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CUSTOMERS AND COMPETITORS IN A NEW SERVICE IDEA GENERATION PROCESS

Master's thesis

Abstract

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Customers and competitors in a new service idea generation process, 43 pages

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The objective of this study was to find out how well customer involvement and competitor benchmarking can be used as an idea generation method in the new service development process of the case company. The study was completed as a company assignment and therefore the company information, methodology and the results of the survey were declared confidential.

The theoretical framework of this Master's thesis consists of three phenomena. First the new service development theory and the idea generation stage of the process are studied. Secondly the benchmarking and customer involvement are studied and discussed as a part of the new service development.

Key words: New service development, new service idea generation, customer involvement, competitor benchmarking

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1 INTRODUCTION

The introduction chapter of this master's thesis describes the basis of the study. The main concepts of the study are introduced. The chapter deals with discussions concerning the study background and the objectives are presented. Also the research questions and delimitations are determined.

1.1 Study background

A standard view model of the economic structure can still be based on three sectors: primary production, industry, and services in which services are so called residual ones. Economy has changed fundamentally during the last decades, but the goods-services dichotomy has remained yet in modern economies services and service consumption often determine the goods produced and technologies used – not the other way round. The line between services and goods is disappearing and services have become an integrated part of goods. (ETLA)

The idea behind this study is the fact that services are the key of modern economy, and as people develop services need to develop as well. New ideas of services need to be found to gain profit in service industry and to replace outdated services. Development of new services is an understudied topic and several service companies would benefit from new research.

The personal and professional interest of the writer has an impact to the topic of the study. The writer has been working in the field of business to business services for six years and has been involved in the employer company's development processes. The findings of this study could benefit the employer company as well as strengthen the professional knowledge of the writer on the field of such services.

1.2 Study objective

The main objective of this study lies in a new service development process and especially in the idea generation stage of the development process. The

objective of this study is to find out how well customer involvement and competitor benchmarking can be used as an idea generation method in the new service development of the case company. The aim is to examine benchmarking as a part of new service development and find out if it can be used in idea generation of new services. Customer involvement is studied in the frames of new service development, too. The study aims to find out if there is a potential in involving customers in service development at the idea generation stage. In the survey of this study the results of modified competitor benchmarking focusing on service portfolio are tested within the focus group of selected customers. Additionally, customers are encouraged to explore their own needs and problems faced while doing business. The answers of the customers are used to find out the most current needs of the customers and what kind of problems they have faced which the case company could solve just by offering some new service.

1.3 Research question and delimitations

Service development is quite a complex process; it consists of several stages. The most unknown stage is idea generation stage on which this study focuses. There are two main research questions in this study:

1. How well customer involvement can be utilized as a source of new ideas for new service development?
2. How well competitor benchmarking can be used as a new service idea generation method?

The above mentioned questions were selected as research questions as they represent the main ideas behind the study. In order to use customers as a source of new service ideas, we need to find out if such a method is a really well functioning one. The same idea is utilized with benchmarking. Is there really a point to use benchmarking as an idea generation method? By answering these questions the aim of the study can be reached and the company can find out if these methods will be used in future.

Delimitations of this study are made by not concentrating on the whole new service development process, but on the idea generation stage. Benchmarking is here limited to the competitive benchmarking and especially to an early stage of benchmarking, the benchmarking company's services against those of competitors. Additionally, the market and the service portfolio create some limitations as the study concentrates on one certain market.

The study is executed within certain service lines; this is why the results of the study can not be generalized as they are. Also the customer involvement is performed within the clientele of one company and therefore the involvement might differ when considering other service lines and other companies.

1.4 Service development and service idea generation

At the end of 1970's the research of service marketing started to accelerate and research of service design was pioneered. Studies of a service development process have had two different viewpoints; functional study describing the process in reality and the efficiency and quality of the service development. Additionally, some flowcharts, service maps and blueprints of service development have been created to improve the process descriptions. (Kinnunen, 2001, pp. 1)

In general the service development process encompasses four stages. The first stage is idea generation (to which this study focuses on), the second stage is concept development, the third is building and the fourth is implementation. The names of the stages may differ, but these four are the recognized stages of the process. In service development these stages are mainly conducted sequentially and parallelly, at least partly. (Tidd and Hull, 2003, pp. 40) There are several service development processes and this thesis describes only a few of them. Gustafsson et al. (1999) identified four partly parallel stages of the development process which are 1. idea stage, 2. project formation stage, 3. design stage and 4. implementation stage. Alam and Perry (2002) described the process as ten phases which can be either linear or parallel. The stages of Alam and Perry are; 1. strategic planning, 2. idea generation, 3. idea screening, 4. business analysis, 5. formation of cross functional teams, 6. service and

process system design, 7. personnel training, 8. service testing and pilot run, 9. test marketing and 10. commercialization. Kinnunen (2004) presented a process model which is somewhere between these two models and it contains six stages; 1. generating service ideas, 2. service ideas, 3. service production concept, 4. service design, 5. plan for service launch and 6. service launch. These process models are introduced in more details in chapter 2.

Idea generation is one of the most difficult stages of a new service development process. Despite of this fact many companies appear not to appreciate the importance of this stage in their new service development programs. Therefore many ideas of companies arise without any aid of disciplined procedures and are relied on chance rather than any analytical thinking. (Drejeris and Tuncikiene, 2010, pp. 603) However, idea generation stage can be described to be somewhat technical (Kinnunen, 2001, pp. 4).

Using customers as a source of ideas purposely is quite rare despite of the fact that the needs and wishes of the customers are remarkably important to service companies (Kinnunen, 2001, pp. 4). In his doctoral thesis related to the new service development of financial institutions Jin Dayu (2012) writes that the two most frequently employed market tools which are used in new service idea generation are brainstorming and focus groups. Dayu also reports that benchmarking is used in a new service idea generation stage. (Dayu, 2012, pp. 67)

Even though there are not too much research made around the service development idea generation stage, there are still some references like Dayu (2012), Sandén (2007), IBM (2006), Alam and Perry (2002) and Kelly (2000) of implementing customers and competitors in the new service development process. These references have studied these aspects or one of them in their work and built ground theories around the aspects.

1.5 Benchmarking

Benchmarking can be described to be a way of discovering the best performance being achieved. The best performance can be measured against a

particular company, a competitor or a company representing entirely different industry. (DeLayne Stround, 2010) When planning to benchmark, a company needs to select the benchmarking type. The type depends on the aim of the company and the resources available. Benchmarking types are internal, competitive, functional or generic. (Camp, 1989, pp. 60, Tuominen, 1993, pp. 22)

Internal benchmarking can be used in a company that has already established and proven best practices and which they need to share (DeLayne Stround, 2010). Such companies can be, for example, a company who has offices in different countries. Internal actions are studied and the best practices are implemented in other units. (Karlöf and Östblom, 2003, pp 67-68)

When a company wants to evaluate its position within its own industry, competitive benchmarking is used. Competitive benchmarking identifies the performance targets of industry leadership. (DeLayne Stround, 2010). Functional or industry in performed against the best functional operations of companies sharing the common technological and market characteristics. Generic benchmarking focuses on best work processes. (Elmuti and Kathawala, 1997, pp. 232)

1.6 Customer involvement

Companies are increasingly rethinking the ways in which they generate ideas and bring them to market. One source of information and knowledge is customers. (Lundkvist and Yakhlef, 2004, pp. 250) The overall objective of customer involvement is to create new successful service, but the company could define some other objectives for the involvement, for example testing or enhancing the customer's competence. Customers involved in a company's action are usually selected on the basis of personal traits, motivation, knowledge or the length of the relationship. (Larbig-Wüst, 2010, pp. 42-43)

When involving customers the stage of the involvement should be considered. According to Alam and Perry (2002) customers can be involved during each stage of the new service development. However, the benefit of the customer

involvement can vary depending on the stage (Sandén, 2007, pp. 107). Additionally the company should decide the extent of customer involvement, whether it is low like passive acquisition of input or information and feedback or higher like consultation or representation (Larbig-Wüst, 2010, pp. 42-43).

1.7 The structure of the study

The theoretical framework of this study consists of seven parts. The introduction of the study describes the main idea behind the study and introduces the main concepts explained briefly. The main concepts of the study are discussed next. New service development is discussed on a theoretical level; phenomena are explained and the process models as well as development tools are introduced. The third chapter of the study concentrates on the key stage of new service development, the idea generation. Chapters four and five contemplate the theory of the studied methods, i.e. benchmarking and customer involvement. These methods are also discussed in the point of view of idea generation. The methodology of this study is introduced in chapter six, the methodology of the study is introduced and the research discussed. The case company is introduced in chapter seven. The assigning company is introduced to give an idea of the company's field of business and the current service portfolio. Chapters eight and nine put together the results of the study and the analysis of them. The final parts of the study present the results and discuss the process and observations made.

All customer related information of the case company is classified confidential. Also the service development of the company is confidential and therefore not public information. As this study concentrates on a vital part of service development process and stresses the customers' involvement in the process, this thesis is also written under a confidentiality agreement. All chapters concerning the company's identity, service portfolio, service development and customers are disclosed. Therefore the public edition of the thesis includes only the edited introduction chapter and theory chapters 2-5.

2 NEW SERVICE DEVELOPMENT

This chapter discusses the service and service development. Firstly, the concept of the service is described. Secondly, the paper describes the differences between new service development and new product development. Thirdly and finally this chapter introduces new service development methods on a theoretical level.

2.1 Service

What is a service? It is a quite complex phenomenon. As a word it has several meanings; starting from a personal service to service as a product. The concept of service can be even wider and even a machine can be 'a service' if the provider attempts to adjust the solution according to the specific requirements of a customer. The machine itself is of course a tangible product, but the method of providing a well designed and carefully planned product to the customer is a service. (Grönroos 2001, pp. 78)

Service can be described in several different ways. One of the most concrete descriptions of 'service' was stated by Gummerson (1987); 'service is something that can be bought and sold, but cannot be dropped on one's toes.' Also another good description has been given; 'Service is an action intended for sales which provides benefit and satisfaction without leading to change occurring in the form of physical form of an item.' Grönroos however considers both descriptions to be too limitative and states that 'service is always somewhat intangible action or series of actions with which the customer's problem is solved in interaction with the service personnel, physical resources or systems of product and/or service providers'. (Grönroos 1998, pp. 50-52)

The nature of the service can be generally described as intangible and heterogeneous. It is produced and consumed simultaneously and it is perishable. (Ojanen et al. 2008, pp.1, Shekar, 2007, pp 3, de Jong, 2003, pp.7) In order to compare services to products Grönroos (2001) presents the table (figure 1). He states that in addition to the previously mentioned features services usually involve customers in production, and this is not so common in

the case of products. Grönroos also states that the core value of a service is produced in interaction between the provider and the customer. When services are provide, ownership is not transferred. (Grönroos, 2001, pp 53)

Products (physical)	Services
Tangible Homogenous Production and distribution separated from consumption	Intangible Heterogeneous Production, distribution and consumption take place simultaneously
Item Core value produced in a factory	Function or process Core value produced in interaction between buyer and seller
Customers are not (usually) involved in production	Customers are involved in production
Storable	can not be stored (perishable)
Ownership is transferred	Ownership can not be transferred

Figure 1: Differences between products and services (Grönroos, 2001, pp 53, Grönroos 1998, pp 53)

As a conclusion Grönroos (1998) states that there are four characteristics of service:

1. Services are more or less intangible.
2. Services are actions or series of actions, not items.
3. Services are produced and consumed fairly simultaneously.
4. Customer is involved in production of services in one way or another.

In general, not much research and development investments are needed as the innovations in services mostly involve small changes in processes. In addition to that services can easily be copied. All innovations are based on development and implementation of a new feature or aspect. The idea of innovation is to produce some kind of benefit like profit, personal growth or the like. All innovations arise from an idea. However, the idea itself is not an innovation; it is only a necessary precondition for any innovation. (de Jong, 2003, pp.7)

2.2 New service development versus new product development

There are significant differences between service and product development processes. Most of these are reflections of the actual differences between

services and products. When comparing the timeline of both development processes we can find out that the development of services is far more upbeat than that of products. Services are produced more ad-hoc. This is because the development of services concentrates mainly on improving and reshaping already existing services. Also the difference lies in testing; it is harder to actually test services than products. Of course piloting is done in some cases. (Kinnunen, 2004, pp. 29-31)

Figure 2 summarizes the most important comparison points between the development process of services and that of physical products. The crucial point in service development is the production process. Services are as stated, produced and consumed simultaneously and the customer is involved in the process. Concerning products, the main target is just to provide a functional product to market in order to satisfy customer needs. Another important factor differentiating the service and product development is quality control. Production of physical products can be easily standardized. Readymade products can be stored for a reasonable time. All the same, service production is always different because it depends on the customer in question. If the customers do not fulfill the requirements set, the service quality might not be maintained high. (Kinnunen, 2004, pp. 29)

In the case of products the strategy and targets are usually defined, but with services this is not the case. Such third party services like market research are common in the production of physical products, but service providers use such services less. Resources to be used for service development come from the service line personnel. It is only logical that this reduces the time used from service production, it is additional work for service producers. Product development is performed by specialized product development personnel. (Kinnunen, 2004, pp. 30-31)

Point of comparison	Physical products	Services
Strategy definition	Usually defined	Usually undefined
Professionalism	Specialized product development personnel	Not specialized product development personnel
Design responsibility	Product development department	Service line personnel
Customer involvement	Frequent	Infrequent
Cost determination	Usually well documented	Usually vaguely documented
Usage of market research	Widely used	Slightly used
Warranty	Frequently used	Infrequently used
Production process	Clearly defined	Often poorly defined
Result	Tangible product, which can be tested	Abstract, intangible offer which can not be tested beforehand

Figure 2: Differences between the development processes of services and physical products (Kinnunen 2004, pp 31)

The most significant differences between new service development (NSD) and new product development (NPD) lay in activities and research techniques. However, there are some similarities between these two processes. According to Shekar (2007) the comparison between companies developing products and service companies shows that service companies lack in concept testing, test marketing or launch activities. Additionally, service companies are ineffective in predevelopment activities. Shekar describes that the early stages of the development process (problem description, idea generation, concept definition and screening) form an important and somewhat a vital basis for the success of the following stages in the process. The development process of services and products are described side by side on figure 3. (Shekar, 2007, pp. 4-5).

Development Stages	New Product Development	New Service development
Problem Identification	Contact with users helps identify the problem	Contact with users and service staff can help identify the problems
Idea Generation	Various idea generation techniques have been used and the user may be involved.	Similar techniques could be used, but participation of both service staff and users will be beneficial.
Concept Development and Evaluation	Formulation of basic concept definition and presenting users with verbal descriptions and or sketches to get their reactions	It is important to seek both user and service staff descriptions for the concept. Evaluation should involve both groups
Business Analysis	Analysis of financial, technical and manufacturing issues.	Analysis of economic, technological and operational issues (which includes cost of hiring and training service staff, facility changes and delivery system enhancements).
Development and Testing	Construction of product prototype (technical, marketing, manufacturing, research and development, design functions) and testing	A challenging step in the case of intangibles (technical, marketing, human resources, operations, logistics) - again essential for service staff to play a part.
Market Testing	Tangible product tested on a limited market.	Standard approaches are difficult; therefore, internal testing, simulations or role-playing may be used.
Commercialization	Internal and external launch preparations required	Excellent internal marketing required to maintain enthusiasm for the new service, due to slow new service adoption by users.
Post evaluation	Consider minor modifications and improvements to product based on market reaction.	Customer satisfaction surveys. The service concept definition may provide a focus point for improvements to service quality.

Figure 3: Development Process for Products and Services (Shekar, 2007, pp. 5).

Figure 3 shows that the mentioned early stages in both cases, services and products, problem identification can be performed by contacting users in addition the service development process uses employees in problem identification. Ideas for product development come from various sources. There are several techniques, also users can be involved. Service development could

use similar techniques, but involvement of employees and users is important. Product concept development and evaluation is executed by formulating the basic concept and by presenting it to the users in verbal and or sketched form. A service concept is formed by using customers' and employees' descriptions and evaluations. Business analyses of processes may vary; product companies analyze technical and manufacturing issues, but service companies prepare analyze of economic, technological and operational issues including costs of hiring and training service staff, facility changes and delivery system enhancements. (Shekar, 2007, pp. 5)

2.3 New service development process models

Literature keeps repeating the fact that only few researchers have been concentrating on new service development while several studies about new product development have been conducted. Despite of this fact there are still some new service development process models available to illustrate the phenomenon. (Kinnunen, 2004, pp 32, Shekar, 2007, pp. 4)

Researchers who have studies service development have come up with an attempt to make a model of service development. This model consists of three concepts and a process in four stages. The three concepts are:

1. Service concept

The service concept is a description of the service offered to the customer by the service provider. The service concept is, in other words, closely related to the need the service is planned to meet.

2. Service system

The service system illustrates the service provider company's resources and organizational structure needed for providing and producing such planned services.

3. Service process

The service process itself is a plan or description of how the service or will be when it is finally performed. (Gustafsson et al., 1999, pp. 345)

Three concepts of service development are put together to create a service development process (Gustafsson et al., 1999, pp. 345). A four-stage model consists of the idea stage, the project formation stage, the design/development stage and the implementation stage. (This model is illustrated in figure 4.) These phases are not totally independent and may overlap in some cases. (Gustafsson et al., 1999, pp. 345 and Kitsios, 2006, pp. 12) This model is based on observations made in Sweden among Swedish companies. The researchers identified these stages in the service development process. They proposed that during the process one can return back to a previous stage if mistakes are detected. (Kinnunen, 2004, pp. 33-34)

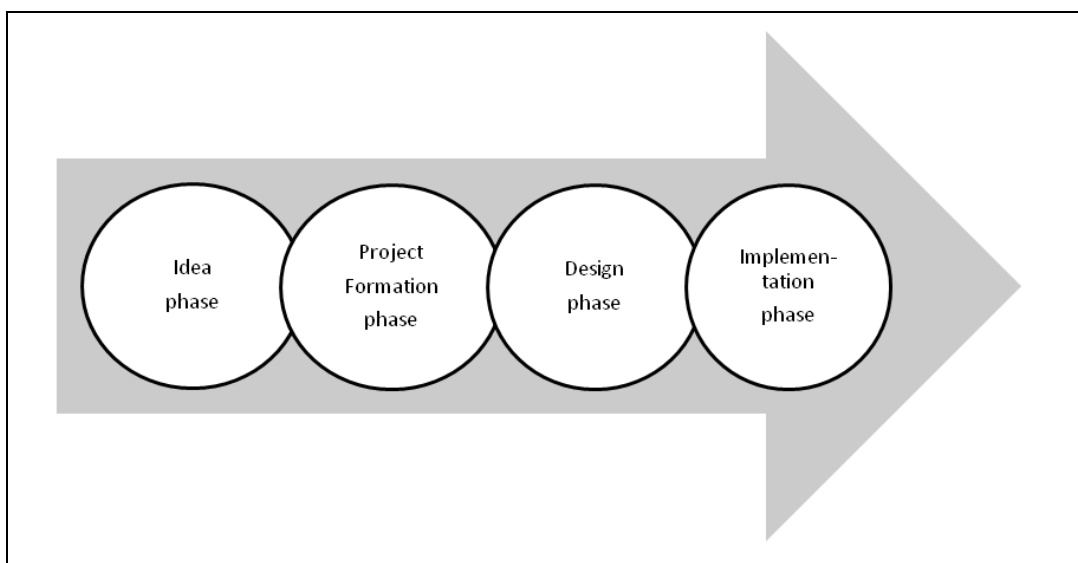


Figure 4: The service development process in different phases (Gustafsson et al., 1999, pp 345)

The first step of the model, the idea phase, starts with the original service idea and develops the idea to the actual service offering. Screening of the idea is also included to this stage. (Kinnunen, 2004, pp 34) During this stage the idea of the service is identified and evaluated considering the business objectives of the company. The phase reaches its end with a decision whether the idea is feasible and of interest of the company to be pursued further. This result is often based on preliminary market research and customer analysis. If the decision to continue is made, the second phase can begin. (Gustafsson et al., 1999, pp.345) During the second step, the project formation phase, the project of service development is actually started by gathering a project team of people

with appropriate knowledge and competence so that they are able to develop such a service and to set the working rules and procedures (Gustafsson et al., 1999, pp. 345 and Kinnunen, 2004, pp. 34). The design phase, the third step of the model, combines these three concepts; the service concept, the service system and the service process (Gustafsson et al., 1999, pp. 346). This phase includes the analysis of customers' needs as well as all factors related to the service and the development processes. During this stage the service scheme and service process are planned and created. This phase is also a place for possible service testing. (Kinnunen, 2004, pp. 34) The final step, the implementation phase, is the concluding phase. During this phase the service is launched both internally and externally. An internal launch may for example concern training of employees. (Gustafsson et al., 1999, pp. 346).

Alam and Perry (2002) performed a study among service companies about the subject how companies developed new services. They developed a theory of ten stages in the new service development process: 1. strategic planning, 2. idea generation, 3. idea screening, 4. business analysis, 5. formation of cross-functional team, 6. service design and process/system design, 7. personnel training, 8. service testing and pilot run, 9. test marketing and 10. commercialization. Each of these stages has a different level of importance, which was measured by frequency of use and by ratings of involved managers. The most important stages according to the frequency were idea generation and commercialization. Managers of the case companies reported the most important stages to be idea generation, idea screening and formation of cross-functional teams. (Alam and Perry, 2002, pp. 521-522)

Alam and Perry incorporated the discovered ten stages of new service development into two process models; one linear and another containing some concurrent stages. Both models, the linear and the parallel one, are illustrated in figure 5. Whether one of these models is better than the other can be debated. No certainty was made during the study of Alam and Perry. However, the study proposed that, ideally, the linear model of new service development should be established, but some stages can be executed concurrently to make the process faster. Specially, three pairs of process stages can be executed

simultaneously. These stages are strategic planning and idea generation, idea screening and business analysis and personnel training and service testing. (Alam and Perry, 2002, pp. 524, 526)

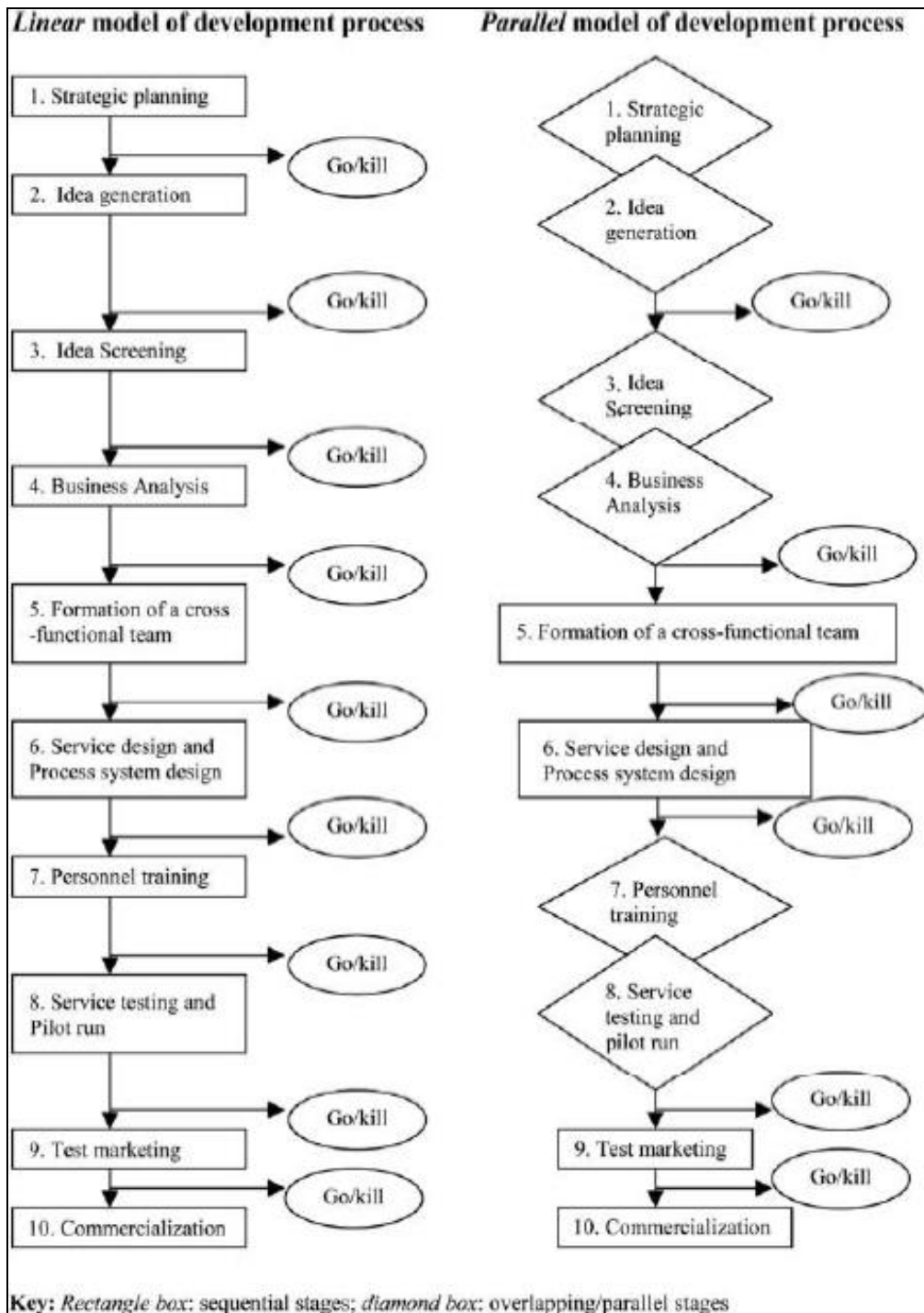


Figure 5: Two models of new service development (Alam and Perry, 2002, pp 525)

The service development process model introduced by Kinnunen (2004) consists of six stages. This model, illustrated in figure 6, presents a new service development as a systematic process with continuous evaluations. Kinnunen's model starts with the service idea generation stage. Ideas are generated from different sources. According to Kinnunen, there is no single way to generate ideas. Kinnunen emphasizes that in order to be developed to concrete form an idea needs a strong faith and commitment. Afterwards the ideas are mapped. If the selection seems to be too wide some more selection and estimation is needed. The evaluation of a service idea forms the second stage of the model.

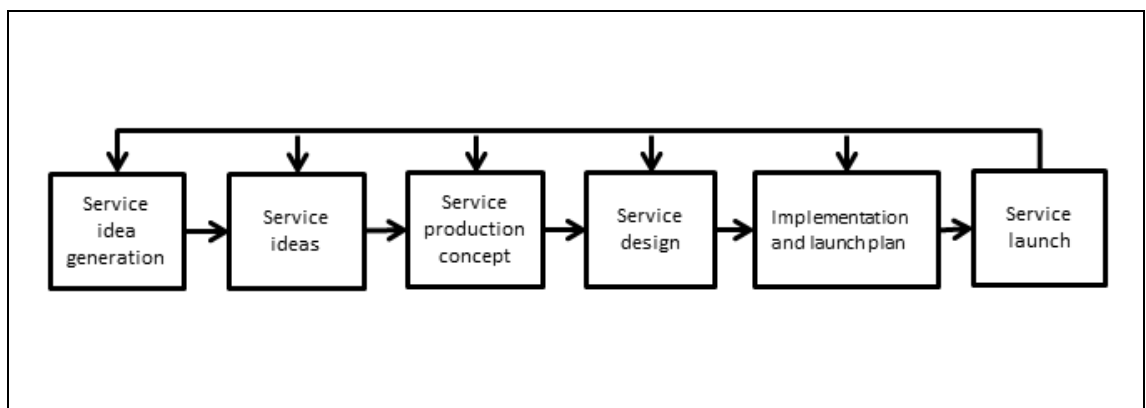


Figure 6: New service development process model (Kinnunen, 2004)

During the third stage, the service design concept, the concept of the service is created and illustrated so that it can be tested. During design and testing possible failures and mismatching can be corrected. The target is to fit the service to the image of the provider and the needs of the customer. After the concept is ready, it will be transferred to a service design. The design is already rather close to the actual service phenomenon. The implementation and launch plan is the final stage before the service sees the day light. During the fifth stage the essential part is proper training and giving instructions to the personnel and customers. The evaluation of the demand and the suitable price level needs to be carried out to find out the profitability. After that the launch plan can be created. During this stage one can return to previous stages for to make corrective actions or for to decide not to launch. If all calculations and plans indicate success the new service can be launched. The launch plan with defined segments, budget and objectives should be prepared carefully. (Kinnunen, 2004, pp. 146-148)

The depth of the service description is depending on the nature of the service. In some cases it is better to leave the description at a more indefinite level to allow more leeway. As to technical services the description, however, needs to be more precise. This guarantees the quality service production where also the customer is well instructed. (Kinnunen, 2004, pp. 148)

2.4 New service development tools

New service development tools are implemented in the new service development process. According to Dayu (2012) there are eight main new service development tools with different purposes in new service development process:

1. Benchmarking:
A company can achieve desired performance levels and improve development processes by benchmarking against the best.
2. Scenario planning:
A company can generate a set of scenarios and possibilities to predict risks and needs in the future.
3. Focus groups:
Companies can obtain information about customers' opinions about the new service idea.
4. Brainstorming:
Companies can stimulate new innovative ideas by creative group sessions.
5. Concept testing:
Companies can identify promising new service ideas from poor ones for further consideration by using concept testing.
6. Quality function deployment (QFD)
QFD tool translates customer requirement into new service specifications for the service company.
7. Structures analysis and design technique (SADT)
Companies can map service processes with clearly defined responsibilities by using SADT.
8. Service blue printing

A service blueprinting tool helps companies to clarify service concepts systemize the delivery processes of services. (Dayu, 2012, pp 50-53)

New service development tool can be divided into two groups; market tools and development tools (figure 7). Market tools (brainstorming, focus groups, benchmarking and scenario planning) encourage customers' input and positive impact on operational performance, but not on market performance. However, development tools (concept testing, QFD, SADT and service blueprinting) facilitate technical development and testing and have a positive influence on market performance, but not on operational performance. Market tools are more commonly used among companies than development tools. (Dayu et al., 2011, pp 1-2) The described features of market tools and development tools define the usage of the tool in different stage of the new service development process. The main roles and supporting roles of each tool are illustrated in the figure 7. (Dayu, 2012, pp 53-54)

		Idea generation and screen	Business and market analysis	Service design	Service testing	Service launching
Market Tools	Brainstorming	●				
	Focus Groups	●				
	Benchmarking		●			
	Scenario Planning		●			
Development Tools	Concept Testing		■	●		
	Quality Function Deployment (QFD)			●	■	
	Service Blueprinting			●	●	■
	Structured Analysis and Design Technique (SADT)			■	●	■

● main role ■ supporting role

Figure 7: New service development tool classification scheme (Dayu, 2012, pp 54)

2.4 Conclusions

Service is quite a complex phenomenon which can be described as intangible and heterogeneous by its nature. 'Service' differs from 'product' quite significantly. Services are produced and consumed simultaneously, they are not storable and usually there are no specialized service development personnel.

New service development is not as studied as the field of a new product development. However, some development process models exist. Also it is notable that new service development tools are implemented in new service development processes. These tools form the two central concepts of this thesis, benchmarking and customer involvement (in the form of focus groups). The main focus of this thesis in service development lies in idea generation. There are three models presented in this thesis and all of them have idea generation as the first stage of the model. Idea generation is the starting force of the process, as without an idea no project is started.

3 IDEA GENERATION IN NEW SERVICE DEVELOPMENT

This chapter describes the idea generation of a new service development process more in detail. Firstly, the chapter discusses idea generation in general. Secondly, different sources of new service ideas are reviewed. Thirdly and finally, the chapter presents theory of an analytical process of new service idea generation.

3.1 Idea generation in new service development process

So far service idea generation has been neglected in the studies of service development process. However, such studies exist in connection with physical product development. Studies related to service development mainly concentrate on actions after that a service idea is born. (Kinnunen, 2001, pp. 2) All of the above presented new service development models contain an idea generation stage. An idea in new service development means the idea behind the innovation which results to a new service. This idea is unrealized and inexperienced. It is a starting point to a new service development possibility. Generating new ideas requires creativity, out of the box kind of thinking and critical observations towards old operations. Creativity and idea generation needs, however, innovativeness to form the ideas into service ideas. (Kinnunen, 2004, pp. 10-11)

There is no one and only source for ideas in the process of new service development. Studies show that new service ideas are generated in various

ways and the ideas arise from inside as well as outside of companies. The ideas can result from formal or informal search. All in all, even if the sources for new ideas are wide the process is not formalized. (Kelly, 2000, pp. 105)

3.2 Sources of new service ideas

Even though companies tend not to have systematic service idea generation processes, service ideas may come from different sources. Two of the most recognized sources of ideas are employees and competitors. Companies utilize their employees' knowledge and creativity and use focus group to collect the best ideas. Also the potentiality of competitors is well known. Investigating the competitor service portfolio companies was easily find service ideas just by copying. (Kelly, 2000, pp. 106-105)

According to the study performed by IBM, three most significant sources of innovation ideas are employees, business partners and customers. IBM asked CEO's to determine up to three most important sources of ideas and figure 8 illustrates the results. The mostly rated source was employees, over 40 percent of respondents selected this as their top three source. The second most rated source was quite surprisingly business partners. The third place was taken by customers as an idea source. This study indicates that two out of three most important idea sources, the significant part of the innovative ideas, are located outside the organization. Surprisingly only 17 percent of the interviewed CEOs mentioned research and development actions as one of their top three important sources. (IBM, 2006, pp. 21-22)

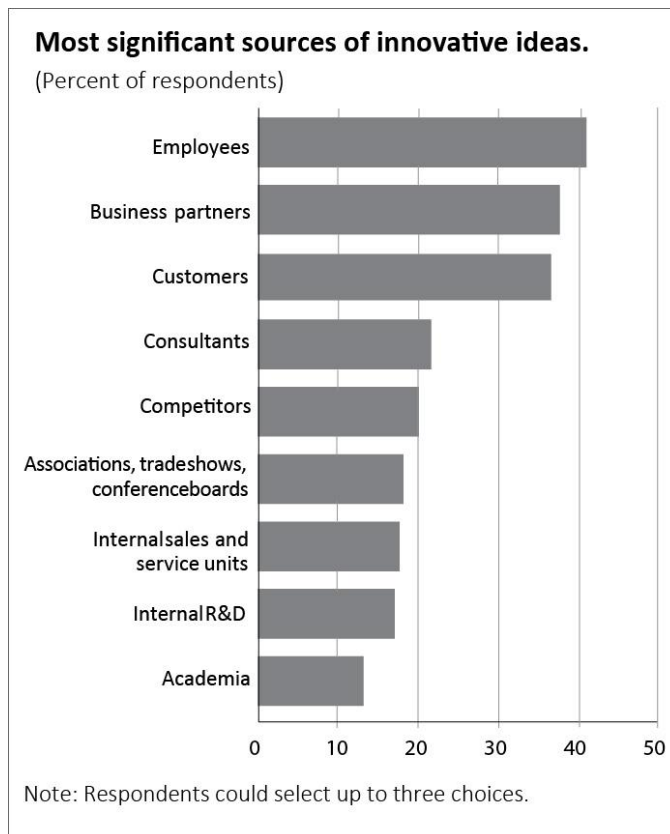


Figure 8. Most significant sources of innovative ideas (IBM Business Consulting Services, 2006)

Competitors as an idea source was rated fifth in importance and surprisingly company's own research and development was as low as on eight on the list (IBM, 2006, pp. 21-22). Competitors are generally used as service idea sources as services are easy to imitate. However, copying a service from a competitor does not mean that the company is capable of organizing a development process. In most cases companies try to adjust the competitor' service product. (Tidd and Hull, 2003, pp. 37)

3.3 Analytical process of idea generation

According to Edgett (1996) some sort of idea screening process in news service development should be implemented in order to ensure the approval of good ideas and developing them into services. This process should also protect the company from moving forward with poor ideas and wasting resources into them.

Service idea generation process can be executed analytically. Figure 9 illustrates the general analytical model of generating service ideas. This model

consists of different argument actions leading to service ideas. Basic research, customer assessment and spontaneous interviews with customers are part of service idea generation process model. (Kinnunen, 2001, pp. 68-69, 79)

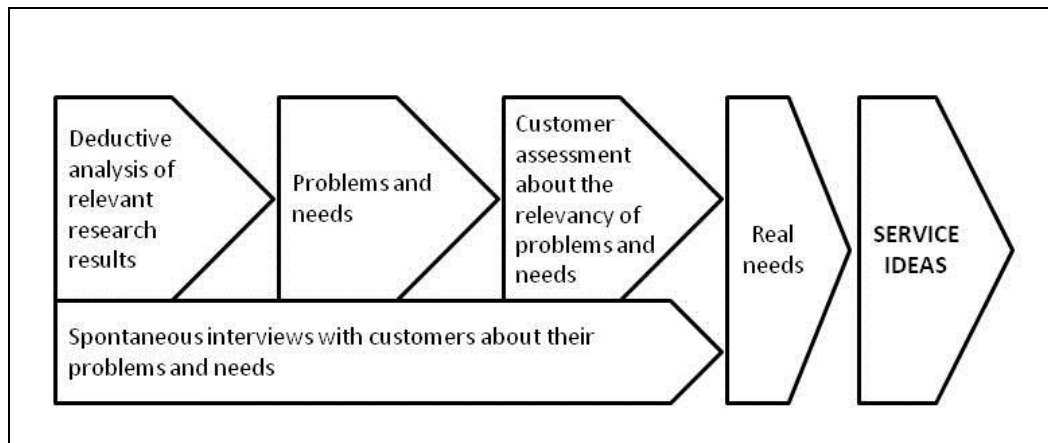


Figure 9: The model of generating service ideas analytically (Kinnunen, 2001, pp. 69)

The purpose of the idea generation process model (Figure 9) is to illustrate that idea generation is possible to conduct by using analytical thinking instead of relying on luck and creativity. The first step of the model is deductive analysis of relevant research results. During this stage the research results relevant to the industry are examined. The findings will identify the problems of the customers and possible needs they might have. After the needs and problems have been analyzed, the third stage will start. During this stage the findings are assessed by the customers. In this way the company can make sure that the needs found are real and relevant. To reach this point, a company can interview customers spontaneously about their needs and problems. After such a process the company should have quite a clear and realistic idea about the real needs of the customers. Based on these findings the company can define its service ideas. (Kinnunen, 2001, pp. 68-69, 79).

3.4 Conclusions

Ideas are not generated by using one defined way only, but by pouring ideas from different sources. The idea generation stage of service development is not widely studied, but different sources point out several ways to gather ideas for new services. Internal work, employees, customers and competitors are

considered the main sources of new service ideas. In most cases new service ideas came by change. However, there is an option to generate ideas analytically, too. Kinnunen's model for analytical generation of service ideas can be applied in the new service development process. It could bring reliable results for the company.

4 BENCHMARKING

This chapter introduces benchmarking as a concept and a process. First the concept of benchmarking is introduced and then the types are described. The process of benchmarking is described stage by stage. Finally the phenomenon is discussed in context of new service development.

4.1 The concept of benchmarking

What is benchmarking actually? Michael J. Spendolini (1992) and Kari Tuominen (1993) define benchmarking in their books to be a continuous and systematic process for evaluating any organization's services, products and work processes that are considered the best practices for the improvement of the organization.

The objective of benchmarking is to set goals for the organization, but also to discover the practices needing to be changed and new goals needing to be set. Benchmarking encourages organizations to develop and move forward to realistic goals by changing the current work practices. The benefits of benchmarking come from fulfilling the customer requirements, measuring the true productivity of the organization and ensuring the implementation of industry best practices. Organization establishes new goals for their operations. (Camp, 1989, pp. 28)

Benchmarking has an opportunity to make the organization competitive. It increases the awareness of products, costs, markets and processes and develops the effective planning in delivering. However to become competitive, any organization needs to understand the competition. Benchmarking process

challenges the current way of doing business by bringing the new ideas and process models from outside. (Camp, 1989, pp. 33)

So, which are the reasons and benefits of benchmarking? Benchmarking can increase productivity and individual design. It can also show growth potential. Just by looking outside the company, any organization can identify breakthroughs in thinking and find new potential areas of growth. This kind of companies tends to be more future oriented. Benchmarking can also be used as strategic tool. Benchmarking can enhance learning and help overcoming disbelief. Learning about the processes of other companies help employees and organization to see better ways to compete. Benchmarking is used also for assessment of performance tool and continuous improvement tool. When identifying the 'best' practices, companies can observe their position compared to other organizations. Other organizations could provide solutions for problem areas and organizations learn from others who are more successful in certain areas. As a continuous improvement tool benchmarking establishes methods of measuring units of outputs and costs. Benchmarking can support budgeting, strategic planning and capital planning. Finally benchmarking allow companies to improve performance. Organizations learn and can set achievable goals which are proven successful by others. (Elmuti and Kathawala, 1997, pp. 230-231)

4.2 Benchmarking types

Before deciding to benchmark, companies should determine what they are going to benchmark (Elmuti and Kathawala, 1997, pp. 231). When the company plans to benchmark, the selection of benchmarking type depends on the aim of the company and the resources available. Benchmarking can be done as internal, competitive, functional or generic. (Camp, 1989, pp. 60, Tuominen, 1993, pp. 22)

Internal benchmarking might be the easiest way to start benchmarking. Bigger organizations have several departments or units or they can have operations in different countries. This kind of organizations can perform internal benchmarking by examining the operations between the locations or

departments. This way the company may find differences in management styles, employees and for example local organizational history. (Spendolini, 1992, pp. 16, Camp, 1989, pp. 61-62) The main objective of internal benchmarking is to determine the internal performance standards of the organization. The best procedures should be transferred to other portions of the organization. (Elmuti and Kathawala, 1997, pp. 232)

In competitive benchmarking, direct product competitors are the most obvious to benchmark against. In general, competitive benchmarking requires identification of products, services and work processes of the direct competitors and comparison to your own organization. Competitive benchmarking may show the competitive advantages and disadvantages your organization has as the actions of the competitors affects the perceptions of your organization's clientele, suppliers, shareholders and potential customers. The downside of the competitive benchmarking is the hard availability of information. Sometimes the information is not easily reached as product related information or service processes might be classified. (Camp, 1989, pp. 62-63, Spendolini, 1992, pp. 18-19)

Functional or industry benchmarking is external benchmarking against the best functional operations of certain companies or industry leaders. Benchmarking partners are not direct competitors, but companies who share common technological and market characteristics. (Elmuti and Kathawala, 1997, pp. 232) Key to successful and beneficial functional benchmarking is to determine leading firms in selected business function and if the benchmarked companies share some characteristics with the benchmarking company, the project might bring real benefits. (Camp, 1989, pp. 64)

Generic benchmarking, also known as process benchmarking, focuses on best work processes. This benchmarking type does not concentrate on business practices but similar procedures and functions. (Elmuti and Kathawala, 1997, pp. 232) Such procedures and functions could be for example invoicing, order handling and collection functions. Generic benchmarking is the most difficult benchmarking concept to gain acceptance and use. However, this

benchmarking probably has the highest long-term pay off. (Camp, 1989, pp. 64).

4.3 Benchmarking process

Benchmarking is a structured process containing several steps. However, the structure should not cause problems to the process itself. In the simplest form, benchmarking can be illustrated with five step model. (Elmuti and Kathawala, 1997, pp. 232) Figure 10 illustrates the five step model of benchmarking.

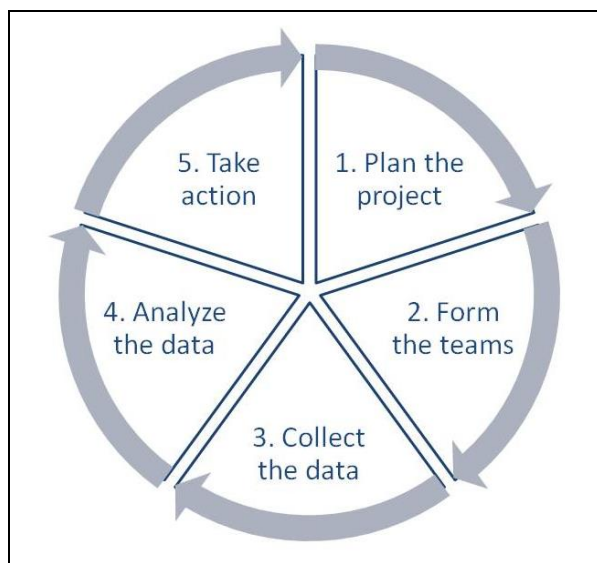


Figure 10: Five step benchmarking process model, adopted from Spendolini (1992)

The first step of the process is planning the project. During this stage the company should determine what to benchmark. The actual benchmarking process should be selected, which process would bring the organization positive results. Also the customer expectations and requirements needs to be known. (Elmuti and Kathawala, 1997, pp. 232, Spendolini, 1992, pp. 48)

The second step of the benchmarking process is about forming a benchmarking team. Benchmarking can be conducted without a team by individuals but most of the efforts are team actions. (Spendolini, 1992, pp. 48-49) When selecting the team the first step is to select overall team members from various areas of the organization. These members are divided to three smaller teams; the lead team which is responsible for maintaining the commitment to the project, the

preparation team which carries out the detailed analysis and finally the visit team which carries out the possible benchmarking visits. (Elmuti and Kathawala, 1997, pp. 234)

The third step of the process is named as 'collect the data'. This stage starts with company's own processes', products' and services' identification. After this, the company should gather information on best practice companies and their performances and finally identify best practice companies. This stage provides understanding of the extent of improvements available. On-site visits will provide even more in-depth understanding. (Elmuti and Kathawala, 1997, pp. 234)

The fourth step, data analysis, provides information how the company relates to benchmarking company (Elmuti and Kathawala, 1997, pp. 234). Benchmarking information is analyzed in accordance with the original requirements (Spendolini, 1992, pp. 49). This stage identifies the performance gaps and the causes to the gaps (Elmuti and Kathawala, 1997, pp. 234).

The final, the fifth, step is action stage. During this step the company should determine the needed action in order to match the best practice for the process in question. The needed changes needs to be determined as well as an implementation plan should be created. (Elmuti and Kathawala, 1997, pp. 234) All steps and appropriate follow-up activities are identified as well as the continuation of the benchmarking process. Due to the fact that the benchmarking process should be continued, the process reassessed, the process model is presented as circular. (Spendolini, 1992, pp. 49-50)

4.4 Benchmarking in new service development

New service development tools are described methods or procedures which support and improve the process of new service development. These tools can be divided into two parts, market tools and development tools. Development tools are used for supporting development efforts of technical design and testing while market tools are used to gain better understanding of customers' needs and commercial potentials. (Dayu et al., 2011, pp. 3)

Benchmarking is one of these new service development tools and belongs to market tools category. According to the study of Dayu et al. (2011) the most used market tools in new service development were brainstorming, benchmarking and scenario planning. The high usage of benchmarking states the importance of competitors to the organizations. This indicates that companies still widely use a strategy of imitating services and products of competitors. (Dayu et al., 2011, pp. 4-5)

In general, market tools are used in new service development stages with intensive customer interaction. Benchmarking is used in several stages of the new service development (see figure 11). According to Dayu et al. (2011) benchmarking is mainly involved to the business and market analysis part of new service development, but 44% of the companies involved in the study stated that they use benchmarking in the idea generation and screening stages. The study points out that especially financial institutions rely heavily on brainstorming and benchmarking as these two tools help to generate innovative ideas which meet the customers' needs. (Dayu et al., 2011, pp. 6-8)

		Idea generation and screen	Business and market analysis	Service design	Service testing	Service launching
Market tools	Benchmarking (25)	44%	76%	60%	28%	24%
	Scenario planning (19)	42%	74%	53%	32%	16%
	Affinity diagram (8)	13%	50%	38%	13%	0%
	Brainstorming (31)	77%	58%	74%	13%	35%
	Conjoint analysis (11)	27%	36%	73%	36%	9%
	Focus group (16)	50%	56%	63%	50%	50%
	Lead users (13)	23%	38%	77%	69%	38%
Development tools	Concept testing (17)	47%	24%	41%	47%	29%
	Quality function deployment (12)	17%	25%	83%	25%	8%
	Service blueprint (15)	20%	27%	80%	60%	33%
	Structured analysis and design (17)	29%	47%	82%	41%	24%
	Failure modes and effects analysis (7)	29%	43%	71%	57%	14%
	Root cause analysis (7)	43%	57%	29%	43%	57%

■ Significantly higher than usage in other NSD stages ($p < .05$)
 ■ Significantly lower than usage in other NSD stages ($p < .05$)

Figure 11: Percentage of firms that apply NSD tools in each stage of development (Dayu et al., 2011, pp. 6)

4.5 Conclusions

Benchmarking is not an easy process. It requires time, resources and careful planning. In the best case benchmarking can bring the company considerable cost savings and improve the processes remarkably. The type of benchmarking depends on the focus of the company and available resources. One might not think that benchmarking is useful in the process of new service development, but some reference in that area is available as well. According to such reference benchmarking can be used in new service development and, in particular, at the idea generation stage.

5 CUSTOMER INVOLVEMENT

The purpose of this chapter is to examine customer involvement in new service development process. First of all, the project of customer involvement is described. Secondly the customer involvement project is presented by means of four strategic decisions; objectives of the customer involvement, characteristics of involved customers and stages and degree of customer involvement.

5.1 Customer involvement in new service development

The main goal of service development is to keep profitable customers hooked to the service provider, but also attract new customers and keep loyal customers who are satisfied with the service and communicate positively about the service company. In order to really understand the needs of the customers' it seems to be necessary to involve them in the new service development process. (Gustafsson et al., 1999, pp. 344)

Edwardson et al. (1995) studied new service development and state that customers are a more frequently utilized resource in product development than they are in service development. However, literature about market orientation suggests that customer oriented development processes generate a superior innovation and greater new service success. Also customer input throughout the development process is argued to have an effect and customer interaction can increase service success. (Alam and Perry, 2002, pp. 526)

Sandén (2007) argues that it is necessary to make four main strategic decisions when planning customer involvement project. The first decision is to set the strategic objectives and decide in which way the customer should contribute. The second decision, customer characteristics, is based on the first decision. Thirdly, the part of development process of customer involvement is decided and finally the degree of the involvement determined.

5.1.1 Objectives of customer involvement

The overall objective of customer involvement is to create new successful service. However, different studies have stated a list of major objectives in customer involvement. (Larbig-Wüst, 2010, pp. 42-43 and Sandén, 2007, pp. 100) Larbig-Wüst (2010) reviews the objectives to be customer-based and reflect solely one dimension of success.

The objectives are:

1. new ideas and innovations
2. testing ideas, concepts and prototypes
3. enhanced understanding of user value
4. mutual learning
5. enhancing the customer's competence
6. reducing cycle time.

Sandén (2007) reviews that the objectives of customer involvement are related to its benefits:

1. superior and differentiated services
2. reduced cycle time
3. user education
4. rapid diffusion
5. improved public relations
6. building and sustaining long-term relationships.

However these points may not be specific and measurable (Larbig-Wüst, 2010, pp. 42-43).

Sandén (2007) shortlists the reasons for involving customers into three points. Firstly, customers possess so-called sticky and difficult-to-understand information. This information is difficult for them to express. There is also an opportunity to learn with the customers, from the customers and about the customers. Secondly, the benefits of the new innovation are difficult to verbalize on the market. Customers, as more familiar with their own context, are better in evaluating the value of the innovation in use. Thirdly, customer involvement mitigates organizational learning making the organization more aware of customers' expressed and latent needs and ways to satisfy them. (Sandén, 2007, pp. 100-101)

5.1.2 Customer characteristics

Customer characteristics highlighted in the customer involvement process may vary according to market characteristics (Sandén, 2007, pp. 101). Companies tend to select the most conducive customers based on their competences, attitudes and relevance to the company before involving them in new service development. Companies overcome inherent customer involvement risks by zooming in characteristics of customers and selecting them based on personal traits, motivation/behavior which is inherent, knowledge, their status in company's business context or duration of relationship. (Larbig-Wüst, 2010, pp. 47)

Several customer types have been presented in the literature of customer involvement. Gruner and Homburg (2000) identified four customer characteristics types; technically attractive, financially attractive, close connection and lead users. From these types, the financially attractive, close connection and lead user customers had a positive impact on innovation success. Enkel et al. (2005), on their research, proposed additional customer types and contribution in different stages of development process. Customer interviews provide for new ideas by suggesting them or by giving feedback and complaints. Launching customers are expected to participate in the development activities while reference customers supply application experience from testing. Lead user customers could cover all the process stages. (Sandén, 2007, pp. 103)

In his study Sandén (2007) noted that companies, actually the majority of them (52%), tend to involve customers with expertise, like lead user customers. Ten percent of the companies choose to work with financially attractive customers. Six percent of the companies choose to involve customers with interest in cooperation or they cooperate with those customers who are available. However, a surprisingly high number, 27%, of companies do not perform any special selection of involved customers. It is also notable that business to business companies are more interested in customers with special experience than companies on consumer markets. (Sandén, 2007, pp. 103-104)

According to the study of Carbonell et al. (2012), two most useful types of the customers are the lead user customers and the customers with relational closeness. Their study shows that the involvement of the lead user customers has a positive effect on service newness and new service advantages. They also state that involving customers with relational closeness will positively effect on the speed to enter the market and new service advantages. (Carbonell et al., 2012, pp. 503)

5.1.3 Customer involvement in new service development project stages

Several innovation processes are presented in the literature, but in which stage of the process customers can be involved and when it is useful to involve them (Nicolajsen and Scupola, 2011)? Depending on the theory, customers are involved at all stages of new innovation development process (Larbig-Wüst, 2010, pp. 47).

Alam and Perry (2002) stated that there are ten stages of new service development at when customers can be involved. Their study indicated that, due to the most frequent customer involvement actions discovered during the research, customer involvement could be the most crucial and important during three new service development stages. Figure 12 illustrates the ten stages of new service development and activities performed by the customers of each stage. (Alam and Perry, 2002 pp. 521, 524, 547)

According to Alam and Perry (2002) the most frequent customer involvement was recorded during the stages of idea generation, service design and service

testing and pilot run. During the idea generation stage customers state their needs, problems and solutions. They also identify gaps in the market and state new service adoption criteria. During service design stage customers review the service blueprints and suggest improvements and identify mistakes. The last most important stage, service testing and pilot run, involve customers by participating them in simulated service delivery process when customers can suggest final improvements and design changes. (Alam and Perry, 2002 pp. 521, 524, 547)

New service development stages	Activities performed by the customers
1. Strategic planning	Feedback on financial data.
2. Idea generation	State needs, problems and their solution, criticize existing service; identify gaps in the market; provide a wish list (service requirements); state new service adoption criteria.
3. Idea screening	Suggest rough sales guide and market size; suggest desired features, benefits and attributes; show reactions to the concepts; liking, preference and purchase intent of all the concepts; help the producer in go/kill decision.
4. Business analysis	Limited feedback on financial data, including profitability of the concepts, competitors' data.
5. Formation of cross-functional team	Join top management in selecting team members.
6. Service design and process system design	Review and jointly develop the blue prints; suggest improvements by identifying fail points; observe the service delivery trial by the firm personnel.
7. Personnel training	Observe and participate in mock service delivery process; suggest improvements.
8. Service testing and pilot run	Participate in a simulated service delivery processes; suggest final improvements and design change.
9. Test marketing	Comments on the marketing plan; detailed comments about their satisfaction of marketing mixes; suggest desired improvements.
10. Commercialization	Adopt the service as a trial; feedback about overall performance of the service along with desired improvements, if any; word of mouth communications to other potential customers.

Figure 12: Customers' input in new service development process (Alam and Perry, 2002, pp. 527)

Sandén (2007) argued that the benefit of customer involvement varies according to the stage of the development process. Manufacturing companies benefit the most of customer involvement during the early stages of the new

service development process. For them the benefit is at the highest in strategy and idea generation, when companies should rely more on their own professionalism during the technical development of the product. For service firms, however, the outcome from customer involvement is highest in the later stages of the development process. In early stages of the process, companies often have problems describing the service to customers. This leads to the situation that customers have difficulties in providing valuable feedback. (Sandén, 2007, pp. 107)

Literature creates quite a complex picture about the customer involvement. In order to define the absolute advantage of customer involvement in new service development process stages, additional research in relationship between customer involvement and development process stages is needed. (Sandén, 2007, pp. 108)

5.1.4 Degree of customer involvement

The final, the fourth, strategic decision in planning of the customer involvement project is determining the customer involvement (Sandén, 2007, pp. 99). Companies need to determine on what extent customers should support new service development. The degree of customer involvement needs to be managed in order to control and avoid overload of external and internal resources. (Larbig-Wüst, 2010, pp. 42)

Larbig-Wüst (2010) reported in her study on an analysis of four different degrees of customer involvement; passive acquisition of input, information and feedback on specific issues, extensive consultation with users and representation. Extensive consultation and information and feedback were the most preferred levels of customer involvement. These two levels were reported to be the easiest to manage, they were less expensive and time-consuming when comparing to high degree of integration. (Larbig-Wüst, 2010, pp. 42-43)

Sandén (2007) reports that, according to his study, 14 percent of companies do not involve customers in development processes. These companies rely on internal expertise and knowledge. The study shows that the most common way (36,5% of companies) to involve customers in development project is to identify

them as experts in some point of the process. This degree of involvement is called 'customers as experts'. 32,9% of companies involve customers on 'customers as informants' degree. This means that companies involve customers by using market research activities like surveys, focus groups and interviews. Third degree of customer involvement is partnership. 13 percent of the companies contribute customers in knowledge and competence during the whole process. Little percentage (3,6%) of studied companies reported that large proportion of their new products and services are solely developed by their customers. In this case the customer degree is called 'customer as sole developer'. (Sandén, 2007, pp. 110)

5.2 Conclusions

Customer involvement is used to really understand the needs of the customers and such involvement is said to generate superior innovation and greater success. When involving customers to the service development process the objective for such involvement needs to be determined as well as the characteristics of the involved customers. It might not be beneficial to involve customers in all stages of the process, but select the stages according to the plan of the company. Too heavy involvement is not beneficial to the process or for the customer relationship. Customer involvement plan should be generated by persons who have the best knowledge about the clientele of the company.

REFERENCES

Alam, I. and Perry, C. 2002. A customer oriented new service development process. *Journal of Service marketing*, Vol. 16, issue 6, pp. 515-534.

Camp, R. 1989. *Benchmarking. The Search of industry best practices that lead to superior performance.*

Corbonell, P., Rodriguez-Escudero, A. I. and Pujari, D. 2012. Performance effects of involving lead users and close customers in new service development. *Journal of service marketing*. 26/7. pp. 497-509.

Dayu, J., Hin, C. and Chuan, T. 2011. The usage and effectiveness of new service development tools. National University of Singapore (NUS), Engineering management research group. Executive summary report.

Dayu, J. 2012. The Effectiveness, adaptation and application of new service development (NSD) tools and techniques. Doctoral thesis. Department of industrial and systems engineering, National University of Singapore.

de Jong, J and Vermeulen, P. 2003. *Organizing Successful New Service Development: A Literature Review*, EIM Business and Policy Research, Zoetermeer, The Netherlands

DeLayne Stround, J. 2010. Understanding the purpose and use of benchmarking, iSixSigma.

<http://www.isixsigma.com/methodology/benchmarking/understanding-purpose-and-use-benchmarking/> assessed on 21.10.2014

Drejeris, R and Tuncikiene, Ž. 2010. Complex assessment of the methods for new service idea generation. *Business and management. Selected papers.* Vilnius

Edgett, S. J. 1996. The new product development process for commercial financial services. Innovation Research Working Group working paper no. 55. School of Business, McMaster University.

Edvardsson B., Haglund, L. and Mattsson J. 1995. Analysis, planning, improvisation and control in the development of new services. *International Journal of Service Industry Management*, Vol. 6 No.2. pp. 24-35

Elmuti, D. and Kathawala, Y., 1997. An overview of benchmarking process: a tool for continuous improvement and competitive advantage. *Benchmarking for quality management & technology*. Vol. 4 No. 4. pp. 229-243.

ETLA, the Research Institute of the Finnish Economy

<http://www.etla.fi/en/research-projects/service-economy-services-source-productivity-growth/> Assessed on 2.9.2014

Gustafsson, A., Ekdahl, F. and Edvardsson B. 1999. Customer focused service development in practice. A case study at Scandinavian Airlines System (SAS). *International Journal of Service Industry Management*, Vol. 10 No.4. pp. 344-358

Grönroos, C. 1998. *Nyt kilpaillaan palveluilla*. Porvoo. WSOY

Grönroos, C. 2001. *Palveluiden johtaminen ja markkinointi*. Porvoo. WSOY

IBM Global Business Studies. 2006. *Expanding the Innovation Horizon. The Global CEO Study, 2006*.

http://www-07.ibm.com/sg/pdf/global_ceo_study.pdf

Kelly, D. and Storey, C. 2000. New service development: initiation strategies. *Liberty Consortium Management: An International Journal*, Vol. 2 No 5/6 pp. 104-121

Kinnunen, R. 2001. *Creating and testing of service ideas and service production concepts*. Swedish School of Economics and Business Administration. Helsinki. Yliopistopaino.

Kinnunen, R. 2004. *Palvelujen suunnittelu*. Helsinki. WSOY

Kitsios, F. C. 2006. *Service Marketing in Hospitality Economy: An exploratory study*. Technical University of Crete, Dept. of Production Engineering and Management, Chania, Greece.

Karlöf, B. and Östblom, S. 1993. Benchmarking. Tuottavuudella ja laadulla mestariksi. Weiling+Göös. Jyväskylä.

Larbig-Wüst, C. 2010. Measuring customer involvement in new service development projects. Doctoral Thesis. Cass Business School City University of London. The United Kingdom.

Lundkvist A. and Yakhlef A. 2004. Customer involvement in new service development: a conversational approach. *Managing Service Quality*. Volume 14. Number 2/3. pp. 249-257

Nicolajsen, H.W. and Scupola, A. 2011. Investigating issues and challenges for customer involvement in business services innovation. *Journal of Business & industrial Marketing* 26/5 2011. pp. 368-376.

Ojanen, V., Lanne, M., Reunanen, M., Kortelainen, H. and Kässi, T. 2008. New service development: Success factors from the viewpoint of fleet asset management of industrial service providers. Fifteenth International Working Seminar of Production Economics. Innsbruck, AT

Sandén, B. 2007. The Customer's Role in New Service Development. Faculty of Economic Sciences, Communication and IT Business Administration. Karlstad University. Sweden.

Shekar, A. 2007. An innovative model of Service Development: A process guide for service managers. *The Public Sector Innovation Journal*, Volume 12(1), Article 4

Spendolini, M. 1992. The Benchmarking book. New York. Amacom.

Tidd, J. and Hull, F. M. 2003. Service Innovation. Organizational responses to technological opportunities & market imperatives. Imperial College Press. London.

Tuominen, K. 1993. Benchmarking prosessiopas. Opi ja kehitä kilpailijoita nopeammin. Tekninen tiedotus 10/93. Malliteollisuuden kustannus Oy. Helsinki.

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