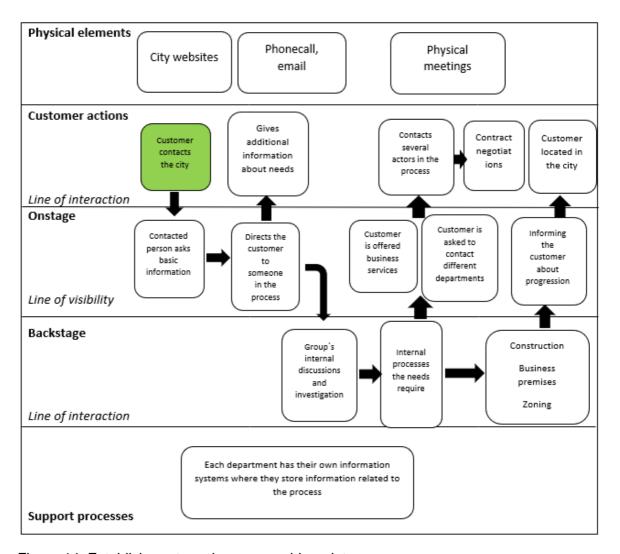


Figure 14. Establishment service process blueprint

The current business establishment process is quite efficient and straightforward in cases where the locating business seeks solely for a business premises and enterprise counseling. In such cases Mitra is managing the process and offering most of the required services, while Kehy is supporting the process by giving needed counseling to the customer. The establishment process becomes more complicated when suitable business premises are not available and there is a need for zoning. Zoning process is often lengthy, and it can prolong the establishment service process.

Apart from the core actors of the establishment process, the customer ought to contact actors as well. Depending on the situation and requirements, the customer might need to discuss with the city geodesist, water and electric service providers and possible other public officials. This also lengthens the establishment process and introduces additional tasks for the customer company.

City of Imatra is currently not managing the establishment services process as a process, but rather as a collection of isolated activities. Even though the service process is quite efficient most of the times, the city desires to bring it even further. The goal is to create a proactive and efficient service process which offers superior value to the customer and increases the readiness of the city to welcome new companies to its territory.

### 3.4.2 Understanding customer needs through QFD analysis

Customer-driven service process improvement implies that the process is made to match to the needs of customers. A survey inquiry was sent to two customer companies of the City of Imatra. There have been only few companies who have gone recently through the establishment service process and thus, it explains the small sample size. The bigger of the two customer companies successfully located now in the city, is also seen the best example regarding the process. That is because the company is very large enterprise, the establishment process followed the standard procedures and the desire to locate similar companies to the city is pursued. Only the bigger enterprise, company X in this study, took the survey and is acting as a main source of customer information.

The survey (see appendix) followed the likert -approach and asked the respondent to rate each claim from 1 (totally disagree) to 5 (strongly agree). It also included four open questions. The claims related to the business establishment process and were in four different categories: before the process, beginning of the process, during the process and after the process. The open questions were more specific and asked the respondent to specify the service process more deeply and express their overall opinion about the establishment service process. In addition to the survey, few specifying questions were sent to company X to expand the understanding related to some questions. The results will not be discussed one by one but are integrated to the analysis of this chapter and further.

The data generated from the customer was used to perform a QFD analysis. QFD (Quality Function Deployment) matrix was created to match the customer needs with the service design. The relationship between customer needs and service design was identified, in order to gain insight for the service process improvement. Survey was the main source of information for customer needs, and the service designs were generated through other empirical research methods, practices identified from the theory and researchers own deductions. Discussion during the executive committee meeting was especially beneficial for speculation of possible service designs to match customer needs.

Considering the unique nature of selected service process and the public administrator as a service provider, a modified QFD analysis approach was chosen. As the business establishment service process differs from traditional profit-generating private services, parts of the QFD matrix was left out of the analysis. The HOQ (house of quality) was reduced to only focus on customer needs, design requirements and their relationship and priority. Competitive evaluation, design goals and technicalities were left out of this analysis. As the theory confirms, there is various levels of detail into which one can go using the QFD house of quality diagram. Quite low level of detail was chosen to this study, considering the factors pointed our earlier. The figure 15 illustrates the modified QFD matrix.

X's (How's) Service Functions / Requirements CTQs																	
Relationshi Weight	Strong 5	Medium 3	Weak 1	Clear division of tasks	Process owner selected	Process tracking	Defined process	Forwarding the customer to right person	Communication between service actors							Importance (1=low, 9=high)	
		Customers' N	eeds/wants		4	4	_	_	_		ιci	4	ന്	οi	÷	7.0	Total
	Process is fast		4	_	_	5	5	5	-	$\vdash$	$\vdash$	$\vdash$	$\vdash$	$\vdash$		189	
Easy to contact right person		4	5	2	4	5	5	-	-	$\vdash$	$\vdash$	$\vdash$	$\vdash$	9.0			
	Easy for customer		3	4	3	5	5	5	_	_	_	<u> </u>	<b>—</b>	<u> </u>	9.0		
	Contact person handles everything		4	5	3	3	4	5	_	_	_	_	_	_	9.0		
	Being update	ed during proce	\$\$	3	4	4	5	3	4							9.0	207
	Contact pers	on is high in ra	nk	3	4	1	3	3	1					_		7.0	
				_	_			_		_	_		<u> </u>	<u> </u>	_		0
				$\vdash$	$\vdash$			$\vdash$	$\vdash$	$\vdash$	$\vdash$		$\vdash$	$\vdash$	$\vdash$		0
																	0
CTQ Priority		175	218	143	209	209	213								1167		
% Importance			21	26	17	25	25	25								]	
		-	Priority rank	4	1	5	3	3	2								-

Figure 15. Modified QFD matrix

Company X is a large enterprise that operates worldwide. The company established its operations in Imatra in 2012 and the establishment process followed the standard path. They were very satisfied with the process as a whole and did not report any clear shortcoming. The business establishment service process started with contacting the mayor of the city and proceeded the standard way, as is depicted in the service blueprint illustrated earlier. The information regarding Imatra as a potential operating location was investigated by the logistics department, and the same department also suggested contacting the City. City of Imatra has been focusing on their websites as a main source of information and

contact channel. In the case of company X, the website was not seen as necessary and rather the contact was directed to the city leadership directly.

The company found it easy to find the needed contact information and the desired contact person was easy to reach. They found the whole establishment process very clear and were receiving supportive responses when needed. There were times when the company had to wait for certain information for extended periods of time, where it was hard to track the process progression. These situations were very minor and did not affect their overall service experience too much.

The company X was also asked some additional specifying questions through an email. The data from both the survey and the specifying questions were used to articulate customer needs to the QFD analysis. The four major customer needs identified were:

- Easiness of contacting the right person
- The process is easy for the customer
- Contact person from the city handles most of the tasks
- The customer is being informed during the process

The customer highly appreciates process that is open and easy for them. They prefer not having to do too much research and contacting several departments. Customers value the ease in contacting the right person in the city, regarding the establishment. They also wish that there would be only one contact person from the city, that is contacted back and forth. It is not desired that the customer should call and visit different departments, such as city planning, geodesist, water, electricity etc. The customer would prefer that the contact person investigates the customer needs and handles most of these processes on behalf of the customer. Constant informing from the contact person is also expected, as tracking the process is necessary also. Customer has to know the progression of the process so that they can manage their business efficiently and plan for the future.

Additionally, Company X also values the process being as short as possible and that the contact person has authority within the city. These were clearly identified customer needs, but a bit less prominent as the ones discussed before. Extended process causes customer dissatisfaction and could even risk the whole establishment process. This issue has been recognized in the city of Imatra as well, as was found during the interviews and focus group

discussions. It is also appreciated by the customer that the contact person is high in rank within the city. This was seen as a sign that the city appreciates the customer and their willingness to locate to their area and takes their needs as a priority. Contact person who has authority in the process, is also able to speed up the process by doing their own decisions.

The service functions in the QFD analysis were generated through empirical data collection methods and researchers own reasoning. Data collection methods were interviews and focus group discussions. The service functions were:

- Clear division of tasks
- Selecting process owner
- Process tracking
- Defining the process
- Forwarding the customer to right person
- Communication between the actors within the establishment process

These service designs were selected with a customer-oriented mindset, to make the process fast, easy for the customer and organized. Defining the process and diving the tasks within it is crucial for process management. Every actor should know the tasks they are responsible for. Following the process management approach, selecting process owner was seen a crucial service design. Process owner is responsible for the process performance and progression and coordinates it. Communication between the actors in the process was also seen impactful, as it effects the service process a lot. Communication helps speeding up the process and making it flow efficiently without unnecessary delays. It is also beneficial as many of the tasks in the process happen simultaneously, and there is need for coordination. Such coordination applies to another service design analyzed, forwarding the customer to right person. Customers disliked contacting various departments and researching by themselves what they ought to do. With proper coordination, the city can proactively handle tasks previously customer responsible for and lessen their burden. Process tracking was seen also an important service design, as it gives clearer picture about the process and its progression. It diminishes process overlapping, which just slows the process and makes it more burdensome. Doing certain tasks twice or thrice is just poor usage of resources and shows lack of coordination.

Conducting QFD analysis expanded the process improvement approach and gave direction to improvement actions. The analysis of customer needs and service design factors and their relationship was helpful in finding appropriate direction for process improvement. The QFD analysis generated weights for the relationship between these two variables. These weights are called absolute weight and relative weight and are shown in the bottom of the QFD matrix. The weights are depicted in figure 16.

CTQ Priority	175	218	143	209	209	213
% Importance	21	26	17	25	25	25
Priority rank	4	1	5	3	3	2

Figure 16. Service design priority ranks and weights

The input of this QFD analysis shows the priority numbers for each service design. The results indicate that two service designs have the most impact on fulfilling the customer needs:

- 1. Selecting process owner
- 2. Communication between the actors in the establishment service process

#### 3.5 Identified challenges

The results of empirical research, service blueprinting and analyses conducted indicate that the City of Imatra does not have clear, defined service process, which has an impact on the studied establishment service process. There is no uniform way to perform the service process and that affects the customer experience and causes uncertainty.

Service blueprinting points out the role of the customer and the internal process within the city. Currently, the customer is obliged to do excess amount of research and tasks, and the responsibilities are decentralized to several actors in the process. There is no clear division of tasks or defined responsibilities, which causes ambiguity. The absence of process owner is also seen as a problem, as it is a crucial part of process management. No one is promoting the customer-oriented process management within the organization or responsible for the process itself.

Interviews and focus group discussions brought up the contradicting views within the city organization. The personnel had various views regarding the service process. For some, the service process seemed clear and logical, others found it ambiguous and confusing. The common view was that there is no clear and defined process, and the role of the customer is difficult. The customer is responsible for finding the correct person to contact, which is often times not the most competent regarding the establishment process. This results to the incapability of the contacted person to initiate the establishment process efficiently. The customer is also obliged to contact various different departments for tasks regarding the actual process and guidance.

There is also lack of process tracking, monitoring and quality measurement. Some actors in the process have better understanding of the service progress than others, which is inefficient. This slows down the process and causes overlapping activities. The customer can also find the process progression confusing and irritating. Documentation is done separately among the service process actors which was seen problematic and something to be improved. The lack of monitoring and measuring service quality also indicates the clear absence of process management in the organization. One of the key concepts of customer-oriented process management is the measurement of customer needs, expectations and experience. Improving processes whilst considering only internal process efficiency and capability will not bring long-lasting competitive advantage.

Some actors within the city organization seemed very demotivated and did not really see any reason to change the current business establishment process. This might cause some change management issues, as people are often afraid of new tasks. The fact that that the most crucial actors in the process are CEOs of companies can also become a challenge. As the theory highlighted, service process improvement requires new procedures and the projects ought to be managed with certain hierarchy (e.g. process owner). If the importance of the process improvement is not understood well within the organization, conflict situations may occur: "who are you to command me?"

The customer survey and analysis showed that regardless of the lack of process management, the establishment service process is quite satisfactory. Similar perception was created through the internal process research. However, satisfying the customer needs does not mean that the service exceeded the customer expectations, which the literature regards as key to strong competitiveness. The process could always be better. Weak points found in the process ought to be improved, if the city wishes to pursue for competitive edge

against other cities. Not only improving the customer experience will do this, but also improving and managing internal processes.

The main weak points of the establishment service process identified are summarized as follows:

- 1. Absence of customer -oriented process management. No defined process, division of tasks and responsibilities or process owner.
- Customers workload is too big. The customer has to research and contact various actors during the process.
- 3. Customer ends up often to wrong contact person, who is not capable of initiating the establishment process efficiently or at all.
- 4. Lack of proactive communication within the organization. This is emphasized in the proactive capabilities of the City to locate a company, overlapping tasks, directing right person to contact the customer and extended times to perform tasks, especially zoning.
- Lack of service process tracking, monitoring and quality measurement. The city has
  currently no capability to improve service in a customer-oriented way, as they are
  not listening to the customers. Tracking and documentation is done individually,
  which causes ambiguity.
- Possible lack of motivation and ambition to improve the service process. Some people within the organization did not feel the need for such improvement efforts and might directly or indirectly hinder the efforts.

The two major bottlenecks identified in the establishment service process are the absence of process management and process owner, and the lack of proactive communication within the organization. Solving these issues will already improve the service process significantly and enable the city of Imatra to purse the road of continuous improvement. The city has understood the need for proactive process improvement as their competitive edge in these times of intense competition. Such will and pursue for increased competitiveness is the key in establishing the environment of continuous improvement and customer-orientation.

#### 3.6 Service process improvement suggestions

This chapter will combine all the results and conclusions gained during the research and propose an improvement service process model. New service process will be depicted in a form of new service blueprint. Additionally, steps and tasks necessary to achieve this process improvement plan are suggested. Mapping the current service process and combining the service blueprint gave an insight for the areas of improvement.

Customer-oriented service process improvement emphasizes the role of the customer. Before that, process owner must be selected and appointed to lead the establishment service process. This is one of the most important steps, as the process owner plays a key role in the process and is responsible for its success. Suggested process owner would be the CEO of Mitra, who is the key actor in the current process. Mitra is responsible for proving the construction and business premises for the company and has best overview of the overall process. Mitra is also marketing the city and has close contacts with the other two major actors of the process, Kehy and Kake. The CEO of Mitra would act as a primary contact person for the customer and communication link between the city and the customer. In cases of special circumstances, the process owner can assign a process manager to be the contact person, and the CEO of Kake would be suitable for this role. Kake is proving business services and counseling, and thus might need to keep contacting the customer anyhow.

The suggested service process would start with the customer contact, see figure 17. The information directing to the right contact person, mainly CEO of Mitra, should be clearly expressed in the websites and other sources of information, such as marketing materials. It is expected that customer will end up contacting other personnel of the city, like the Mayor or geodesist. These people or anyone else receiving the customer contact, should direct the customer to process owner, CEO of Mitra. Process owner will then investigate the situation and needs, or even market the city if the customer is barely examining their options of possible new business location. The process owner will then bring the issue to the awareness of group executives, investigate the internal capabilities regarding the customer needs and prioritize the activities. In a situation of multiple customers, the customers should also be prioritized to some extent. Process owner can also appoint someone else, preferably the CEO of Kehy, to act as main contact person between the customer and the city, if needed.

Importance of internal communication within the actors in the establishment service process is extremely important. The process owner should ensure that the process is flowing in an organized manner and keep proactive communication with other key actors. It is almost important that the workload of the customer is minimized, by handling the processes internally. Communication with the customer should be limited to as few as possible different actors and would preferably be initiated by the city. The city should be the one contacting and informing the customer, rather than having the customer to inquiring information repeatedly.

Proactive internal communication and planning also helps solving one of the identified issues: zoning. Zoning process was found to lengthen the establishment process. The characteristics of zoning activities makes them time-consuming and less flexible. Process owner can optimize the process related to zoning in two ways: emphasizing the importance of the customer and inquiring about the progress of the zoning and engaging into proactive communication with the CEO of Kake. Proactive communication here suggests that they ought to discuss about the capabilities and readiness of the city to locate new companies. There should be proactive investigation and planning for possible zoning possibilities. This will speed up the establishment process, when proactive measures have already been taking and zoning capabilities are clear.

Process owner is responsible for the documentation and tracking the process as well. The correct approach to this ought to be considered carefully, to match the capabilities and resources of the organization. Currently, the city is not undergoing many establishment processes and there might not be a need for comprehensive customer relationship management (CRM) system. Adopting such system might become necessary if the city is receiving many customer companies inclined to locate to Imatra.

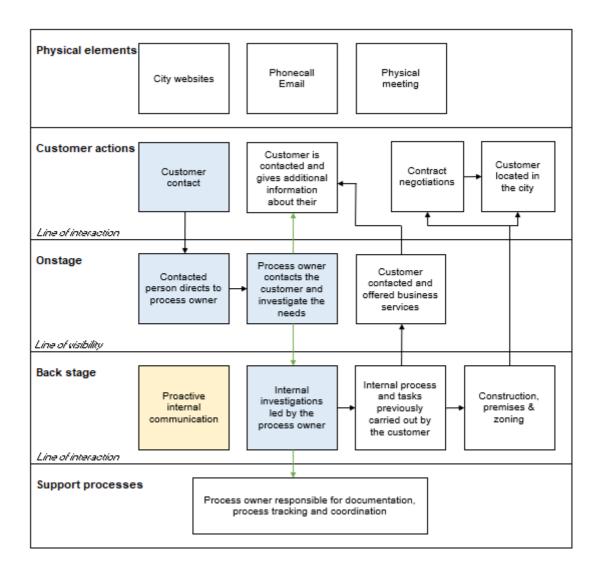


Figure 17. Suggestion for improved service process

The suggested service blueprint emphasizes lesser workload for the customer and the role of process owner as coordinator of the process. The new process is more convenient for the customer as well as the city organization. The process management approach also ensures the division of tasks and responsibilities and enhances the service quality. The role of process owner is an important one, but if taken seriously and executed properly, can result into an efficient process outcome.

City of Imatra wishes to become more competitive and increase their state of readiness to welcome new companies to their area. Proactive communication will help in achieving these goals. The city management is communicating quite well, but the proactiveness should be embedded to their approach. The capabilities should be well-known, as it helps planning the future.

In order to adopt new service process and comprehensive process management within the city organization, some suggestions are given:

- 1. Selecting process owner. This person is responsible for coordinating the service process and is responsible for its success. Process owner should be the main contact person between the city and the customer. Suggested person for this role is the CEO of Mitra. Customers highly value that the number of contact people is only one. Process owner should also ensure that most of the tasks are handled internally, so that the customer is not obliged to call several actors during the process.
- 2. Adopting overall customer-oriented process management. This comprises the whole organization and should have the support of the top management. The city leadership should commit themselves to the approach and encourage other employees. Process management should be implemented to other processes as well, rather than managing tasks separately. Regarding the establishment service process, the top management of the city, Mayor and deputy Mayor, ought to show their enthusiastic and motivated attitude towards working with the companies intending to locate in Imatra. When the establishment process has begun, they could contact the customer company and show their appreciation and indicate that answering to the needs of the company is of highest priority.
- 3. Contacted person should direct the customer to the right person, process owner. This should be done as quick as possible. If the process owner is not able to pick up the customer shortly, another key person of the process is the CEO of Kehy. Everyone within the organizations should know this.
- 4. Proactive communication within the city organization. The group executives and city management ought to communicate actively, not only regarding current activities but also about future capabilities. Such proactive planning includes zoning capabilities and service improvement approaches. Zoning was seen to be slowing the process at times, which should be taken into consideration through anticipatory measures. Production and business premises state, as well as zoning capabilities should be planned and discussed frequently, in order to facilitate future business establishment processes.

- 5. Service process improvement approach should be customer-oriented.
  - Monitoring processes and clarifying customer needs, expectations and experiences is crucial for service improvement. Currently, the city is not measuring its service performance and that is something that should be adopted. Following the principles of process management, the city can measure its services by collecting customer information. There are many tools available helping with customer need analysis and data collection.
- 6. Everyone within the organization should participate. The city management and process owner should ensure that the sense of urgency is established related to process management and the process at hand. It is not enough if only certain people or departments are committed to become more customer-oriented and improve the overall organizational process management. Change management practices suggested are repetitive and consistent communication about the improvement projects and verifying that everyone is on board. In this specific case and the process of business establishment, the whole organization should be well informed about the importance of the process for the competitiveness and long-term vitality of the city. The employees within the organization ought to know the new procedures, e.g. everyone should know who is the selected process owner, and what to do in the case of customer contact. The support and ambition of top management is crucial for the improvement efforts to succeed. The employees would as such feel motivated and work towards more efficient and customer-oriented service processes.

The success of process management and improvement efforts rely strongly on the dedication and skills of the process coordination. As the city of Imatra has no previous process management expertise, nor process owner, few additional suggestions are given.

- Finding and selecting suitable process coordination and planning tool
- Introducing IT communication platform

Firstly, process owner is responsible for the process and ought to coordinate it. Imatra should consider broadening their IT system selection to fit the requirements of successful process management. There are various tools available for process planning, tracking and documentation. Utilizing such tools offers various ways to coordinate and analyze processes. Also visualizing the process steps and using charts can help in outlining and

understanding the process. Secondly, as the proactive communication within the organization was perceived as very important success factor, appropriate actions related to that ought to be taken. The current communication in the city of Imatra is mostly done by traditional means e.g. emails, calls, meeting. Imatra could take a look at the different communication tools available. Many of these communication platforms offer great ways to communicate real-time, exchange documents, edit shared files and plan events on a calendar. The various opportunities if IT systems and platforms should be investigated, chosen and implemented. Traditional ways of communication have higher risks of miscommunication or losing opportunities, as an important mail can be lost in the inbox and call can be easily missed. It is important to analyze the options carefully and pick the ones that are suitable for the organization. A too complicated system or platform can be almost impossible to implement into organizational procedures, if the skills and dedication are way behind the complexity of the solution.

## **4 DISCUSSION AND CONCLUSIONS**

The aim of this study was to improve the establishment service process provided by the city of Imatra. The chosen service improvement tool was service blueprinting, which was used to map the service process and identify possible areas for improvement. Additionally, QFD analysis was conducted to recognize customer needs and their relationship to certain service designs. This chapter begin by responding to the research questions, followed by evaluation of the results and suggestions for further research.

# 4.1 Answering to the research questions

The main goal of this study was answering the main research question and was answered by the aid of the empirical case study. The two supporting questions were answered through the theory.

Main research question of the study:

How can the case organization improve its establishment service process?

Support research questions:

- What is the most appropriate way to approach service process improvement?
- How to meet customer needs with a service process?

Starting with the support questions, the first one of them inquired the appropriate ways service processes can be improved. Answering this question started by discussing the unique characteristics of services and their process nature. Features of services, such as intangibility and human interaction was found to complicate the service improvement. It makes it even harder when dealing with public services, as the one this study addresses. Process management theory was found helpful answering the question. Understanding service as a process and managing it through process management, makes the services improvement seem way more achievable. Hammer (2002) presented six steps to efficiently begin process management, which gave guidelines for service process improvement approach. Identifying the processes, measuring the performance and designating process owner to establish improvement actions are part of those six steps that were found very

useful. Service process improvement chapter gave more insights to the topic and service blueprinting method was introduced. Change management was also covered, and it highlighted the importance of acknowledging it and offered useful steps managing the change. As improvement efforts focus on changing or modifying current procedures, change is an inevitable consequence of such actions. Managing it properly is something that should be focused. People should be motivated and made feel confident about the improvement efforts and changes. The final comprised answer to the first supporting question, could be comprised as: Service process improvement should be approached with a process management mindset, whilst keeping in mind the special characteristic of services and customer requirements.

The second support question was related to customer needs. How can the service process meet the customer requirements? Answer to this was found in the last theory chapter, which discusses customer needs and expectations. The customer expectations are divided into different dimensions and each one of them should be taken into consideration. It was also found out that the best way for a firm to perform beyond customer expectations is to focus on improving their service process. Meeting customer needs and expectations require customer information. Companies ought to choose their channels of communication to fit their capabilities and service offering. Finally, QFD analysis was introduced to match the customer needs with the service design. It shows the factors that the customer really values and how should company improve their processes to meet those requirements.

The main research question, "How can the case organization improve their establishment service process?" was answered in the empirical part of the study. Following the methods and steps of empirical case study, compilation of service blueprint and conducting QFD analysis resulted into clear answers to this question. As a result, new service blueprint depicting improved service process and six suggestions to implement those improvements were formulated. An additional guidance was given for the process coordination and organizational communication: utilizing appropriate IT solutions can provide the city of Imatra the conditions and tools to utilize process management to its full potential and continue their path of process improvement. Short answer to the main research question would be: The case organization can improve their establishment service process by adapting customer-oriented process management, which is founded upon comprehensive and proactive pursue to exceed the expectations of the customers.

#### 4.2 Evaluation of the results

The research can be considered successful, as the main goal of the study was reached and answers to the research questions were found. A suggestion for new service process was introduced. Practical steps were also proposed to help with the organizational change.

The empirical research was divided into two categories, one considering the internal process and another focusing on the customer perspective. Understanding the internal service process perspective of Imatra was very successful and the amount of data collected was great. Interviews and focus group discussions were held with the key actors of the establishment services process, which gave good insight regarding the process. Compiling the service blueprint was not too easy, as the service process studied had such a unique nature. The research on customer experiences and preferences was very limited. This is because the number of recent customers of the establishment service process of Imatra is very low, and out of those, only one company cooperative. Thus, the data regarding customer perspective is limited. Fortunately, the company, which was part of the study, gave very helpful information and was also regarded as the most successful customer of the service process. Overall it could be said that the study is satisfying, and the results are desirable and applicable.

### 4.3 Suggestions for further research

Helpful and practical topic for further research could be related to the usage of information technology in similar business processes. It could be very useful for the city of Imatra, or other municipalities to implement more information technology. Such technologies would support the process management and help in documentation and customer data collection. Another especially useful research topic for the city of Imatra would relate to marketing the city and attracting more new companies to the area. Regarding the theory, an interesting topic for further research is the role of process owner. A detailed description of the role and tasks of process owner in the public organization setting would bring great insight for many administrators.

### REFERENCES

Adesola, S., & Baines, T. (2005). Developing and evaluating a methodology for business process improvement. Business Process Management Journal, 11(1), 37-46.

Baines, T. S., Lightfoot, H. W., Benedettini, O., & Kay, J. M. (2009). The servitization of manufacturing: A review of literature and reflection on future challenges. Journal of manufacturing technology management, 20(5), 547-567.

Balogun, J. and Hope Hailey, V. (2004) Exploring Strategic Change, 2nd edition. (London: Prentice Hall).

Bessant, J. (2003), High-Involvement Management: Building and Sustaining Competitive Advantage Through Continuous Change (Wiley, Chichester).

Bouchereau, V., & Rowlands, H. (2000). Methods and techniques to help quality function deployment (QFD). Benchmarking: An International Journal, 7(1), 8-20

Brigham E F and Ehrhardt M C (2004), Financial Management: Theory and Practice, 11<sup>th</sup> Edition, South-Western College Publishing, New York.

Bitner, M. J., Ostrom, A. L., & Morgan, F. N. (2008). Service blueprinting: a practical technique for service innovation. California management review, 50(3), 66-94.

Brooksbank, D. J., Pickernell, D.G.1999: Regional competitiveness indicators - a reassessment of method, Local Economy, Vol 13, No 4, 310-26.

Burnes, B. (1996) 'No such thing as...a "one best way" to manage organizational change', Management Decision, 34(10), pp. 11–18.

Burnes, B. (2004) Managing Change: A Strategic Approach to Organisational Dynamics, 4th edn. (Harlow: Prentice Hall).

Carbone, L.P., Haeckel, S.H. (1994). "Engineering Customer Experiences," Marketing Management, 3/3 (Winter 1994), pp. 8-19.

Cohen, L. 1995. Quality function deployment: how to make QFD work for you. Reading MA: Addison-Wesley.

Crosby,L.A., Johnson,S.L.(2007) "Experience Required," Marketing Management, July-August, Vol. 16, No. 4, 2007, pp. 20-28.

Clausing, D. (1994) Total Quality Development, New York

Curatolo, N., Lamouri, S., Huet, J. C., & Rieutord, A. (2013, October). Lean in the hospital setting: Analysis of the literature from a business process improvement perspective. In Proceedings of 2013 International Conference on Industrial Engineering and Systems Management (IESM) (pp. 1-7). IEEE.

D'Agostino A, Serafini R, & Ward-Warmedinger M (2006) Sectoral Explanations of Employment in Europe-The Role of Services. Working Paper Series European Central Bank 625.

Davenport, T.H., Short, J.E. (1990): The New Industrial Engineering: Information Technology and Business Process Redesign. Sloan Management Review, **31**(4), 11-27

Deloof M, 2003. Does working capital management affect profitability of Belgian firms? Journal of Business Finance and Accounting, 30: 573-588

Dent, E. B., & Goldberg, S. G. (1999). Challenging "resistance to change". Journal of Applied Behavioral Science, 35 (1), 25 – 41

Edgar H. Schein. (1992). Organizational Culture and Leadership. Jossey-Bass Publishers, San Francisco, CA

Edvardsson B., Gustafsson, A., Johnson, M. & Sandén, B.(2000). New Service Development and Innovation in the New Economy. Lund: Student litteratur.

Edvardsson, B., Gustafsson, A. and Roos, I. (2005), "Service portraits in service research: a critical review", International Journal of Service Industry Management, Vol. 16 No. 1, pp. 107-21.

Fitzsimmons, J. & Fitzsimmons, M. (2006). Service management: operations, strategy and information technology. 5.painos. New York. McGraw-Hill

Fließ, S. and Kleinaltenkamp, M. (2004), "Blueprinting the service company. Managing service processes efficiently", Journal of Business Research, Vol. 57 No. 4, pp. 392-404.

Furtmueller, E., Wilderom, C. & van Dick, R. (2010), "Sustainable e-Recruiting portals: How to motivate applicants to stay connected throughout their careers?", International Journal of Technology and Human Interaction, 6(3): 1-20

Gitman L A (2005), Principles of Managerial Finance, 11th Edition, Addison Wesley Publishers, New York.

Graetz, F. (2000) 'Strategic change leadership', Management Decision, 38(8), pp. 550–562 Grönroos, C. (2009). Palvelujen johtaminen ja markkinointi. Helsinki, Talentum. 565 s

Hannus, J. (1994). Prosessijohtaminen: Ydinprosessien uudistaminen ja yrityksen suorituskyky (4. painos). Jyväskylä, HM&V Research Oy. 368 s

Hammer, M., Champy, J. (1993): Reengineering the Corporation: A Manifesto for Business Revolution. Harper Business, New York

Hammer, Michael (2002). Process Management and the Future of Six Sigma. MIT Sloan Management Review 43: 2, 26–32.

Hammer, M. (2003). The agenda: What every business must do to dominate the decade. Crown Business.

Harjula, H., Prättälä, K. (2015). Kuntalaki – Tausta ja tulkinnat. Helsinki: Talentum.

Harrington, H. J. (1991). Business process improvement: The breakthrough strategy for total quality, productivity, and competitiveness. McGraw Hill Professional.

Harrison, S., Pollitt, C., & Simon, T. (1994). Controlling Health Professionals: The future of work and the organization in the NHS. Physiotherapy, 80(12), 869.

Hartley, J. (2005). Innovation in governance and public services: Past and present. *Public money and management*, *25*(1), 27-34

Hauser, J. R. (1993). How Puritan-Bennett used the house of quality. Sloan Management Review, 34(3), 61-70.

Hwarng, H.B., & Teo, C. (2001). Translating customers' voices into operations requirements – a QFD application in higher education. International Journal of Quality, 18(2), 195–197.

Karmarkar, Uday (2004). "Will You Survive the Services Revolution?" Harvard Business Review, 82 (June) 100–108.

Kiviniemi, M. (1989). Julkiset palvelut ja organisaatiorakenteet. Valtionhallinnon kehittämiskeskus. Helsinki: Valtion painatuskeskus.

Kiviniemi, M. (1985). Julkisen hallinnon ja toiminnan palvelukykyisyys. Valtiovarainministeriön järjestelyosasto 2/1985. Helsinki. Valtionvarainministeriön järjestelyosasto.

Kiviniemi, Markku, Pirjo Vehkamäki, Kaisa Pöllä, Tarja Hyvönen ja Sinikka Vuolijoki (1995). Valtionhallinnon perusteet. Helsinki: Painatuskeskus Oy.

Kotler, Philip, and Gary Armstrong. (2001). Principles of marketing, 12th ed. Upper Saddle River, N J: Prentice Hall

Kotter, J. (2008). A sense of urgency. Harvard Business School Press, Boston

Kotter, J. (1996). Leading Change. Harvard Business School Press, Boston

Kresl P. (1995) The Determinants of Urban Competitiveness, in Kresl P. and Gappert G. (eds.), North American Cities and the Global Economy: Challenges And Opportunities, Urban Affairs Annual Review no.44, London: Sage Publications

Kubler-Ross, E. (1969). On Death and Dying. Macmillan. New York. Cameron, E., &

Green, M. (2015). Making sense of change management: A complete guide to the models, tools and techniques of organizational change. Kogan Page Publishers

Kuntaliitto, S. (2015). c. Kunnan itsehallinnolliset tehtävät. [Online document]. [Accessed 15.8. 2019.] available

https://vm.fi/documents/10623/1083563/Kuntien+itsehallinnolliset+teht%C3%A4v%C3%A4t+ja+niiden+laajuus+%28raportti%29/faede779-17c3-4971-8feb-629f70545c2c

Kuntaliitto, S. (2017). Sote -ja maakuntauudistus. [Online document]. [Accessed 11.7. 2019.] available https://www.kuntaliitto.fi/sosiaali-ja-terveysasiat/sosiaali-ja-terveydenhuollon-jarjestaminen-2017

Laamanen, K., & Tinnilä, M. (1998). Terms and concepts in business process management. Helsinki, Federation of Finnish Metal, Engineering and Electrotechnical Industries, 55

Lazaridis I, Tryfonidis D, (2006). Relationship between working capital management and profitability of listed companies in the Athens stock exchange. Journal of Financial Management and Analysis, 19: 26-25.

Lecklin, O. (2006). Laatu yrityksen menestystekijänä. Helsinki: Talentum. 408 s. ISBN 952-14-1082-5

Lengnick-Hall, C. (1996) 'Customer Contributions to Quality: A Different View of the Customer-oriented Firm', Academy of Management Review 21(3): 791–825.

Lengnick-Hall, C., Claycomb, C. and Inks, L. (2000) 'From Recipient to Contributor: Examining Customer Roles and Experienced Outcomes', European Journal of Marketing 343(3/4): 359–84.

Lorenzi, N. M., & Riley, R. T. (2000). Managing change: an overview. Journal of the American Medical Informatics Association, 7(2), 116-124.

Luecke, R. (2003) Managing Change and Transition (Boston, MA: Harvard Business School Press).

Lumijärvi, I., & Jylhäsaari, J. (1999). Laatujohtaminen ja julkinen sektori. Helsinki: Gaudeamus.

Luo, W., & Alex Tung, Y. (1999). A framework for selecting business process modeling methods. Industrial Management & Data Systems, 99(7), 312-319.

Lusch, R. F., Vargo, S. L., & O'brien, M. (2007). Competing through service: Insights from service-dominant logic. Journal of retailing, 83(1), 5-18.

Nazir, M. S., & Afza, T. (2009). Impact of aggressive working capital management policy on firms' profitability. IUP Journal of Applied Finance, 15(8), 19.

Martinich, J.S. (1997). Production and operations management – An applied modern approach, New York: John Wiley & Sons, Inc.

Mayer, K.J., Bowen, J.T. and Moulton, M.R. (2003), "A proposed model of the descriptors of service processes", Journal of Services Marketing, Vol. 17 No. 6, pp. 621-39.

McAdam, R. (1996), "An integrated business improvement methodology to refocus business improvement efforts", Journal of Business Process Re-engineering and Management, Vol. 2 No.1, pp. 63-71

Meyer, C., & Schwager, A. (2007). Understanding customer experience. Harvard business review, 85(2), 116.

Moeller, S. (2010). Characteristics of services—a new approach uncovers their value. Journal of services Marketing, 24(5), 359-368.

Moran, J. W. and Brightman, B. K. (2001) 'Leading organizational change', Career Development International, 6(2), pp. 111–118

Moss, J. D., & Stine, B. (1993). Cash conversion cycle and firm size: a study of retail firms. Managerial Finance, 19(8), 25-34.

Mäenpää, O. (2013). Hallinto-oikeus. Helsinki. Sanoma Pro OECD (1996) Industrial Competitiveness Paris: OECD

Oulasvirta, L. (1993). Palvelun kehittäminen Suomen valtionhallinnossa v. 1981-1992. Poliittisten päätöksentekijöiden ja keskushallinnon harjoittaman ohjauksen rationaalisuuden ja sisällön arviointia. Tampereen yliopisto. Hallintotieteen laitos

Oulasvirta, L. (1996). Kuntien valtionapujärjestelmä. Vertaileva arviointitutkimus kahdesta valtionapujärjestelmästä. Acta Universitatis Tamperensis.

Padgett, D., Allen, D.(1997). "Communicating Experiences: A Narrative Approach to Creating Service Brand Image," Journal of Advertising, 26/4 (Winter 1997), pp. 49-62

Parasuraman, A., Berry, L. L., & Zeithaml, V. A. (1991). Understanding customer expectations of service. Sloan management review, 32(3), 39-48.

Pitman, G., Motwani, J., Kumar, A., & Cheng, H.C. (1996). QFD application in an educational setting: A pilot field study. International Journal of Quality & Reliability Management, 13(4), 99–108.

Porter M.E. (1996) Competitive advantage, agglomeration economies and regional policy' International Regional Science Review 19, 85-90

Radnor, Z., Osborne, S. P., Kinder, T., & Mutton, J. (2014). Operationalizing co-production in public services delivery: The contribution of service blueprinting. Public Management Review, 16(3), 402-423

Raheman A, Nasr M, (2007). Working capital management and profitability – case of Pakistani firms. International Review of Business Research Papers, 3: 279-300.

Reijers, H. A. (2003). Design and control of workflow processes: business process management for the service industry. Springer-Verlag

Remington K, Pollack J. (2007). Tools for Complex Projects. Gower, Aldershot

Rieley, J. B. and Clarkson, I. (2001) 'The impact of change on performance', Journal of Change Management, 2(2), pp. 160–172.

Rosemann, M., & vom Brocke, J. (2015). The six core elements of business process management. In Handbook on business process management 1 (pp. 105-122). Springer, Berlin, Heidelberg.

Schneider, Benjamin, and David. E. Bowen. (1999). Understanding customer delight and outrage. Sloan Management Review 41/1 (Fall): 35-45.

Segelström, F. (2010). Visualisations in service design (Doctoral dissertation, Linköping University Electronic Press).

Sherman, R. (2008). Lost Knowledge: Confronting the Challenges of an Aging Nursing Workforce. Nurse Leader 45-56

Shin HH, Soenen L, (1998). Efficiency of working capital management and corporate profitability. Financial Practice and Education, 8: 37-45.

Shostack, G., Lynn., (1982). "How to design a service." European Journal of Marketing 16(1): 49-63.

Shostack, G.L. (1987). Service positioning through structural change. Journal of Marketing, 51(January), 36.

Sipilä, J. (1998). Asiantuntija ja asiakas: myymmekö tunteja vai tulosta? WSOY

Stringfellow, A., Nie, W., & Bowen, D. E. (2004). CRM: Profiting from understanding customer needs. Business Horizons, 47(5), 45-52.

Suomen kuntaliitto. (2001). Omin voimin, yhdessä, ostaen: kunnan omaa teknisten palvelujen tuotantoa täydentäviä vaihtoehtoja. Suomen kuntaliitto. Helsinki

Tichy, N. M. (1983). Managing strategic change: Technical, political, and cultural dynamics. New York: Wiley.

Tinnila, M. (1995), "Strategic perspectives to business process redesign", Business Process Reengineering & Management Journal, Vol. 1 No.1, pp.44-50.

Todnem By, R. (2005). Organizational change management: A critical review. Journal of change management, 5(4), 369-380

Tukker, A. (2004). Eight types of product–service system: eight ways to sustainability? Experiences from SusProNet. Business strategy and the environment, 13(4), 246-260.

Vandermerwe, S., & Rada J. (1988). Servitization of business: adding value by adding services. European Management Journal, 6(4), 314-324

Van Horne J C and Wachowicz J M (2004), Fundamentals of Financial Management, 12th Edition, Prentice Hall Publishers, New York.

Vargo, S., & Lusch, R. (2004). Evolving to a new dominant logic for marketing. Journal of Marketing, 68, 1-17

Vargo, S., & Lusch, R. (2008a). Service-dominant logic: Continuing the evolution. Journal of the Academy of Marketing Science (36), 1-10

Weinraub. H. J., Visscher. S. (1998). "Industry Practice Relating to Aggressive Conservative Working Capital Policies", Journal of Financial and Strategic Decision, Vol. 11, No. 2, pp. 11-18.

Wilkinson, A., Dainty, A., Neely, A., Spring, M., & Araujo, L. (2009). Service, services and products: rethinking operations strategy. International Journal of Operations & Production Management.

Zeithaml, V. Bitner, M. & Gremler, D.( 2009). Services marketing: Integrating customer focus across the firm. 5. painos. New York. McGraw Hill

## **APPENDICES**

# Survey about business establishment process in the City of Imatra

This survey is aimed at customers of Imatra's business establishment process. The goal is to gather information on the customer experience of service.

Answer the following statements (1 = totally disagree; 5 = fully agree)

		pr			

people during the process

				Totally disagree	Disagree	Neutra		Strongl agree
The clear and in establishment p	$\circ$	$\circ$	$\circ$	$\bigcirc$	$\circ$			
We found the n	ecessary information ab	out the establishment	t of the city of Imatra	$\circ$	$\circ$	$\circ$	$\bigcirc$	$\circ$
The city's webs	ite is clear		$\circ$	$\circ$	$\circ$	$\bigcirc$	$\circ$	
The City's webs	site contains enough of i		$\circ$	$\circ$	$\circ$	$\bigcirc$	$\circ$	
Contact details	for a suitable contact pe	rson were easily foun	nd	$\circ$	$\circ$	$\circ$	$\bigcirc$	$\circ$
The city's webs	ite should be the primary	source of information	n on business services	$\circ$	$\circ$	$\circ$	$\bigcirc$	$\circ$
Answer the following statements (1 = totally disagree; 5 = fully agree)								
Start of the prod	cess							
	Strongly disagree	Disagree	Neutral	Agre	10	Stro	ongly a	gree
The right contact person was easy to find	0	0	0	С	)		0	
The contact person was easy to choose	0	0	0	С	)		0	
We appreciate only one contact person	0	$\circ$	0	C	)		0	
We appreciate not having to contact several different	0	0	0	C	)		0	

## Answer the following statements (1 = totally disagree; 5 = fully agree)

## During the process

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
The process of establishment proceeded clearly	0	0	0	0	0
We were always up to date on the progress of the process	0	0	0	0	0
We got the information we needed during the process	$\circ$	0	0	0	$\circ$

## Answer the following statements (1 = totally disagree; 5 = fully agree)

### After the process

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Imatra City's establishment service process was in line with our expectations	0	0	0	0	0
We felt that the process remained well on schedule	0	0	0	$\circ$	0
The process was easy for us.	0	0	$\circ$	0	$\circ$

Sivu 2
Open questions
What was your primary source of information regarding Imatra as a destination?
On what basis did you choose the contact person and the method of contact? Best way to contact?
What did you particularly like in the establishment process?
How would you improve the establishment process?