

KEMI-TORNIO UAS

Service-dominant logic as a future strategy

Case CCC Corporation Oy

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ABSTRACT

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The focus of this thesis is service-dominant logic, a framework created by Stephen Vargo and Robert Lusch (2004), in the software business. The case company, CCC Corporation is used as an analysis point. The subject is approached through research questions which are as follows: 1) How does the case company implement service-dominant logic in Finland? 2) What is service-dominant logic in the software business? 3) Why is service-dominant logic important for the software business and 4) What competences are needed to have service-dominant logic in the software business?

Qualitative study is the chosen research method for this thesis. Semi-structured interviews and document review are used as data gathering techniques. Interviews concerned managers in different operational areas of the case company, to gain a broader view on the subject. Theoretical framework and discussions concentrate on the service-dominant logic, its key concepts value and service and on competence domains.

A cyclic pattern between service-dominant logic, service-orientation and customer-orientation was discovered and the importance of the logic for the software business was recognised. Competence discussion derived from the discussion in project-based companies and the foundational principles of service-dominant logic. Different organisational and individual competences were defined as demands of the logic.

Service-dominant logic was recognised as a potential strategy for the company and an implementation plan was created. The demands for changes in organisational structure, competence and process development and networking were the heaviest phases recognised in the implementation plan.

Keywords: service, competence, value, service-dominant logic, service-orientation, customer-orientation

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1 INTRODUCTION

An invention or a theory framework, in this case service-dominant logic, may at a fast pace become a dominant trend in business and therefore requires fast moves from a company in order to stay on board of development and maintain competitive advantage. However, staying on board demands that a company understands what the causes and consequences are. The challenge is also on a personal level. As my working area in the case company is in marketing and sales support, the demand to follow the trends of the market and the changes in there is continuous. The message to be delivered to the customers and other potential target groups has to be in line with the demand. Understanding service-dominant logic and the demands set by it affect all the employees in the organisation, also mine. However, this understanding is not only important in the case company. Understanding service-dominant logic on a deeper level may enable a company to understand the moves and decisions those of competitors.

Before a framework gains practitioner' attention and is applied in business, it has been discussed widely among different authors in scientific publications. Service-dominant logic, as the core focus of this thesis and interest of the case company, has been under discussion in scientific circles. The re-discovery of service has been recognised by many authors and there is a magnitude of literature on service, service-orientation and service-dominant logic. Vargo & Lusch (2004) introduce the service-dominant logic for business. Arto & Wikström & Hellström & Kujala (2008) discuss the impact of services on project business. Demirkan & Kauffman & Vayghan & Fill & Karagiannis & Maglio (2008) discuss service-oriented technology and management in research and practice. Lay & Schroeter & Biege (2009) introduce a typology for business-to-business markets in service-based business concepts. Sheth & Sharma (2008) on their behalf, discuss the impact of product to service shift in industrial markets and the evolution of the sales organisation. Vargo & Lusch (2008) continue their work on service-dominant logic and its evolution. Analysis on a framework and its applicability in business, including this thesis, demands a literature review in order to gain different views, pros and cons and whether it has gained acceptance among other authors in that particular field.

The work on service-dominant logic by Vargo & Lusch (2004) was originally developed in marketing but the impact of service shift has been discussed more widely since the introduction of service-dominant logic. Even though the focus of this thesis is on service-dominant logic, the process that a company has to go through should not be forgotten. Service-dominant logic has brought about the new concept of service, which is different to the concept of services. These concepts will be clarified more clearly in chapter 3. A person who has not familiarised himself with the literature of this field can easily confuse these two concepts. Therefore, it is important to understand the development of industries and the change from product-orientation to service-orientation. For a company that may choose service-dominant logic for its future strategy, the true difference of services and service has to be clear and work needs to be done before true service-dominant logic is found on the managerial and operational levels.

The re-discovery of service has also been recognised in the software, which is the business field of the case company. According to Cusumano (2008, 20), companies in the software industry have seen many customers, companies and individuals rebel against the high prices of standardised or commodity-type software products and are now demanding for customized products. Customization is the word of today and customization means service (Cusumano 2008, 20). Still the understanding of service and the different dimensions of it may vary. In the case of the software business, Cusumano (2008, 20) argues, it remains to be seen whether the change is about life-cycle dynamics or business model choices. These new developments have impacted on the business models, including different ways of pricing, delivering software and reaching different customer segments. Software product firms should perceive services as a strategic area and a target of opportunity to increase revenues and profits. When and if choosing service as a strategy, management should identify the best mix of products and service for their business segment and define how to servitize their products as well as how to productize their services. (Cusumano 2008, 24-26.)

Even though the concept of service-dominant logic is quite new, there are companies, also in the software business, that are changing their whole business to operate according to the principles of service-orientation. Microsoft is an example of a company in the software business, which has recognised the need of service and its potential and has shifted its business focus from products to service. Customers and their demands are

changing the market. 24/7 support and maintenance and consulting are examples of the service and the demands that customers may have. Among the customers of the case company a demand for service from consulting to 24/7 support and maintenance may only represent a tip of an ice berg and therefore, an understanding of service-dominant logic should be gained as well as the applicability of the logic in its business operations.

1.1 The purpose of the research

Service is becoming a dominant concept in business markets and understanding the value of the service and its opportunities are important for the company, the case company CCC Corporation Oy. As a strategic decision, service-orientation leads to changes in business model. Service-orientation does not only offer opportunities. The change may force the company to go through costly changes in its business model and organisation in order to survive on the market. As a result of the literature review an understanding that service-dominant logic is more than making the shift from product-orientation to service-orientation or about outsourcing products and focusing on service delivery has become evident. The company needs to recognise the demands set by the new business model and the changes that are needed in order to have service-dominant logic. The aim of this thesis is to understand service-dominant logic in the software business and demands set by it.

In this thesis the demands set by the logic are studied as competences that the company needs in order to be service-oriented. Even when the company is in the transition phase or has recently made the shift it should evaluate what competences are needed to maintain the chosen logic in its business operations. It is equally important to recognise that even though the company can create value within its own organisation, service and the related value of service is always co-created. The co-creators may be the producer of the product or the customer that receives the service. These are example of some of the incremental concepts that formulate this thesis. The more detailed framework for service-dominant logic as well as for this thesis is discussed in chapter 3.3.

To summarize the discussion in earlier paragraphs the purpose of this thesis project is to study service-dominant logic in the software business, the competence domains of it and

to find out its applicability in the software business as a competitive strategy for the future through the case company, CCC Corporation Oy. This thesis project is not to discuss why or whether to make this change, it is about how to make the change and what the needed competences are. The main focus of the research is in the case company. However, the role of network will be recognised even though not carefully examined within this thesis.

The topic of the thesis is studied through four questions, first through the main research question followed by three sub-questions related to the topic and issue under analysis.

These questions are as follows:

1. How does the case company implement service-dominant logic in Finland?
2. What is service-dominant logic in the software business?
3. Why is service-dominant logic important in the software business?
4. What competences are needed to have service-dominant logic in the software business?

The purpose of this thesis project is to study service-dominant logic in the software business and to find out its applicability in the software business as a competitive strategy for the future through the case company. As a result an implementation plan for the case company is made and discussed. Networks and their importance for business operations are noticed but they are not included into the analysis. The focus of this thesis is on business-to-business software markets in Finland. Business-to-consumer software markets are a different entity.

1.2 The case company CCC Corporation Oy

CCC Corporation Oy, henceforth CCC, the case company of this thesis, is a Finnish software company established in 1985. Its business model has been mainly project-based since its establishment. The main customer segments are public sector and manufacturing industry. According to Jorma Kallio (2010), the CEO of CCC, the most important current and potential customers arise from state owned companies and organisations and big industrial customers especially in the heavy metal industry and process industry and in reasonable amounts logistic companies and other medium-sized

industrial customers. The company's main business is operations management and enterprise resource planning in customers' critical business operations. Alongside the core offering are system and people integration and services. The solutions of CCC are preferably based on products and platforms of other companies, tailor-made solutions are also possible. Mr. Kallio (2010) states that he does not believe that there are customers that will make long investments decisions based on purely tailored solutions, the future is on platform-based solutions.

Figure 1 that illustrates the offering of the company has been created by Harri Kujansuu (2010), the Vice President of industry and operators business unit of CCC. This "onion", as it is internally called, has also been the basis of the strategy of CCC. This means, according to the CEO (Kallio 2010), being in the core business of the customer and doing things that are important to the customer. The company has to have thorough understanding of customers' business and processes. Being in a tight and close co-operative relationship with customers and building the core solutions has its risks. Especially among industrial customers it is all or nothing; all the companies invest at the same time and other times no one invests. This cyclic pattern means high risks and, therefore, CCC should increase its proportion of services to be able to better handle the economic constrains of risks. Service could be for example people integration, management consulting or maintenance and support. (Kallio 2010.)

The main market area of CCC is Finland. It produces software and services to projects and the proportion of international projects is about 10 to 15 % of CCC's turnover. CCC has never been able to truly internationalise itself (Kallio 2010). Even though the company does not focus on international markets now or in the near future it still has a couple of overseas customers in the USA and Japan. When and if the opportunity for internationalisation arises, CCC is determined to go international with the customer to operate alongside the customer. In terms of production, CCC had its own offices in Hungary but recently they were outsourced to a local company which now is a part of the company's partner network (Kallio, 2010).

Another international partnership CCC has in Estonia. Most of the other partnerships that CCC has are based on the Hansel tendering system that deals with management consulting and IT-service projects. The network of partnerships is mainly based on human resources, i.e. skills and knowhow, into projects in areas that are not the core

business of CCC. A partnership with TDC Hosting gives CCC the possibility for Cloud computing in the future. (Kallio 2010.) Cloud computing will increase in importance in the software business and will be discussed in detail in chapter 3.1.1.

CCC defines its offering in the form of an onion as presented in Figure 1. According to Mr. Kujansuu (2010), the core of CCC's business operations are the business systems, i.e. the customer's core systems such as enterprise resource planning. The other layers of the onion can be solutions or service as such or a part of a bigger entity. Together all these layers help to build up a solution, an entity that is connected to all the needed systems and people and is kept up and running every day as only solutions that function can create value. Systems integration and people integration refer to connecting customer's both systems and people together to enhance customer's daily operations. Despite the fact that service is in the out most circle of the onion, their role is to be part of all operations.

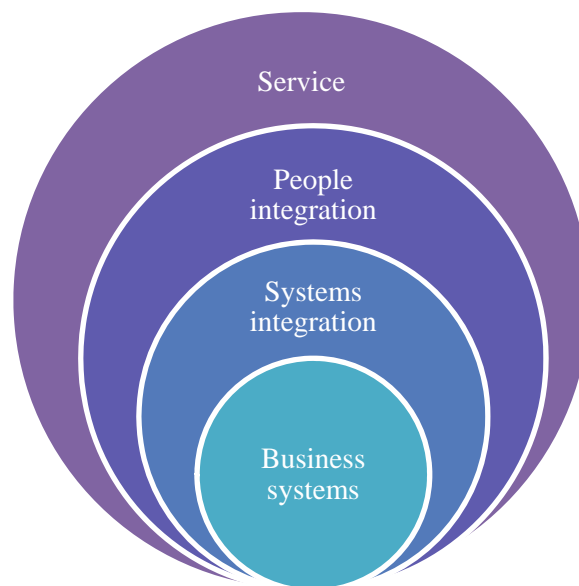


Figure 1. CCC's offering

As mentioned earlier, CCC has been a project oriented company since its establishment and has now recognised a need to change. At the moment ever more companies are shifting towards service-orientation in their business model and this is especially the trend in information technology. According to Forest research, change in architecture into a service oriented one may help the company to reduce its costs up to 30 %. (Demirkan et al. 2008, 358.) According to Wikström et al. (2009, 114), many companies such as IBM, General Electric, Siemens and Hewlett Packard have made a

change in their business model by outsourcing partially their core offering and introducing new service concepts such as consulting. As there seems to be opportunities as well as cost advantage in service-orientation, it could be the right business model for CCC also. Due to the opportunities offered by new business model, the company wants to find the applicability of service-dominant logic in the software business. For the company it is important to identify the competences and processes that it needs to take into consideration when changing its business model. For the future success of the company, competences need to be identified, analysed and organised.

The software business is dynamic by nature and its development until this date has been fast. Also competence is fierce. There are big and small players in the field. Globalisation, especially in the form of cheaper labour, is severely impacting on the market. To become a player in the market, demands only little investment, as the product or the service that is sold is knowhow and skills. There is no manufacturing in its tangible form and it does not demand big machinery. The development of the software business is fast, there are new technologies and solution platforms that come to the market and overnight they seem to become the dominant design demanded by customers. To survive in this type of market, the company has to stay on the edge of development and develop its resources, knowhow and skills.

1.3 The structure of the thesis

There is a magnitude of elements and issues that affect the development of the business and business models. Within this thesis the main focus is on service-dominant logic and the key elements of that logic. In chapter two the chosen research methods of this thesis are presented and defended. Chapter three, service-orientation in the business markets, focuses on three main concepts of this thesis value and service as building blocks of the new business model, the service-dominant logic itself and the needed competences. Chapter four takes the competence discussion around service-dominant logic further and discusses the pitfalls of strategy implementation. Chapter five presents the results of the interviews and document review. Discussion and conclusions analyse the results, reflect those to the theory framework and represent the implementation plan for the company for service-dominant logic and recommendations for the future.

2 RESEARCH METHODOLOGY

The chosen research methodology for this thesis is qualitative research methodology. The main reason for the exclusion of the quantitative methodology is its demand for multiple companies and their personnel as a target for the research. In addition the interest of the case company towards service-orientation as a future strategy gives an ideal setting of exploring the service-dominant logic and its applicability in the software business through the case company. Bryman & Bell (2005, 28) view qualitative research as inductive; emphasising theory generation. Ghauri & Grønhaug (2005, 202) make a notion that in qualitative research the main emphasis is to gain insights and construct explanations or theory. An analysis of service-dominant logic and its applicability in the software business, demands set for competences and compilation of an implementation plan for the new business logic for the case company are targets of this study and respond to the nature of qualitative research being inductive and theory constructing. Even though the result, the implementation plan, is created for the case company, it may serve as a starting point for theory generalisation on implementing service-dominant logic especially in the software business.

Another view from qualitative research methodology is presented by Eriksson & Kovalainen (2008, 51), who state that most qualitative business research projects use organisations and people as sources of information. In qualitative research the term “backyard research” is used when conducting research in an organisation or among people that are familiar to the researcher. Conducting a research in a company and among people that the researcher is connected to, often allows easier access to both individual and written research material. (Eriksson & Kovalainen 2008, 51-52.) Arguments by Eriksson & Kovalainen (2008) reinforce the choices for research methodology in this thesis. Also in this research, the people and the company are the sources of information, due to the easier access to the people and written information. The “backyard research” as Eriksson & Kovalainen (2008) define it, crystallise the choices behind the methodology. In the end research is about access to the information and using the company where one is working usually guarantees the access to the right people as well as to written material.

2.1 Research strategy

Research strategy refers to the nature of the study, whether the purpose is to explore, explain or to find a cause and effect installation. Also the strategy identifies the focus of the study whether it is in case study, document review or some other. The research strategy of this thesis is explanatory and the focus is of case study. Research questions and their formulation influenced heavily on the choice for the research strategy and the research questions also represent the reasoning behind the choices made in research strategy of this thesis.

According to Yin (2003, 5), there are three conditions to be considered when choosing research strategy: type of the research question posed, the extent of control an investigator has over actual behavioural events and the degree of focus on contemporary as opposed to historical events. Eriksson & Kovalainen (2008, 39) argue that “how” and “why” -questions focus on causes and consequences and aim for answering or explaining something in qualitative terms. Yin (2003, 6) shares the view of Eriksson & Kovalainen and defines “how” and “why” -questions more explanatory. As a research strategy for explanatory research Yin (2003, 6) presents case studies, histories and experiments. As the main research question of this thesis is based on ‘how’ -question, it suggests that focus of the research is on explanation.

The choice of research method is further defended by the questions related to the extent of control over behavioural events. Yin (2003, 7-8) states that histories are the way of research when there is no access or control, case studies when there is access but no control and experiments when there is access and possibility to control the behavioural events. At the same time it is vital to consider whether the degree of focus is on contemporary as opposed to historical events (Yin 2003, 7). In this study there is no control on behavioural events. Also the focus of the study should be on contemporary events. Therefore, case study as a research strategy fulfils the requirements set by form of research question, required control of behavioural events and focus on contemporary events.

There is also the choice of single or multiple case studies. The case study of this research is a single case study. According to Yin (2003, 41), a single case study can be justified if it is representative or typical case. The objective of this type of case is to

capture the essence, circumstances and conditions of an everyday or commonplace situation. For example the case may present a typical project, a company or a school. What is gained from this type of single case study is the experiences of a person or an organisation. (Yin 2003, 41.) The selected case company of this research represent a common small and medium-sized software company. The case company is facing the challenge set by the dynamic operating environment, call for service-dominant logic. The situation is quite common, as explained earlier in the chapter 1, as more and more companies have realised that to be competitive and survive they need to change their business model. It can be said that this case does not represent an everyday situation but it is a representative case among the small and medium-sized software companies facing the challenge of service-dominant logic. The analysis of the data will be done as a discussion with service-dominant logic theory and in this sense this case study may represent some features of critical case study. According to Yin (2003, 40), critical case is testing a well-formulated theory to confirm, challenge or extend the theory. Also a critical case study is a rationale for a single case study and, therefore, the choice of single case study.

2.2 Research technique

The chosen research strategy for this thesis project is case study, as was presented in chapter 2.1. The choice of strategy does not necessarily dictate the choice of the actual research technique as there are different techniques to choose in different strategies. Information should be sought after from variety of sources not by a single technique. Ghauri & Grønhaug (2005, 114) define case study as a description of a management situation involving data collection through multiple sources. Verbal reports, interviews and observations are seen as primary sources of data but information can be collected through sources such as financial reports, archives and operating statements, as an example (Ghauri & Grønhaug 2005, 114). Case study as a research strategy makes it possible to choose from variety of research techniques.

Interview is the chosen research technique for this study because the purpose is to find people experiences, opinions and attitude towards service-dominant logic, to map the status of the company towards service-dominant logic. As the focus of this study is on

contemporary events and on future strategy choices it is unlikely that information will be in paper form.

Eriksson & Kovalainen (2008, 80-81) argue that a common reason for the use of interviews in business research is that they are an efficient and practical way of collecting information that cannot be found in a published form. Also it allows to study people's experiences as seen from their point of view or the social construction of knowledge concerning the chosen topic (Eriksson & Kovalainen 2008, 81). Also Ghauri & Grønhaug (2005, 124) see survey, questionnaire or interview, as an effective tool to get opinions, attitudes and descriptions. There are several circumstances that may influence respondents and their reactions and also reflecting to the answers. These factors are: sponsor of the research, appeal of the researcher, stimulus caused by the reward of the survey, the format of the questionnaire, tone and stance of the covering letter and stamped and self-addressed envelope. Still surveys are among the most popular data collection methods in business studies. (Ghauri & Grønhaug 2005, 124-125.)

Interviews as a technique pose different forms. Semi-structured interviews are the precise technique of this study. Bryman & Bell (2007, 474) propose that semi-structured interview is an in-between model of interviews. It has list of questions but the interviewee is not limited by fixed response categories. What is important in semi-structured interviews is that all questions will be asked and similar wording will be used in all interviews to be conducted. (Bryman & Bell 2007, 474.) According to Ghauri & Grønhaug (2005, 132), the plan of semi-structured interviews is to minimize bias.

As earlier was mentioned in the paragraphs above, interviews allow studying people's experiences and construction of knowledge on the chosen topic. In this thesis the interview is semi-structured interview where the questions are formed in advance and the same questions will be asked in all interviews. If there is a need, additional questions may be asked in the end of the interview or in the process of checking the transcripts of the interview. Additionally if there is any documentation available related to this research it may be used and then the secondary research technique will be document review.

2.3 Interviews

As the focus of this research is to analyse the case company and its relation to service-dominant logic as a future strategy, the target group for the interviews is built within the company. The company is part of a network but at this point the focus is of the case company and its operations, therefore the network partners are left outside of the interview. The target group is formed by five persons working for the case company and who due to their role in the company have different views for this subject under study. The selected persons are: the CEO of the company, two business unit leaders, leader of the sales team and leader of the account management group.

To follow good ethics the interviewees will be sent a preliminary email on the subject or they will be approach by phone to initiate the process of the interview. The first discussions are introductory to this thesis process and to gain interview permission. In these discussions also the matter of recording the interview will be discussed as well as how the interviews will be documented. Depending on the interviewees the interviews will be conducted face-to-face, via phone or on-line but all interview techniques enable recording of the discussion.

The interviews will be conducted in Finnish as it is the native language of all the respondents. Interview questions, appendices 1 and 2, have some general questions and after that the focus is of value and service-dominant logic. If the concept was entirely unknown to the respondent a short review on the main principles of the logic was given, which is written in the questionnaire form presented in appendices 1 and 2. Also during the interview process an additional question was posed to the interviewees: How to bring the logic down to the actor level in the organisation? After the interviews a transcription of the interview is sent to the respondents for them to correct and check their answers. If needed, verifying questions may be asked after the interviews via email or phone.

As the main source of data collection in this thesis is interviews the recognition of my own influence as the interviewer on the results has to be brought up. Semi-structured interview is used to be able to limit the discussion to the focal topics of the thesis and avoid going to the wrong tracks. Already in this phase I have influenced the direction of the discussion. Semi-structured interview also makes it possible to conduct similar

interviews and therefore guarantee better comparability among the respondents. However, the main focus of the study is to understand the situation of the case company and create an implementation plan for the future the subjectivity in this case is acceptable. As an additional source of information, document review, is used the reliability of the results should be guaranteed.

2.4 Reliability and validity

According to Yin (2003, 37), the goal of reliability is to minimize the errors and biases in a study. Bryman & Bell (2007, 163) define that reliability of a study can be measured in three levels: stability, internal reliability and inter-observer consistency. The meaning of stability relies on the little or no variation of results over time when redoing the study. Internal reliability is about the correlation between measurements used in the study. The third measurement of reliability, inter-observer consistency, handles the subjectivity of the study whether there is lack of consistency in data categories and therefore also in the decisions. Subjectivity and consistency issues are typical in studies where open ended questions are used. (Bryman & Bell 2007, 163.)

The discussion of the reliability of this study is done by using the three measurements defined above. In terms of stability of this study there should not be great variations. The concept of service-dominant logic is quite new and understanding of it from industry to industry or even within an industry may change. Hence changes also in results may occur. Strategic choices, information flow and the dynamic nature of the operating environment possess a great potential of having a radical shift in the results of this study as the empirical study is lot to do with the company representatives and their understanding and opinions about elements built in service-dominant logic and value. The measurements are built upon existing theoretical frameworks such as dynamic capabilities and service-dominant logic, which both in the end discuss about the same issues, value and core competences. Therefore, there should not be doubt in their coherence or validity for this study. Also the consistency of the study should be in order as the measures of the study are built upon theoretical frameworks. What may raise doubts about the consistency of this study is the subjectivity of responds, which often is the situation with open ended questions, where the respondents express their own

opinions and understandings and there may also be some wishful thinking. However, this study is an analysis of one company and its situation the subjectivity should not undermine the reliability of the study.

Validity of a study is about whether the conclusions drawn represent, describe or explain what has happened (Kovalainen & Eriksson 2008, 292). Internal validity and external validity represent the measurements of analysing a study and its validity. Ghauri & Grønhaug (2005, 86) relate external validity to what extent the findings of a study can be generalised to and across different persons and settings of time and place. Bryman & Bell (2007, 41-42) also view external validity as whether the results of the study can be generalised to people and organisations. Internal validity is seen as whether the conclusion drawn upon the results hold water, that the cause and effect are correctly understood and formulated (Bryman & Bell 2007, 41). In addition to reliability and validity a study should be also replicable. The whole research process should be reported in a way that anyone could be able to conduct the study again and come to the same conclusions.

For the particular case company the results will be valuable and they may be valuable also to other companies making the shift to service-dominant logic. The validity of the results within the same business areas as the case company is operating should be consistent. The results may give an insight also to other companies considering the shift in their business logic. However, the results cannot be generalised or they are not universal. Services and their content are heavily dependent on the industry and setting. This paper is an insight on one company which may give a boost to other studies for example to a more extensive study that would research the capabilities and their overlapping between industries in service-dominant logic.

2.5 Data and analysis

The first form of data of this thesis was gathered while building up the theory framework. Studies and literature on service-dominant logic as well as on competences were used while building up the framework and basis for the interview and analysis. Empirical data was collected through five interviews on different levels on management

in different operational areas of the case company. Additionally documentation will be used as a source of information, if there is any related to this research.

As already presented in chapter 2, “backyard research” is often used in business research due to familiarity of the environment and easier access to information and people (Eriksson & Kovalainen 2008, 51). This thesis project also presents a form of backyard research. The case company is also the employer of the writer of this thesis which guarantees better accessibility on the information, interviewees within the company than of those who are outsiders for the company. Also writers own knowledge on the company and related to the subject is used as a source of information in this thesis.

Three key focus areas also in the theoretical framework of this thesis were the guidelines of the interviews to keep the discussions focused and on the subject under research. These were value, competences and service-dominant logic. These themes together with semi-structured interviews as a technique were used to guide the interview process, to make the interview replicable from one person to another and to avoid the masses of data that were not relevant for this study.

According to Ghauri & Grønhaug (2005, 204), it is common that in qualitative studies the researcher easily becomes overwhelmed by the masses of the data. A key characteristic of analysis is dividing up of the mass of data into constituent parts. Through analytical operations the researcher dissects, reduces, sorts and reconstitutes data. It should be noted that no single agreed-upon approach to qualitative data analysis exists. (Ghauri & Grønhaug 2005, 206.) According to Eriksson & Kovalainen (2008, 295), the evaluation of qualitative research should take place during the whole research process. Table 1 represents how Ghauri & Grønhaug (2005, 207-208) identify the activities to be used in analysis of qualitative data.

Table 1. Analytical activities of qualitative data

Activity	Description
Categorization	The process of classifying units of data.
Abstraction	Groups previously identified categories into more general conceptual classes.
Comparison	Explores the differences and similarities within the data and provides guidelines for collecting additional data.
Dimensionalisation	Involves identifying properties of categories and constructs.
Integration	Requires mapping of relationships between conceptual elements and is important part in building up theory based on data.
Iteration	Is about simultaneous data collection and analysis in such a way that preceding operations shape subsequent ones.
Refutation	Involves deliberately subjecting one's categories, constructs, propositions or conceptual framework to empirical scrutiny.

The data gathered through interviews and additionally on internal documentation will be processed through the steps presented by Ghauri & Grønhaug in Table 1. The main focus on the analysis will be in comparison and discussion between the theoretical framework and empirical findings. To better guarantee the validity and reliability of the research triangulation is pursued through more than one source of data and discussions with theoretical framework and discussion of results. According to Ghauri & Grønhaug (2005, 31), using multiple sources is called triangulation. Eriksson & Kovalainen (2008, 292) argue that triangulation is a process of using multiple perspectives to refine and clarify the findings of the research but it may lead to controversial, paradoxical or even conflicting research results. Despite the threats, the results will be triangulated to the extent that is possible within this thesis and the conclusions shall present whether a consensus is reached or further research is needed.

The transcripts of the interviews and the material from internal workshops that which has been used as material in the document review are confidential by nature. The confidential information is not made public through the databases of Kemi-Tornio University of Applied sciences. The transcripts of the interviews are provided to the reviewing lecturers for inspection purposes.

3 SERVICE-ORIENTATION IN THE BUSINESS MARKETS

Chapter 1 discussed how service is the focus of today's business world which has made many companies to consider a shift in their business model. The overall purpose of this thesis is to study service-dominant logic in the software business, the needed competences and implementation of the logic. Even though the focus of this study is on service-dominant logic, service-orientation is a concept used alongside it. Service-orientation as a concept within this thesis refers to the emphasis on service in business operations and offering. Service-orientation is a step on the path to service-dominant logic, which merely describes the trend of the market where service is becoming the focal offering of companies.

As a starting point, key elements of service-dominant logic need to be identified and analysed, as they dictate the nature of demand in the markets also for the case company. Service has become the focal unit of business and it is also the key concept of service-dominant logic. Another key concept is value. A review on these concepts is done to enhance the understanding of service-dominant logic in the software business and there on for the case company.

3.1 Service and its interpretations

Service and how it differs from services are the basics that the case company needs to understand while considering the shift to service-dominant logic in its business model. Services have been seen as additional activities alongside products, as value-adding elements. Lusch & Vargo (2007, 8) distinguish the difference as follows: services refer to deeds, performance or actions. On the other hand service is a process, an application of "operant resources" for the benefit of another party (Lusch & Vargo 2007, 8). Operant resources are invisible and intangible such as core competences or organisational processes (Vargo & Lusch 2004, 3). With core competences Vargo & Lusch (2007, 8) refer to dynamic resources such as skills and knowledge that are capable of acting and producing effects in other resources. Vargo & Maglio & Akaka (2008, 145) share the views of Lusch & Vargo and define service as an application of competences, knowledge and skills delivered by one entity to benefit another.

According to Vargo & Lusch (2004; Ordanini & Pasini, 2008, 290), goods are mere appliances to perform a service and can be considered the direct and indirect ways to transfer knowledge and skills during the service process. The message that service-dominant logic is to deliver is that service is the foundation for all of exchange. However, service does not out run goods and products, the function of goods and products is to deliver service if not provided directly (Vargo & Lusch 2006, 46). The service-dominant logic will be introduced and more thoroughly discussed later on in the chapter 3.3.

Especially in the software business, which is also the business area of the case company, the business model is often project-based and service is an incremental part of the delivery. Skills and knowledge are essential resources in building up customer solutions in a project that may, in some cases, be a very long process of defining, analysing, building and testing of a solution to the customer's needs. Even though service is an incremental part of projects, projects are similar to products by nature. They are seen as one time delivery without continuation in the future. There are many types of service in the software business from maintenance and support to consultation but whether they are treated as service or services is entirely dependent on the business model of the company.

As service is the focal unit of business in service-orientation, and two of the sub-questions of this thesis are about service-dominant logic in the software business, the role and concept of service within the software business needs to be studied. There are different frameworks related to the interconnection of software and service and these are presented in the next chapter 3.1.1. However, this study is also about how to implement service-dominant logic within the case company. Studying the interconnection between software and service enables the case company to recognise how service as business can be offered, in which forms.

3.1.1 Different roles of service in the software business

It was already recognised earlier that service is an essential part of the software business, but their role may vary. The aim of this chapter is to recognise the potential that service offers to the business and to answer what service-dominant logic may mean in the software business and also for CCC. The discussion is also about the importance of service-dominant logic in the software business. Turner & Budgen & Brereton (2003) argue that the role of software is to deliver a service and that the focus should be shifted to describing and delivering that service. There are different approaches to the combination of software and service. There is Software-as-a-Service (known as SaaS), Cloud computing and Service-Oriented Architecture (SOA) for example. To clarify the difference between these concepts and how they relate to service-dominant logic they are carefully defined in the paragraphs below for the purposes of this work.

Software-as-a-Service (SaaS), according to Wang & von Laszewski & Andrew & He & Kunze & Tao & Fu (2008, 4), means that software or application is hosted as a service and provided to a customer via internet. There is no need to install and run application on customer's local computers which in turn eases the burden of software maintenance and reduces the expenses by on-demand pricing (Wang et al. 2008, 4). SaaS is about composition of fine-grained and customised service through a supply network that compiles service into larger units until delivery. SaaS has elements of outsourcing and application service provisioning. (Gold & Mohan & Knight & Munro. 2004, 72.) Turner et al. (2003) continue on the same line and define SaaS as one of the demand-led software markets in which service are assembled and provided as and when needed to address a particular requirement. Within the concept of SaaS there are two levels: consumer and enterprise. Webmail, light office productivity applications and web applications, for example YouTube, represent Software-as-a-Service for consumer. On the enterprise level the applications are larger and range from messaging to business process applications like customer relationship management and enterprise resource planning. (Karpinski 2008, 29.) For the case company of this thesis its customer's core processes such as enterprise resource planning are those of importance and represent what the case company offers. As the orientation has been in project business, the identification of these solutions as a potential Software-as-a-Service may have been dismissed. SaaS represents one way of doing business in a service-oriented manner and

therefore is building up the knowledge for the case company what service-dominant logic may be in the software business.

Cloud computing or computing-as-a-service as defined by Karpinski (2008, 29) is about computing capabilities including processing, storage, databases and more. Service is delivered online and companies can buy what they need (Karpinski 2008, 29). Another side of the coin is presented by Wang et al. (2008, 2-3) as they state that there is no widely accepted definition for the Cloud computing as it is still evolving. Based on their experiences Wang et al. (2008, 3) define Cloud computing as follows: “A computing cloud is a set of network enabled service, providing scalable, quality of service guaranteed, normally personalised, inexpensive computing infrastructures on demand, which could be accessed in a simple and pervasive way”. The definition by Wang et al. (2008) is two sided. According to it, Cloud computing can be viewed as an activity, a process of delivering service to the customer or Cloud computing is a structure, a computing network, a set of facilities. For the purposes of this study the view that Cloud computing is an activity is preferred. Hosting service is one example of Cloud computing. Even though it may not represent the case company’s main offering or offering at the moment, the opportunities and threats brought by it as the markets evolve should be recognised. Also customers are demanding more and more comprehensive solutions from their partners. Even though not the core business of the company, it should consider whether it is their best interest to form a supplier network to be better able to the customers’ demands that may include also hosting services as a part of a larger entity.

Ordanini & Pasini (2008) in turn have studied the adaptation of IBM’s Service-Oriented Architecture (SOA) which represents a practical view of service-dominant logic; an interpretation of service-dominant logic in practice. According to Ordanini & Pasini (2008, 290), SOA is modular by foundation and it is designed for business customers who can create different IT-solutions in different situations and contexts. Depending on the point of view SOA is examined its definition evolves. From a business point of view it is about a set of services to enhance business operations in a network where as in technological point of view it is about modularity, re-use and composition but most of all about new programming methods, tools and standards. (Ordanini & Pasini 2008, 290-291.) For the case company this type of operational model would demand a well-defined and organised network of partners who all have their area of expertise.

SOA can be considered as a service platform. It is not about fully outsourcing IT-operations where as to form a partnership between the service provider and customer. For the customer the idea is to partially rely on the service provider but at the same time maintain their own sense of business applications. The idea of SOA is about flexibility and through flexibility its applicability on various business issues. (Ordanini & Pasini 2008, 291.)

Service co-production and value co-creation represent the main ideas of service-dominant logic and these are also true in Service-Oriented Architecture. Ordanini & Pasini (2008, 291) argue that by playing a key role in planning and using SOA system, the customer is co-creating the service. Also the customer's ability to use the system and enhance its resources and capabilities through it prove the case of value co-creation (Ordanini & Pasini 2008, 291). From their study on SOA Ordanini & Pasini (2008, 295-296) could conclude that there is evidence of conceptualization of service as application and exchange of specialized knowledge between providers and users of service. Among the most important aspect on service-dominant logic in the software business is that to be able to be part of co-production and co-creation processes companies need to share the common view of value. The demands for network management are heavy in this type of operational model. For the case company it may also be a possibility for the future as the aim is to move from fully tailor-made solutions to partially product- and platform-based solutions.

When service is a fundamental part of software it changes the nature of the business. According to Karpinski (2008, 28), as companies are moving towards service delivery, the first step does not need to be into strategic process applications. In the markets of the case company where customisation is a big part of the service as the needs and demands vary between customers, the movement into the network may be a dream at least for small and medium-sized companies, such as CCC. Companies should start with small things and not with the strategic business applications is a key notion from Karpinski (2008, 28).

The evolution of the business has a lot to do with the fact that software and computing can be delivered as a service. As the market opportunities of today are wide and various, companies need to build up teams or networks to fully benefit on the opportunities at

hand. (Karpinski 2008, 28-29.) Companies become more and more specialised within their own business when the customers in turn demand for more and more comprehensive solutions and service. The combination of these two developments has forced companies to develop networks to be able to offer the service customers are demanding. Also CCC has felt the pressure of the markets and has chosen specialisation as one part of its strategy. A network of couple of suppliers has been established for better and wider resource pool and service creation with the customers.

SaaS, Cloud computing and SOA are examples on how service-orientation may be conducted in the software business. Gartner, an analyst company, has forecasted that SaaS will account for 35% of software deployments by the year 2011 in consumer business (Lamb 2008). This may also be the future in business-to-business markets. Microsoft as an example has formed its own version of SaaS called “software plus service” and has introduced this approach to SaaS for its Exchange email program, Dynamic CRM and SharePoint collaboration product (Lamb 2008). Wang et al. (2008, 3), on their side, argue that the next big thing is Cloud computing. The trend of cloud computing is due to the need to build complex IT infrastructures. Software demands installations, configuration and updates whereas the hardware and other computing resources quickly become out of date. This leads to outsourcing computing platforms as they are complex by infrastructure and difficult to handle. (Wang et al. 2008, 3.)

For the case company to switch into SaaS framework or to Cloud computing, will require new business model as well as new technologies to be successful. SaaS is among the most known installation of software and service but Cloud computing as one form of service-orientation within the software business is making its way to the business. Even though SaaS, Cloud computing and SOA present functional models of service-orientation, they are not a formation of service-dominant logic. The discussion above gives insight on the dimensions service-orientation may have in the software business as well as offer the case company operation models for the future as it proceeds in the path towards service-dominant logic. By now some aspects of service-dominant logic have been identified. As the case company has been mainly project-based since its establishment, a review on services and their relation to project business is in place to better understand the setting, which is the starting point for implementation of service-dominant logic.

3.1.2 Services in project-based companies

The difference between service and services is endorsed by several authors. However, service and services as concepts should not exclude one another in the theoretical discussion of this thesis. To understand the evolutionary process of service-dominant logic also the issues related to services need to be discussed. For example in project-based companies, which is also the history of the case company, services have always been a part of offering and their impacts versatile. Understanding the impacts of services for the case company is important along its way towards service-dominant logic as a potential strategy for the future.

Even though Artto et al. (2008) use the concept of services and not service in their article, it is a good addition to the discussion about service-dominant logic and service-orientation especially when analysing its applicability to the software business. Another important aspect is that even though the discussion is about services in the article by Artto et al. (2008) the characteristics of the services are actually quite close to what Vargo & Lusch (2007) define as service. Artto et al. (2008, 498) found that services are an effective way in which the supplier's product can differentiate to better meet the varied needs of different customers. From the strategic perspective services may bring about benefits such as competitive advantage in terms of quality, added-value and differentiation. Increased customer satisfaction, improved new-product adaptation and supplier credibility are seen as benefits of services when analysing the matter from the marketing perspective. (Artto et al. 2008, 498.) Wikström et al. (2009, 114) rationalise that different service offerings are implemented in different stages of the lifetime of the solution.

Another important aspect in this discussion is the understanding of process. Within service-dominant logic service is viewed as a process or an application of resources such as competences and organisational processes for the benefit of another party. In the discussion around project-based business the concept of process is the same. Process is a set of phases and actions in which such resources as skills and knowledge are acted upon in order to create something beneficial for the customer. In project business services are part of the delivery throughout the process while building the solution. Vargo & Lusch (2004) viewed service as a process, where operant resources such as skills are acted upon for the benefit of another party. In the project business process is

the chain of functions and elements such as knowledge in building a solution for the customer that in the end has value-in-use. Services that are related to a project occur before, during and after the project delivery. It is for the supplier to decide which services to include in the solution life-cycle (Artto et al. 2008, 499). The six ways in which services impact on the business of project based firms are listed below (Artto et al. 2008, 499):

- Customer entry: the service serves as an entry point to new customers, projects or services
- Customer value: the service creates additional value to the customer
- Competitive advantage: the service increases the competitiveness of the supplier's offerings among competitors
- Delivery efficiency: the service helps to make delivery activities more lean
- Service business: the service itself is profitable and therefore also justified as an independent delivery
- Innovation and learning: the service creates new knowledge or capabilities or helps in creating new or improved concepts or products.

The impact types Artto et al. (2008) found seem to enhance business and customer relationships. Even though the benefits of services are clear when analysing the findings of Artto et al. it is not that simplistic. Consulting, that is also a part of CCC's offering, as an example service, is seen as highly value-adding and its profit margins are high but are often complex by nature (Artto et al. 2008, 504). Consulting may act as an entry point to a customer when customer is seeking for specialised knowledge for its business developments. The value is tightly connected to the consultant's skills and knowledge on the customer's industry as well as on the software business. If not required to recuse itself from the tendering process the consulting company has competitive advantage as it has been involved in developing the demands for the project. Through consulting the relationships with the customer have already been established and information gathered which in turn should result as a lean delivery process. Service as such, consulting service in this example, is profitable as it often based on hourly rates and not on fixed prices. It is also a learning point for the company as it may gain a lot of new knowledge or capabilities during the consultancy, not only from the particular customer but also on the industry as a whole.

Consulting activities are often used to enhance the relationship with the potential and also current customer but also to create a trust base (Artto et al. 2008, 504). To be able create a trust base the company has to put its own interests aside. The focus is on the customer, its needs, understanding those needs and finding the best possible solution for the customer. Creating a trust base may in some cases mean cannibalistic-type of relationships where the best possible solution is that of competitors (Artto et al. 2008, 505.). No trust base can be created if the company will not be able to choose the best possible solution for the customer, even if it that of competitors. The tools for relationship and trust base building alongside skills, knowledge and experience are sincerity and customer-orientation. It should be kept in mind that to choose a competitor's solution may have its benefits for the relationship. It saves money and resources of the company especially if the solution is not part of its core offering. It builds up the trust in the relationship as the customer understands that the interest of the company is the best value for the customer. In the future this may lead to revenue in consulting and other type of service.

Another difficult issue in services is their emphasis on customer value creation and this may over run the company's own objective of profitability. Also how to price services and form a functional portfolio of services and free-of-charge value-adding services are problematic issues. Despite the problematic issues that arise from servicing, services may be profitable business as such. Service relationships may act as entry point to the customer; and in the end creates an opportunity to generate more business. (Artto et al. 2008, 505-506.) Pricing and portfolio building are difficult issues in all business areas whether it is about services, projects or products. Whatever the business the company is in, it needs to consider and make decisions on offering, guarantees and pricing and the elements included in these.

Even though the company has to make decisions on pricing and portfolio management, especially pricing is dependent upon the competitive situation of the industry. Pricing is dependent on the resources available and on what price, the number of competitors in the market and also on the type and amount of solutions available in the market. Portfolio management again is dependent upon the strategic choices of the company where also market positioning plays an important role. Whether the company is a leader or a follower or pursues that position in the market affects the portfolio management the capabilities, initiatives, projects and service that is pursued. Being a leader of the market

demands a totally approach to portfolio management hat being a follower and an economy producer.

Even though service changes the nature of business there are still similar problematic issues that the company has to consider whether it is in service or project business. There are some ready established service-oriented frameworks for the software business and the case company such as SaaS and Cloud computing. However, SaaS, Cloud computing and SOA do not represent service-dominant logic as a strategy. Microsoft is a good example that has established its own framework around software and service. To go deeper in understanding the interdependencies in service-dominant logic and the implementation of it for the case company, the aspect of value as one of the key elements of the logic needs to be addressed.

3.2 Value and value creation in service-oriented business

One of the goals of this thesis is to understand service-dominant logic in the software business. For the case company to understand the essence of service-dominant logic it needs to understand the concept of service as was discussed in previous chapters. Even though service is the focal unit of business, it is value that customers are seeking for and it is value that the case company has to offer. Therefore, the case company has to understand what are the twists and turns of value in a service-oriented business and most importantly in service-dominant logic. Also another important factor in this discussion is the focus of this thesis in business-to-business markets, which by character are somewhat different from those of consumer markets.

Even though the most likely scenario of purchase is based on the best value offered, it does not necessarily guarantee the purchase decision. According to Kotler & Keller (2006, 142), there are three scenarios, when the customer does not make the decision based on the highest value offered:

1. The customer is under orders to buy at the lowest price.
2. The customer is maximising personal benefit in the short-run.
3. The customer enjoys a long-term relationship with particular supplier.

For the case company the elements listed by Kotler & Keller (2006) are true in everyday life. In the public sector the purchases need to be tendered and the processes are guided by law. Therefore, exceptions cannot be made. If an exception is made, it usually results a lawsuit. The customer decides the evaluation criteria in advance, which emphasise the factors that, in their opinion, give value. Often in these types of cases the lowest price, is the most appreciated element and therefore the highest score which, in a way, proves the first point of list above.

In the private sector the case company faces a different operation environment. Customers often form relationships with a small amount of suppliers and partnerships are agreed upon the frame agreement. Under this agreement and among the chosen suppliers the customer may send invitation to tenders to gain best possible value. Before the partnership is established the case company has to compete against other suppliers in the field of value propositions. The ones that give the best potential value are chosen. Knowledge on technologies and industries and resources are examples of factors possessing potential value for the customer. Within this type of partnerships in the private sector internal development projects or even bigger projects are possible without comprehensive tendering which in turn proves the third point related to purchase decisions, mentioned earlier in this chapter.

There could be found at least some connections between the business of the case company and value-based purchase decisions. Lindgreen & Wynstra (2007, 735) define that the way customers form the perceived value consists of the product, its price and costs of ownership. In addition to these elements product performance, services, staff and image of the company have an effect on the total perceived value of the purchase (Lindgreen & Wynstra 2005, 736). In addition to product or service, the image of the company and its personnel affect the value experienced. The relationship and its nature between the company and the customer affect the value of the offering. Lindgreen & Wynstra (2005, 737-738) argue that several researchers have started to investigate the concept of relationship value, the perceived value that is affected by outside factors, for example location.

Vargo & Maglio & Akaka (2008, 146) in turn define value and value creation to be the heart of service and are critical to understanding the dynamics of service. Value may be created in number of different ways and the perception of value depends on the business

model of the company as well as who is the examiner of value. In goods-dominant logic services were viewed as value-adding part of the exchange and that value is created by the company and embedded with a product or a good (Vargo et al. 2008, 146). Vargo et al. (2008, 146) argue that value is measured in the exchange transaction and supplier and customer have distinct separate roles, in goods-dominant logic.

As CCC is looking towards the service-dominant logic also its perception on value and value creation has to change. According to Vargo et al. (2008, 146), in service-dominant logic value is co-created, there are no distinct roles between supplier and customer and value is experienced in the use of a product or a good. Value-in-use suggests that only the customer can determine value, which occurs when the customer uses the offering of the company (Vargo & Lusch 2006, 49). In the software business, and for CCC, it is important to understand that a solution or a product possesses a value potential but the actual value is created when used. Equally important is to recognise that a solution or a product can create negative value. This negative value is created if the solution does not answer to the demands of the customer or is difficult to operate or is full of errors.

Because the case company's business is project-based, it has some differences to the product business. In project business the solutions are, at least in some level, customised and the customers are involved in the process of defining and building the solution. As the customer is part of the process, for CCC it is important to understand their role within it as service-dominant logic will only increase the involvement of the customer and other parties in the network in the value creation process.

Customer interaction and value co-creation are the essence of service-dominant logic. How this may work is of importance for the case company. Prahalad & Ramaswamy (2004) present one framework of the value creation paths and phases that exists in the relationship between the company and the customer. According to Prahalad & Ramaswamy (2004, 5), consumers seek to exercise their influence in every part of the business system. Interaction is seen as a basis for value co-creation. Consumers are involved in defining and creating value. (Prahalad & Ramaswamy 2004, 5.) Even though Prahalad & Ramaswamy refer to consumers in their analysis, it does not exclude their findings to be applicable also in the business-to-business world. For the case company interaction is a big part of the process and customers are involved from the first meeting until the end of the service. There are project meetings and steering group

meetings were the representatives of the customers and CCC meet to follow up the process and develop it together.

Maintaining a relationship demands time and resources. In a close relationship the customer may interact with the company in intrusive ways and the co-creation may move the company towards an individual-centred view of demand. (Prahalad & Ramaswamy 2004, 6.) Having a partnership with the customer, demands flexibility but there is a limit to everything. The company needs to consider also its own targets and mission. Prahalad & Ramaswamy (2004, 6) argue that it is important to understand what co-creation is not, it is not a transfer or outsourcing of activities, or marginal customisation of products and services.

Prahalad & Ramaswamy argue that transfer or outsourcing of activities is not value co-creation. Vargo & Lusch on their side argue that to be service-oriented value is co-created with the customer and that it is one of the foundational principles of the logic. When it comes to software and service, hosting service for one represents the service-orientation in the software business. For the customer hosting service is merely an outsourced activity. According to Prahalad & Ramaswamy, the value cannot be co-created in this type of relationship. There seems to be a slight contradiction between these aspects.

Despite the contradiction within the understanding of what type of service is value creation the case company needs understanding and insight on how value creation can be managed. Prahalad & Ramaswamy (2004, 5) have created a new frame of reference for value creation represented in Figure 2. The frame of references gives guidelines for value co-creation which may be the key to success if planning a shift to a service-dominant logic. What Prahalad & Ramaswamy (2004, 6) want to emphasise is that managers attention is needed in the co-creation experience in terms of quality and quality is dependent on the whole infrastructure between companies and consumers.

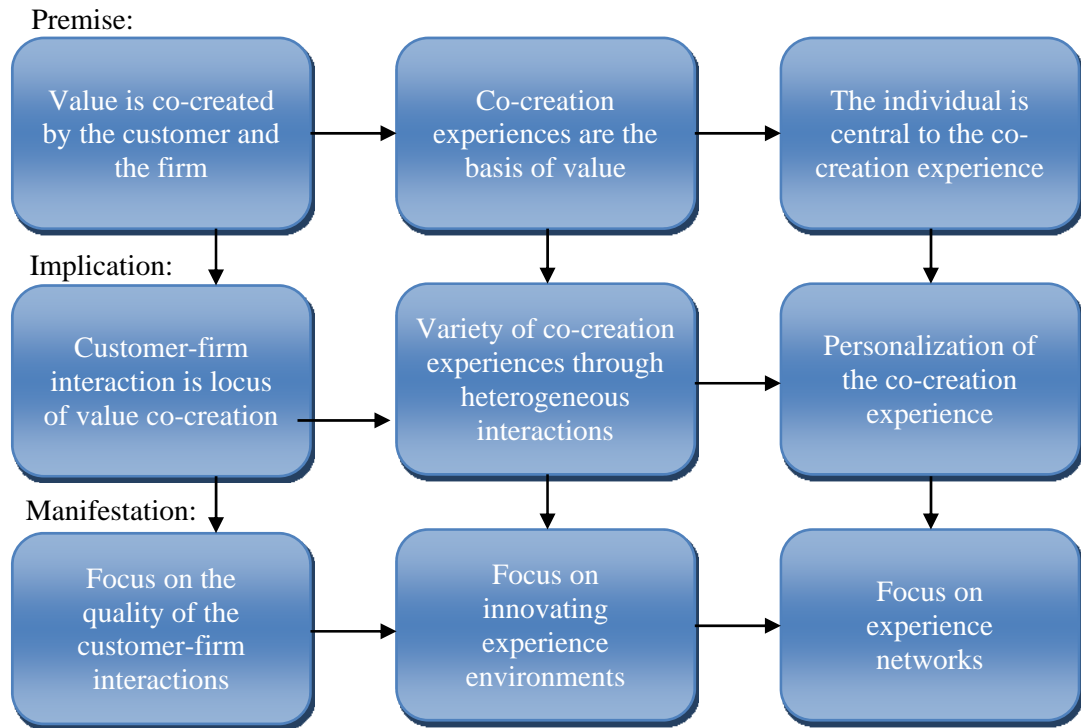


Figure 2. The new framework of reference for value creation

What can be summarised from the framework in Figure 2 is that customer is the key of value co-creation; interaction is the basis of it and experience is the determinant of the whole process. The customer, the interaction and the experience should be the key aspects when the case company is building its processes towards service-dominant logic. Value and how the company creates it and the demands set by the new logic are important aspects when planning the shift and implementation of service-dominant logic for the company. The current attitudes, positions and sources of value of the company will be discussed and reflected towards the theory framework in the latter part of this work.

Hitherto the focus of the discussions has been around two of the key elements of service-dominant logic, service and value. These were the basics that determine many of the rules in service-dominant logic and therefore demand a thorough understanding. The discussion has already set some grounding on the discussion what service-dominant logic is in the software business. The next chapters will continue the analysis around service-dominant logic and the software business but also move further into the analysis on the competences needed to have the logic.

3.3 Service-dominant logic – the new business logic for the software business

There are several concepts for the same phenomenon, service-orientation, service-centred view and service-dominant logic. The discussion is around the same phenomena: service and its role as a fundamental unit of business and exchange but the level is different. Service-orientation was discussed in the chapter 3.1 and service-centred view and service-dominant logic will be discussed within this chapter and the following chapters.

It is important to understand that the context is the same but the level of discussion is different. Vargo & Lusch (2004) have gone further than others and introduced the framework of service-dominant logic and they have continued its development. The purpose of this thesis is to create an implementation plan for the case company on service-dominant logic. Before this can be done, an understanding on service-dominant logic in the software business needs to be gained. The main elements of service-orientation, service and value, were already discussed and below the focus is purely on the service-dominant logic.

Vargo & Lusch (2004, 12) suggest that the service-centred view of exchange implies that the goal is to customise offerings, recognise the customer as the co-producer and strive to increase the customer involvement in the process. The focus of operations is on the customer. The company should shift their focus to the customer and through co-operation with the customer to produce the best possible solution for the customer. In the service-centred view, the source of competitive advantage is in “operant resources”, defined more in detail in chapter 3.1, as core competences (Vargo & Lusch 2004, 12). Vargo & Lusch (2004, 3) define operant resources as the primary resource of the logic. In the software business competences are often resources such as man power who themselves possess the competence such as skills and knowledge on a particular programming language. It is not enough to possess these resources but they must be developed and coordinated to provide value (Vargo & Lusch 2004, 13). Competences and service-dominant logic discussion will go deeper in the following chapters 3.3.2 and 4.

In the service-centred view, from the point of view of marketing the goal is to make better value propositions than those of competitors (Vargo & Lusch 2004, 5). The

interpretation of value has changed as the focus has shifted from the goods-dominant into the service-dominant perspective. Earlier it was presumed that value is embedded in products and therefore value is exchanged when the customer purchases the product. Together with the service-centred view the interpretation of value changed, it is no longer about value-in-exchange whereas value-in-use. Product, service, solution, they all possess value potential but the real value is experienced while using a product or a solution. Therefore, the case company can only make value propositions.

According to Demirkan et al. (2008, 356), service-orientation is emerging on multiple organisational levels of business. The challenge set by the new logic, i.e. service-dominant logic, is for marketing to become the predominant organisational philosophy; to lead and coordinate market-driven perspective for all core competences (Vargo & Lusch 2004, 13). The focus is of the customer and the needs of the customer in all operations. Offering is no longer standardised and the focus is on customisation, which in large entities, are complex to manage. Companies have to be able to offer competences in various areas, also in areas that may not be their core business. For a company to be able to focus on core competences it is necessary to establish resource networks and outsource necessary knowledge and skills to the network. (Vargo & Lusch 2004, 13.) According to Michel et al. (2008, 4), some companies still try to carry out all activities within their own organisation only to realise that it is a significant strategic disadvantage when compared to competitors.

Seth & Sharma's (2008, 261) identification on service-centred view implies that customised offering fits better to customer's needs. They also suggest that companies should identify resources, both internal and external to better satisfy customer's needs. Companies that adopt service-centred business model develop networks that allow companies to offer solutions to customers that may involve outsourcing. Consulting is seen as a framework that would enable marketers to evaluate the service that the customer needs and also provisioning the service. (Sheth & Sharma 2008, 261.)

One very important feature is present in all service-led views on business operations and that is customisation. Customisation is one of the key elements in the software business. Especially in business-to-business world there hardly is a software product that as such is suitable to every company. There are some widely spread products, for example in business management and enterprise planning. However, I believe that there has been

some customisation done within the product to be able to truly fit the product to the needs of particular customer. In the project-based business where the case company is in, the focus is merely on competences. Customers buy knowhow skills and resources, not products. This overview on service-centred view from different authors has already lifted up some commonalities such as focus on core competences, customisation and networking. As good as it is for the case company to know that there are slightly different views in the same matter the focus from now on is in answering what service-dominant logic is in the software business, why it is important and what demands does it set for the competences of the case company.

3.3.1 Foundations of service-dominant logic

The fundamental work for the competence development as well as the implementation plan for the case company is built upon the foundations of service dominant logic. According to Lusch & Vargo & O'Brien (2007, 5), service-dominant logic is grounded in a commitment to processes with customers, partners and employees. It challenges management in all levels to be of service to all the stakeholders and recognises the network of value co-creation (Lusch et al. 2007, 5). The framework of service-dominant logic is based on eight foundational principles (Vargo & Lusch 2006, 44):

1. The application of specialized skills and knowledge is the fundamental unit of exchange.
2. Indirect exchange masks the fundamental unit of exchange.
3. Goods are distribution mechanisms for service provision.
4. Knowledge is the fundamental source of competitive advantage.
5. All economies are service economies.
6. The customer is always a co-creator of value.
7. The enterprise can only make value propositions.
8. A service-centred view is customer-oriented and relational.

Vargo & Lusch (2007, 8) developed their work further by adding the ninth foundational principle into the service-dominant logic: Organisations exist to integrate and transform micro-specialised competences into complex services that are demanded in the market place. The ninth principle was further developed and rewritten in the following form:

All social and economic actors are resource integrators (Vargo & Lusch 2006, 52-53). These foundational principles of service-dominant logic have caused discussion in the scientific circles and therefore some of the wording of the principles has changed during the development process that Vargo & Lusch have done with their framework. To really understand the essence of service-dominant logic and what it may be in the software business these foundational principles need more thorough analysis and discussion.

The application of specialized skills and knowledge is the fundamental unit of exchange. Every person has a set of operant resources. Operant resources are physical and mental skills of a person and the distribution of those skills is unequal among population. Therefore, people need specialisation in order to be efficient in the society. The idea of specialised skills as a fundamental unit of exchange is evident. It is more efficient to exchange the output reached through specialised skills than to try to specialise into more than one area. (Vargo & Lusch 2004, 6.) Lusch et al. (2007, 8) point out that competitive advantage is a function of how one company applies its operant resources to meet the needs of the customer relative to how another firm applies its operant resources.

Skills and knowledge can be learned and for the case company this means such as different technologies. In the software business there is a variety of technologies that are used in solutions, therefore CCC and its personnel have to be specialised in some of them to be good and competitive. Through specialisation efficiency can be gained and the offering targeted. In business-to-business markets, the operating field of the case company, solutions are more or less tailored to fit the customer's needs, which in turn mean that it is not enough to understand the technology to be used to build up the solution but it means also knowledge on the customers' business and processes. Application of skills and knowledge as a unit of exchange fits to the software business as there are hardly any standardised, plug-and-play solutions for businesses in the markets. Therefore, also CCC sells its skills and knowledge to the customers, which in the end produce the solution.

Indirect exchange masks the fundamental unit of exchange. Industrial revolution moved the exchange from one-to-one trading of specialised skills into the indirect change of skills in vertical markets. Especially manufacturing skills were mechanised, standardised and broken down into skills that had increasingly narrow purposes hence

the micro specialization. People and their skills became part of the process and were no longer in direct contact with customers. People with specialised skills are lost in the processes of a company and wholesalers and retailers that are used in distribution are further masking the nature of exchange. (Vargo & Lusch 2004, 8.) Vargo & Lusch (2004, 8) state that money, goods, organisations and vertical marketing systems are only the exchange vehicles.

Individual, project team, project manager, key account manager, these represent the team of the case company that is involved in the value creation process. Throughout the process different people have applied their skills to create something beneficial to the customer but not necessarily all the persons interact with the company representatives and are therefore left behind the mask. Another important factor masking the exchange is internet. As the Internet enables delivery of a product or a service and makes it impersonal which in turn further masks the exchange.

Cloud computing and software-as-a-service may represent the future operation models, which will mask the exchange. In the case of CCC the steering group meetings, tailor-made solutions, co-creation with the customer and working, occasionally, in the customer's premises alongside their teams are evidence that people are not only parts of processes. The exchange as such, delivery of the solution, may be masked especially if there is a continuation of support and maintenance services. One of the most important aspects when considering the mask and exchange is the position that the company has in the software delivery chain. Being supplier's supplier will result in invisibility for the customer. For the case company the aim is to be close to the customer, the trusted partner and through it maintain the contact with the customer and fight against the mask.

Goods are distribution mechanisms for service provision. If the focus of economics is on manufacturing, tangible products as a fundamental unit of exchange is relevant. However, the focus of exchange has moved beyond the exchange of goods. (Vargo & Lusch 2004, 8.) Internet as a channel of information is one of the reasons behind the change. Customers can obtain information more widely than before and therefore can and know how to demand more. According to Vargo & Lusch (2004, 8), the role of goods as a common denominator of exchange is over. In today's marketplace the common denominator for exchange is the application of specialised knowledge, mental

skills and physical labour, though in a lesser extent. Exchange where knowledge and skills can be transferred has three forms: direct exchange, through education or training, or indirectly by embedding them in objects. (Vargo & Lusch 2004, 9.)

Software replaces workflows and processes that have been so far done manually. It is more efficient way of working and processes can be automated. In the service-dominant logic goods are seen as distribution mechanisms and the unit of exchange is knowledge and skills. In the software business and in the operations of the case company much of the skills and knowledge are embedded in a product or a solution and customer receives the knowledge in package that knows how to perform, i.e. automated processes. Ready-made product may function as a platform for a solution or as a platform for customer operations. The case company can also transfer knowledge directly for example through consulting. Another form of knowledge transfer is training programs to guide and provide skills for the future operations using the new products and solutions. Customers are guided in the usage of products and solutions also to guarantee that they can gain the best possible value-in-use.

Knowledge is the fundamental source of competitive advantage. Knowledge, as stated in earlier paragraphs is an operant resource and the foundation of competitive advantage. Economic growth and wealth may also be attained through knowledge. Knowledge as a resource of competitive advantage can be applied throughout the service-provision chain. Even though goods-centred model viewed physical flow as a main flow in the chain, it recognised the existence of information flows. (Vargo & Lusch 2004, 9.) Vargo & Lusch (2004, 9) argue that the primary flow is information and that service is the provision or use of information to a consumer that desires it.

For the case company, and also quite often in the software business, a product may be partially involved in the process, but rarely business as such. Knowledge is what is sold and it is also the source of competitive advantage; knowledge on technologies and platforms, customers' businesses and processes and understanding of industries. This in turn leads to information flow. Knowledge and skills, therefore also information, are the basis of the solution to be built for the customer and therefore what the customers seek from potential providers is the knowledge. The information as well as knowledge is used when the customer requires it or as it is seen beneficial to the customer.

All economies are service economies. There has been the tendency to describe economies in terms of the types of output or operand resources (Vargo & Lusch 2004, 10). Operand resources, as explained earlier in chapter 3.1, refer to products or units of output, static, usually tangible resources that must be acted upon to be useful (Lusch et al. 2007, 8). Vargo & Lusch (2004, 10) present that economies might be better viewed as macro specialisations which are characterised by the expansion and refinement of some particular type of competence. Industrial economy as an example can be viewed by the refinement of knowledge and skills for large-scale mass production and organisational management. The common denominator in this type of approach is the increased refinement and exchange of knowledge and skills. (Vargo & Lusch 2004, 10.) The importance of service has increased over the years and only now it is becoming more apparent as the specialisation in the economy increases and the demand is for more specialised outputs. Services and the operand resources have always been the essence of economic activity (Vargo & Lusch 2004, 10).

In the case of CCC it can be said that it is a service economy as it does not have standardised products whereas it uses its skills and knowledge to provide service for the customer and the end result may be in a form of a good. In a way all economies are service economies. If they do not serve customers as such they serve other operators in the network. For the company to succeed in the market place and competition it has to make choices. The key is specialisation. There are product companies that in a sense serve companies similar to CCC that does not have its own products or the resources to build products and has sharpened its competences to a different set of functions. On the other hand for the product companies, companies such as CCC who implements, maintains and customises the products to fit the customer's needs and operating environments boost their sales and support their sales and activities. In the sense of what Vargo & Lusch have presented, the case company is a refinement of skills and competences on lifecycle management of software projects and solutions. When considering the software business there are also other types of installations that have their place in the value chain for example, software product development and manufacturing or hosting services.

The customer is always a co-creator of value. In the service-centred view goods are seen as appliances that provide services for customers. By using the product, the customer is continuing the marketing, consumption and value-creation and delivery processes. The

emphasis is on continuous-process perspective where production and consumption are not two separate processes. Understanding the customer as a co-producer is seen as an advantage. (Vargo & Lusch 2004, 11.) Vargo & Lusch (2004, 11) define the customer to be an operant resource rather than operand resource i.e. customer is merely a co-producer than the target of the production. As a co-producer customer is involved in the entire value and service chain acting on operand resources (Vargo & Lusch 2004, 11).

For the case company customer is a partner. Customer is often the co-creator of the solution and is involved in the process throughout the chain. Customer is present in the definition phase and is working alongside the provider and testing the solution. Customer throughout the process is using the results of the process so far and developing it further with the company. In this sense the production and consumption are not that separate from one another. Customer is co-creating the value throughout the process in addition to the actual usage where the customer as a user of the solution can also create value by saving time and resources as an example as the solution has enhanced its processes by automating processes. In service-dominant logic the view of value-in-use is emphasised. Value is also created by the usage but in the software business the customer is so closely involved in the whole process that actually the customer is creating the value potential, embedded value, together with the service provider. For the case company the aim is to have life-time partnerships with customers and therefore the emphasis is on life cycle management.

The enterprise can only make value propositions. As discussed already in chapter 3.2, there are two ways value can be interpreted and delivered: value-in-exchange and value-in-use. According to Vargo & Lusch (2004, 11), the concept of embedded value, i.e. value-in-exchange is inadequate. This has led to presentation of customer-oriented approach where the focus is on finding the embedded value useful (value-in-use). The perception of value in the service-dominant logic is that companies can only offer value propositions. It is the customer who determines value and is involved in the co-creation process of value. If a tangible good is part of the offering, it can be embedded with value potential. It is the customer, who must understand the value potential that is transferable to specific needs through co-production. (Vargo & Lusch 2004, 11.)

In business-to-business markets, where the case company is operating standardised products are rare and most if not all service or products acquired need customisation. In

this installation the aspect of value propositions is evident. CCC can only sell references, skills, knowhow and the potential value that those elements and success stories possess. Hence the company can only make value propositions. It is the customer that analyses do they really possess the value potential that is proposed and is it for suitable for their demands.

A service-centred view is customer-oriented and relational. Vargo & Lusch (2004, 11) present that interactivity, integration, customisation and co-production are the essence of service-centred view. The main focus is on customer and the relationship with customer. The essence of the logic is doing things with the customer not for the customer. Exchange is driven by the individual customer's perceived benefits from the offering of potential exchange partner. Single transaction or relationships in either case a company is not freed from the normative goal of viewing the customer relationally. Even discrete transactions have contract warranties that contain promises and assurances for extended periods. (Vargo & Lusch 2004, 12.)

The aim of the case company is to be a strategic partner of the selected customers. The nature of the business, customised and tailor-made large solutions, require close relationships with the customer as well as tight co-operations. Building up the knowledge base, not only from the technological side but also in terms of customers' processes and the industry, is time consuming. Therefore, the emphasis is on long-term relationships; developing, producing and creating together to get the best possible solution rather than on a single transaction. Also organisation structure is at least partially formed around customers, which is seen in a form of key account managers, account management groups and customer business units. In the relationship with the customer there are usually frame agreements that define for example contract warranties, promises and assurances. In the software business contract conditions are dictated in frameworks, for example IT 2010 and JIT 2007, which are used by the public sector but also among companies in the private sector. The service-orientation has been recognised already in these contract conditions as for example service level agreements are described in there.

All social and economic actors are resource integrators. People are becoming increasingly micro-specialised in terms of work outputs. What service-dominant logic suggests is that entrepreneurs (companies) bundle these micro-specialised people and as

a joint effort they are able to create service that people want. Organisations are therefore seen as integrators of individual competences. Service-dominant logic further suggests that organisations exist because they are able to envision service that people want, are willing to pay for, and to integrate together micro-specialists to offer and provide this service. (Vargo & Lusch 2006, 52-53.)

People and also companies are becoming micro-specialised. Also the case company has focused on core competences hence become micro-specialised and therefore it needs to establish networks to be able to serve customers. It is not enough to have competences and specialisation on technologies, also the business and the operations of the customers need to be understood. It is costly to possess competences in many areas and building up the knowledge and skills related to those, it is also time consuming. Therefore, CCC has focused on core competences and specified segments of industry among their customers in order to be profitable. Networks have been established with other organisations, which have their own area of expertise, to be better able to provide complex and broad solutions for the customers. In that sense the case company is an integrator of micro-specialists.

The foundational principles of the service-dominant logic were applicable in the software business and the practical view of all the principles was gained through the operations and business of the case company. To answer the question what service-dominant logic is in the software business some elements can be distinguished. Service-dominant logic is a business model, a strategy and therefore gives the overall guidelines or elements according to which the company should shape its operations and plan the implementation. Understanding that value is experienced in use and the value is co-created with the customer has among the most far-reaching effect. Hence the company can only make value propositions. Customer is the focus of the business and therefore customer-orientation is needed in all operations of the company. The change in value creation and focus on customer-orientation in turn are additional drivers of specialisation which has already been forced by the competitive situation in the markets as well as the nature of the market. As value is experienced in use the nature of business is shifting from one-time delivery into a process where operant resources play an important role. Knowledge is becoming the source of competitive advantage as information and knowhow are key elements in close co-operation and that is what service-dominant logic will bring to the business.

Until now the discussion has been on what service-dominant logic may be in the software business but it has already brought up issues that explain the importance of service-dominant logic for the business. Volatile market, demand for customisation, specialisation and pressure for cost reductions are some of the reasons why service-dominant logic may be important in the future. Products demand high investments in their development and in turn the revenue gained from them is one time off. For a small and medium-sized company such as CCC, product-based business model, which demands high investments, is difficult as it would demand for high volumes of sales. Also in the business-to-business markets the demands, core processes and systems vary heavily between industries and customers hence it is difficult to produce a product that could be applied within many companies.

Also the pressure to cut costs in the ever evolving market has led to specialisation among companies. As companies are becoming more and more specialised and customer demand for comprehensive solutions for ever more complex entities makes it rather impossible to deliver ready-made solutions and hence customisation is needed. Not only is there a demand for customisation but customers are willing or even demand for participation in the creation process. This means that the service is co-created and therefore service-dominant logic as a business model is justifiable and its importance is proven. As was already said product and project represent a business of one-time delivery, where no interest on the future is shown. Service-dominant logic presents merely a life-cycle management view of the business when there is always a continuation, maintenance, development, renewal, changes and through it better earning possibilities can be gained.

What and why as observation points on service-dominant logic have brought up a cyclic pattern between service-dominant logic, service-orientation and customer-orientation. Service-dominant as stated many time before is a business model, a strategy which sets the general provisions for the operations of the company. Service-orientation in turn is about bundling resources such as skills and capabilities together and offering them to the customer in a form of service. Customer-orientation as stated earlier is the focus of the business; understanding, developing and so on which in the end leads to customer loyalty, to a partnership. To make it short service-dominant logic sets the framework for operations and guides the company to operate according to service-orientation which

leads to customer-orientation as a focal point of business and hence customer loyalty which in turn leads back to the service-dominant logic.

Until now the elements of service-dominant logic in the software business as well as its importance for that particular business have been identified and discussed. The foundational principles of the logic have guided this process. The foundational principles of the logic also give guidelines for the competence analysis of this thesis work. The discussion on competences needed for service-dominant logic gains depth through an analysis of service and its impacts on project business in the next chapter.

3.3.2 Building up competences for service-dominant logic

One of the purposes of this thesis is to find out competences that are needed for the company to be able implement service-dominant logic. As the case company has been project-oriented since its establishment and it is quite often the nature of the software business, the discussion by Wikström et al. (2009) on services and their impact on project business gives additional boost to the analysis on competences. On the discussion around foundational principles of service-dominant logic, in the chapter above, such competence areas as skills, knowledge and customer relationship management, for example, were found. The aim is to continue the discussion around the needed competences for the case company to possess service-dominant logic.

Even if the company is focusing on service it does not necessarily mean that it has service-dominant logic as a business model. In the field of project-based companies Wikström et al. (2009, 117) identified three main phases, presented in the Table 2 below, in the maturity of a company when adding service into their business model: goods-dominant, customer-centric and business-dominant. The third phase of assessing the maturity is called business-dominant, as Wikström et al. (2009, 117) want to emphasise the overall business model rather than only the service. Table 2 represents an ideal framework to analyse the case company and its present situation in terms of its business focus. Dimension identified by Wikström et al. (2009) offer a check-list for the important points where to analyse the current position of the company towards service. In the empirical part of this thesis the goal is to get answers to some of the most

important dimensions presented in the Table 2 to be able to define the company's current position.

Table 2. Model for assessing a company's maturity in delivering service

Dimensions	PHASE		
	Goods-dominant	Customer-centric	Business-dominant
Goal	Best product	Best solutions	Best process for benefit
Value creation route	Cutting-edge products	Customising for best total solution	Customer co-created value
Mental process	Possible uses for product	Best combination of products for customer	Combination of skills and resources for best value-in-use
Organisational concept	Product profit centres	Customer segments	Formation around natural workflows
Most important procedures	New product development	Customer relationship management	Three core processes, marketing is an integrator
Measures	New products, market share	Customer satisfaction, retention	Customer equity, satisfaction, lifetime value
Culture	New product culture	Relationship management culture	Decision begin with the customers and opportunities profit
Most important customer	Most advanced customer	Most profitable, loyal customer	Co-creating, co-innovating customer
Priority setting bases	Portfolio of products	Portfolio of customers	Portfolio of skills and resources
Main offering	Specific products	Personalised packages of services	Value propositions
Approach to personnel	Power to product development	Power to customer knowledge	Power to business developing
Sales bias	On the side of the seller	On the side of the buyer	Balanced

When a project is the core offering of a company its cost or the financial scale of it influences on whether to include the services in the offering. Adaptability and flexibility of both the technology of a company and an organisation itself are essential part of the change and may act as either driver of the change or as an entry barrier. If a company has a supplier network, it is one of the elements that allow adaptation of larger service offering. (Wikström et al. 2009, 118.) The case company has already started to build its own network to be better able to respond to the needs of its customers'. Established

network also means that the company is able to offer broader projects and has better flexibility as it has larger resource pool through suppliers in the network. Even though the established network potentially enhances the transition into a service organisation, it still demands a lot of effort and flexibility from the company itself to adopt a new way of conducting business.

The degree of maturity in project-based business can be analysed through the framework presented in Table 2. To increase the maturity in delivering services companies need to change from product-focus to customer-focus in the offering and organisational setup should change to customer segments. The complexity of the core project content provides opportunity for service-enhanced project deliveries. (Wikström et al. 2009, 120.) The complexity of project business based on the work of Wikström et al. (2009) is analysed through different drivers.

Wikström et al. (2009, 121-122) argue that most relevant complexity drivers are: unit cost/financial scale of project, variety of distinct knowledge bases, extent of embedded software in the product, degree of technological novelty, variety of skill and engineering outputs and degree of customisation of final system. Based on the framework presented in Table 2 and the complexity analysis presented above Wikström et al. (2009, 118) were able to define a typology, Figure 3, of four business logics for project-based companies.

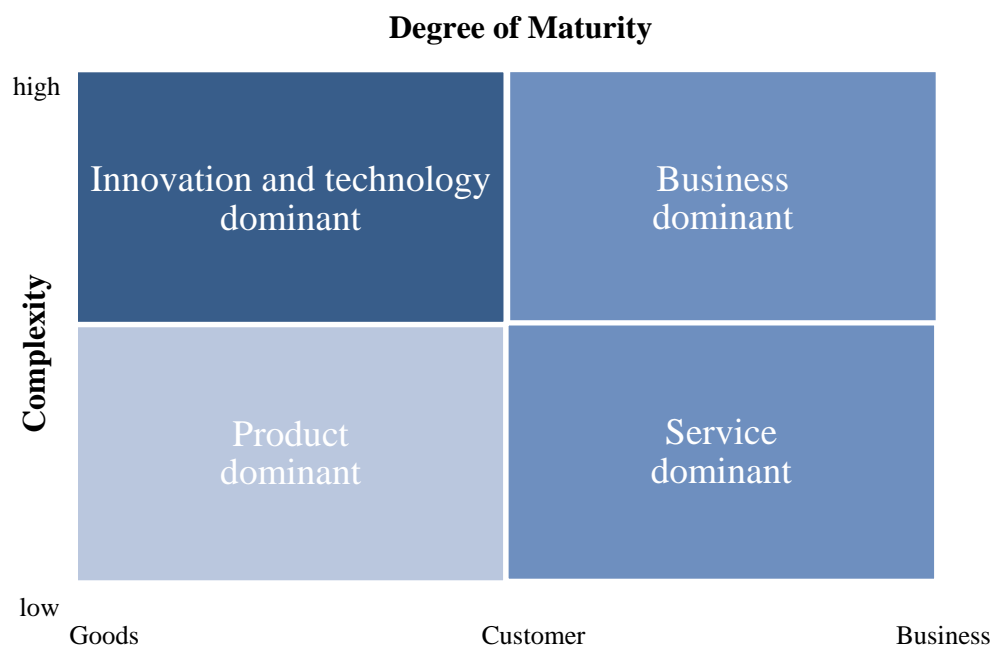


Figure 3. A typology of four business logic in project-based companies

With the help of these tools and the interview questions the current position, in terms of business logic, of the case company is possible to define. The position is a starting point for the implementation plan towards service-dominant logic and therefore the identification of it is critical. By considering some of the complexity drivers of project business, similarities or evidence on the complexity of CCC's businesses can be found. The core business of the case company is in the strategic business processes of the customer. Products and ready-made platforms may be used as a starting point for a project but in the end the solutions are customised and tailor-made for customer's needs and demands. In addition to technical knowledge and experience the projects demand thorough knowledge on customers' business and business processes.

As the case company is considering the change towards service-dominant logic, the process is more than the shift from project-oriented to a service-oriented business. Even though the company shows signs towards service-dominant logic, it is about shaping the processes and most importantly the thinking models of the whole organisation. Vargo & Lusch (2007, 3-4) point out that equally important is the shift to be made in the logic of exchange. Service-dominant logic requires changing the unit of the analysis from products to value creation and operant resources, resources that are intangible, dynamic resources that are capable of creating value. (Vargo & Lusch, 2007, 3-4.)

Wikström et al. (2009) developed the framework, Table 2, where service-delivery was assessed. Within this Table 2 business-dominant column represents largely the domains and features of service-dominant logic and enable competence development. Value co-creation, customer, combination of skills and resources, best value-in-use, life-time value, co-creation and co-innovating as terms resemble issues raised by Vargo & Lusch in their foundational principles of service-dominant logic and reinforce the competences developed earlier as necessary to possess for the service-dominant logic.

In competence analysis, the different dimensions need to be understood. The distinction has to be made between organisational competences and individual competences. Man & Lau (2002, 132) define organisation competences as follows:

- Opportunity competences relate to recognising and developing market opportunities.

- Relationship competences relate to interaction between individuals or an individual and a group.
- Conceptual competences relate to different conceptual abilities which are reflected in the behaviour of the management of the company.
- Organising competences relate to the organisation of different internal and external, human, physical, financial and technological resources.
- Strategic competences relate to setting, evaluating and implementing the strategies of the company.
- Commitment competences drive the management of the company to move ahead with the business.

Analysing competitiveness is not only about the assets and potential but also the process for doing so. In addition the link between organisational performance and individual skills is important to recognise and understand its effects on the business performance (Man et al. 2002, 127; 131). In addition to the dimension, potential, process and performance, Man et al. (2002, 128) identified four characteristics that should take into account when analysing the company's competitiveness. The characteristics are long-term orientation, controllability, relativity and dynamism (Man et al. 2002, 128). Hence the case company should aim for competitiveness with long-term orientation which can be controlled through resources and capabilities. Long-term competitiveness should also be based on resources and capabilities. The competitiveness is relative to as it is compared to the whole industry and dynamism should be pursued to be able to develop new competences (Man et al. 2002, 128).

Discussions about maturity in delivering service together with the foundational principles of the service-dominant logic have lifted up quite similar themes that direct the path in competence discussion. Customer-orientation, value co-creation, skills and resources as competitive advantage, networking and business as a process or life-cycle management are the targets to which the company should aim in order to have service-dominant logic. There are connections between these elements and they should not be treated as separate entities. The competences needed for service-dominant logic can be found under these elements.

Keeping in mind the targets and principles behind the competence discussion so far the analysis can continue. Competences can be viewed in through the setting presented by

Man et al. (2002) which was presented above. The first set of demands the service-dominant logic poses for the company are the strategic competences as the company has to define and evaluate how to formulate their strategy as the logic provides only the principles to follow. In the implementation phase strong leadership is needed and the management has to have the ability to motivate the personnel through the change. Most of the commitment competences are needed especially when going through the change.

As the main focus of the logic is on co-operation and co-creation relationship competences are in the top of the list. Communication and interpersonal skills is the key when something is produced jointly whether the partner in the process is the customer or another subcontractor. Communication and interpersonal skills arise into an important role also as the change process is on-going within the company. According to the service-dominant logic, specialisation is needed from the company and hence networking is emphasised to gain better resource availability. Working in networks demands relationship competences especially as the common goals and target need to be communicated and co-operation assisted to guarantee the working towards the common goal. In networking trust is an incremental part of the relationship and hence also a competence. Networking sets also other demands on competences and these are network management skills; resources need to be managed, the relationship maintained and the joint processes need to be fluent.

To be able to create value operant resources such as skills and knowledge are needed and have to be acted upon. Therefore, the demand for organising competences becomes evident. As there no longer is no physical product the value proposition and creation is dependent upon skills and resources. The company has to be competent in organising and team building in terms of resource management and development. To be successful the company has to have competent resources in terms of skills, knowledge and experience and enough resources on needed areas to be able to provide service.

Service-dominant logic is not about single product, project or service. It is about the process of delivering best possible value for the customer through co-creation and co-innovation between the company and the customer. Hence process is one of the demanded competences of the logic, a conceptual competence. Service-dominant logic is about shared life-time value and long-term partnership where the common goal is to help the customer to develop its business forward. In addition the company has to

understand that it is also an internal process, where the thinking models and workflows have to be natural but service- and customer-oriented.

In service-dominant logic customer is evident in all operations hence customer-orientation is one of the targets of this type of business. From this point of view the logic demands for a certain type of mind set, and attitude, willingness for co-operation and keeping the customer as a beginning of every decision. Innovativeness can also be lifted as a competences demanded in this business model. The company has to be able to keep up with the ever changing market and be able to offer solutions and development ideas for the customer, the partner. Customisation being the key in customer demand, the company has to be flexible and innovative to be able to offer such combinations of skills and resources that respond to the need. Ability to gain and analyse information through business intelligence is an incremental part of innovativeness and resource development.

By far the competence discussion has been mainly on the organisational level and as Man et al. (2002) pointed out there are also individual competences and characteristics that influence on the performance of the company. Service-dominant logic that is heavily tied on resources and skills as a main source of value is therefore also heavily dependent on individual competences. Skills, knowledge and experience, technological and industry related, are strictly tied to persons. Even though some knowledge transfer can be made among personnel the company is heavily dependent upon the individuals and their individual competences. The transition into a new business model demands a change in the thinking patterns of the personnel, willingness to learn and change and commitment on the new strategy. Many of which are dependent on the leadership of the company and how the transition is communicated.

Efficient development and co-ordination of skills and knowledge are important competence areas as well as understanding of the company's inability to possess all the skills and knowledge needed to be able to deliver large applications, systems or service. The focus should be on those areas of skills and knowledge that support the main offering of the company. Resources, skills and knowledge, are the main elements of value propositions that are the basis of service-dominant logic. Through efficient networking and network management the company can concentrate in their core business and customer relationship management as additional skills, knowledge and

resources can be acquired through partners. Network management plays an important role as all the players in the process of value co-creation has to share the same view of service-dominant logic and how value is created.

The company can only make value propositions on the basis of its skills, knowledge, resources and experience and customer experiences value-in-use. The aim in terms of value should be life-time value, life-time value of the partnership between the company and its customer. In service-dominant logic the business is merely a process, a partnership rather than a time defined delivery. In service-dominant logic the business is not so much about the solutions or service whereas life-cycle management of customers' processes and operations.

The discussion above presents a set of competences derived from the theoretical discussion on the matter. It is a set of competences that enable the case company to build itself towards service-dominant logic and the needed capabilities. As a continuation to the competence discussion are the articles of Teece & Pisano & Shuen (1997) and Eisenhardt & Martin (2001) on dynamic capabilities that form the framework around competence development in the next chapter. Discussion around dynamic capabilities deepens the competence discussion gives it an orientation to the future and how to gain these competences. It is not enough that the competence have been defined for the service-dominant logic. The development, management and co-ordination are an important part of the change as the company moves towards the new business logic.

4 COMPETENCE DEVELOPMENT AND STRATEGY FORMATION

Competence definition for the service-dominant logic was one of the purposes of this thesis, and part of the building blocks for the implementation plan. This competence definition was started in chapter 3.3 and its sub-chapters. The competences defined so far apply on the industry level, Even though they have been discussed through the case company. Dynamic capabilities represent also the framework around core competences that will be used in the empirical part of this study. The aim is to find out the current competence domains that the company possesses. In addition to competence development an important part of this thesis is the strategy formation or the implementation plan for the case company. There are obstacles in every change and the obstacles of strategy formation more precisely the building up of the implementation plan are discussed in the latter part of this chapter.

4.1 Developing competences

Teece & Pisano & Shuen (1997, 513) have built a dynamic view of the business enterprise, which enhances the probability of establishing an acceptable descriptive theory of strategy that can assist in the building of long-run advantage and competitive flexibility. Teece et al. (1997, 514) emphasize that resource-based perspective focuses on strategies for exploiting company's existing firm-specific assets. Companies that can demonstrate delivery accuracy and rapid and fast product innovation together with effective internal and external competence management have the competitive advantage and are winners in the global marketplace. The ability to achieve new forms of competitive advantage is referred to as dynamic capability. The term dynamic refers to the capacity to renew competences and capabilities to the key role of strategic management in appropriately adapting, integrating and reconfiguring internal and external organizational skills, resources, and functional competences to match the changing environment. (Teece et al. 1997, 515.) For the case company, this renewal and management of competences is important to be successful in service-dominant logic.

Dynamic capabilities are the abilities or competences that are the essence of a company in delivering value (Eisenhardt & Martin 2001, 1107). For the case company

competences mean for example skills and knowledge on programming languages and development platforms as well as knowledge on the customer's business operations. Eisenhardt & Martin (2001, 1107) point out that dynamic capability can be strategic and organisational processes such as resource integration, a strategic decision making, or re-configuration of resources, which aim at value creation. Good learning mechanisms are the key in developing and evolving of these capabilities. Value of dynamic capabilities is placed on resource configurations and on the ability resources possess. This type of resource-based view enables identification between the routines and processes and their relationship to resources and resource alterations. Hence value of dynamic capabilities can be defined outside the company performance. (Eisenhardt & Martin 2001, 1106-1108.) Even though the case company may have competence domains, such as technical skills and business expertise, they are not enough. Therefore, for the competence domains to become core competences for the case company integration of the two separate assets is required. Equally important are the strategic choices that the company makes in regarding the fields of industry, core offering and execution methods.

Competitive advantage derives from competences, which Teece et al. (1997, 518) categorise into three groups: processes, positions and paths as presented in Figure 4 Sources of competitive advantage. Processes refer to managerial and organizational processes and routines, to the way the things are done within a company. Positions mean a company's resources, assets on technology, intellectual property, customers and suppliers. And by paths the reference is on the strategic alternatives that are available for a company. (Teece et al. 1997, 518.) As already presented in chapter 3.3.2, Man et al. (2002, 124) represent that three dimensions of competitiveness are potential, process and performance. These three dimensions are quite similar to the work of Teece et al. (1997). Man et al. (2002, 124) also point out that competitiveness is affected by internal firm factors, the external environment and the entrepreneur itself when considering small and medium-sized enterprises (Man et al. 2002, 124).

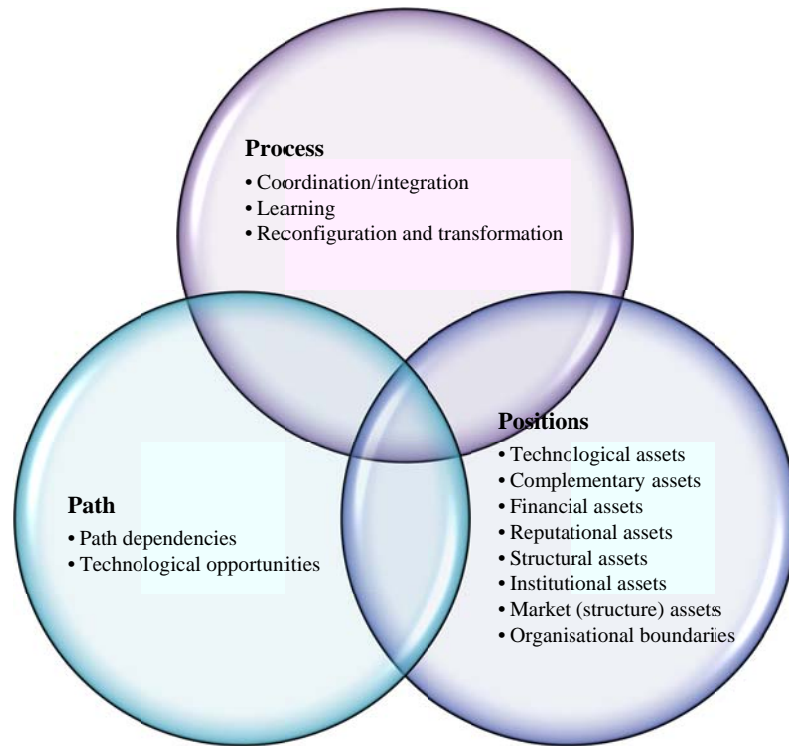


Figure 4. Sources of competitive advantage

According to Teece et al. (1997, 524), the essence of a company's competences and dynamic capabilities is dependent upon company's processes, which in turn are affected by the positions, assets, of a company and its evolutionary path. As important it is to recognise and develop dynamic capabilities and competences within the case company, there are some realities that companies should be aware of. Teece et al. (1997, 534) argue that the shifts in the environment represent a more serious threat to a company than the loss of key individuals. For a company it is more important to stay on the edge of development of the markets and operation environment. Skilled personnel in the end, is much cheaper than transforming organisations especially if the company has lost the advantage of the early shift. Another important aspect brought out by Teece et al. (1997, 524) is that routines can lose their value if they support a competence that is no longer relevant in the market place. No matter how good best practices or routines a company has, it will not bring customers and revenue if they do not support the need in the marketplace. Equally worthless are routines that competitors can easily replicate or emulate (Teece et al. 1997, 524).

On their own assets, processes or paths cannot be a core competence for the company. It requires an integration of more than one element. Positions or assets, such as

technological assets, are the resource that has to be acted upon for it to become effective and in the end there has to be an opportunity where to use the combination before value can be created. Customer-orientation is one of the targets of service-dominant logic. However, to gain the competences needed for customer-orientation, elements from all the domains identified by Teece et al. (1997) have to be integrated. Complementary assets, customer expertise, customer-oriented business processes in addition to the customer who is seen as a partner are the demands for customer-oriented business. All these elements together in the end are the source of competitive advantage.

Dynamic capabilities and resource approach is seeking competitive advantage from within a company, from its internal processes and routines (Teece et al. 1997, 528). Even though a company can require new persons to replace those that have left there are some internal competences that cannot be acquired or bought. These are competences such as value, culture and organizational experience (Teece et al. 1997, 528). The internal assets, for example skills and knowhow are not easily replicable. Firm capabilities need to be understood in terms of managerial processes, which support productive activity (Teece et al. 1997, 517).

In analysing competences the distinction has to be made between organisational competences and individual competences as was done also in the chapter 3.3.2. According to Man et al. (2002), the organisational competences are built around opportunity, relationship, conceptual, organising, strategic, and commitment competencies. For the case company that is a small and medium-sized company, the best potentials for competitive advantage are those ready to become operational. Man et al. (2002, 128) recommend that small and medium-sized companies analyse internal and external environment and their influence on competitiveness separately. A remark made by Jorma Kallio, the CEO of CCC (2010) supports the view of Man et al. (2002); a small and medium-sized company has to innovate all out if external factors demand it.

For the case company to develop core competences, the key is in managing, integrating and developing different competence domains. By domains the reference is on assets such as technological and industrial knowledge and experience, processes such as reconfiguration and integration of assets and lastly recognising the future potentials and opportunities that the market has to offer. The discussion has been mainly on organisational competences but also individual competences are important in this type

of equation. The demands set for individual competences were shortly discussed in chapter 3.3.2. A core competence of an individual as such rarely can be a competence in the market place. It needs building blocks around it for value creation. Competences are also an important part of the case company's future strategy as they define which are the needed developments and strong points for the company.

The starting point for competence development is the evaluation of the company's current position, reflecting the potentials of the future strategy together with market scanning. Through market scanning the needs for adapting, integrating and reconfiguring of internal and external organisational skills, resources and functional competences can be found. The essence of the company's competences is dependent upon the processes, strategic and organisational processes such as resource integration and strategic decision making, which aim for value creation. In the end good learning mechanisms are the key in developing and evolving of dynamic capabilities and competences.

Strategy and competences go hand in hand. If the company does not have competences needed for a particular strategy, it is unlikely that its business will succeed. Strategy formation sets the guidelines for the development process of competences but also there are many obstacles on the way of strategy implementation which should be recognised already in the strategy formation process. The next chapter 4.2 discusses issues that should be taken into account when developing an implementation plan for service-dominant logic as a future strategy.

4.2 Strategy formation

The competence development is an important part of strategy building and implementation. The aim of this thesis is to produce an implementation plan for CCC to have service-dominant logic as a future strategy. Hence all elements of the theory discussion need to be considered. Building an implementation plan is about developing a strategy and the needed steps to gain that strategy. The obstacles that the company may and quite often will face in the process need to be recognized and taken into account

while building up the implementation plan. Among the most important issues are how to plan and formulate the steps in the implementation process.

Lawrence Hrebiniak (2006, 12) analysed the obstacles of effective strategy implementation. He argues that managers are trained to plan but not execute strategies. Quite often the strategy implementation in companies is left to the lower levels of the organisation. The reality is that implementation demands ownership at all levels of management and people must be committed to the change. (Hrebiniak 2006, 13.) According to Hrebiniak (2006, 13), execution is the key responsibility of all managers. While building up the implementation plan for CCC the issues of responsibility, ownership and execution has to be taken into consideration or the new strategy will, most likely, fail.

Critical issues for strategy implementation within this work discussed by Hrebiniak (2006, 13-14) are the interdependence of planning and execution and coincident planning and implementation. Hrebiniak (2006, 14) argues that people responsible for the execution should be involved in the planning process. The duality of planning and doing is quite difficult to achieve especially for the purposes of the case company. Even though the internal development workshops have been taken into account and data retrieved from these workshops for the empirical part of the thesis, building up the implementation plan of this thesis is still going to be separate from the implementation. The only way to tackle this obstacle is to continue the development of the plan as the implementation process advances and to involve the people responsible of the execution more tightly into the development process.

Hrebiniak (2006, 14) points out that implementation is a process which takes a long time and that it involves many people, more than the strategy formation. There are many issues that have an effect on the company and may hinder the implementation of the new strategy. Therefore, there should be ways or measurements to control and follow the change. Strategy implementation involves many decisions and actions over time and the implementation plan presented within this thesis should not be forcefully carried out, rather it should be developed accordingly to adjust the changes in demands and within the environment. Establishing the involvement, ownership and commitment to the strategy implementation of this thesis may be the most difficult aspect to achieve as the implementation plan is developed in solitude within this thesis project. After the

involvement of the managers the second difficult step in the process is the involvement and commitment of the personnel. The strategy implementation and communication should go as far as to the daily routines of the personnel (Hrebaniak 2006, 15).

In addition to obstacles discussed above Hrebaniak (2006, 17) defined top five obstacles to strategy execution; inability to manage change effectively, poor or vague strategy, not having a model to guide implementation efforts, poor or inadequate information sharing and unclear responsibility and accountability and working against the power structure. Change resistance is likely one of the biggest obstacles in the implementation and therefore it is important to have the ability to gain support and to get people to change their behaviour. These are the issues that need to be tackled already when developing the implementation plan and therefore are important issues to be taken into consideration when building up the implementation plan for CCC and its potential future strategy. For a more successful strategy implementation Hrebaniak (2006, 19) has developed and implementation model presented in Figure 5.

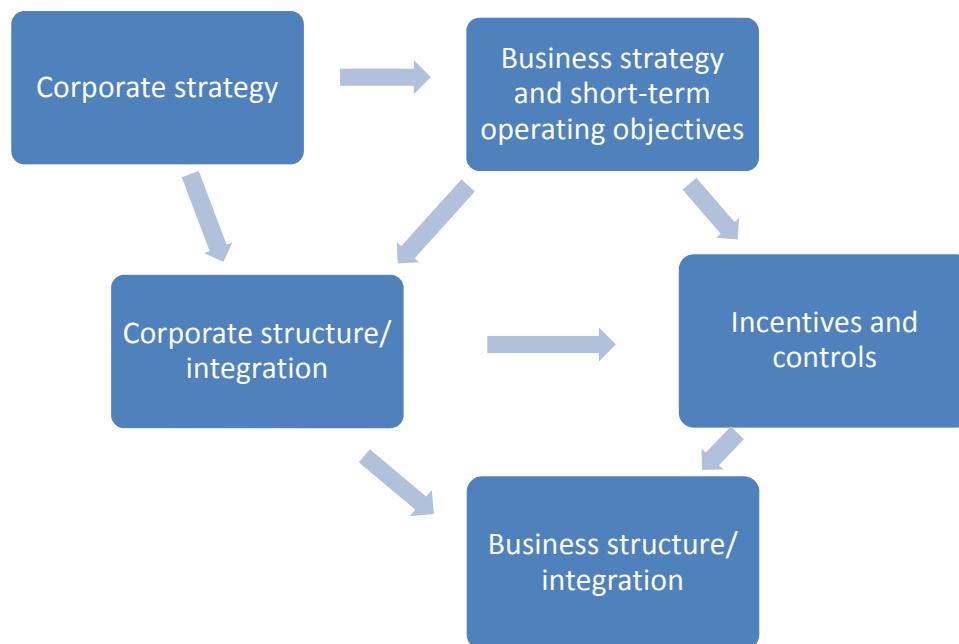


Figure 5. Strategy implementation model

The model developed by Hrebaniak (2006) shall be the basis of the implementation plan to be developed within this thesis. According Hrebaniak (2006, 19), in corporate strategy the emphasis is on the entire organisation and focus on such areas as portfolio management, diversification and resource allocations. In the second phase where

business strategy and corporate structure are formed the emphasis is on building the strategy in the level of products, service and competitive strategy. Corporate structure is formulated according to the corporate and business strategy choices to support the implementation of the strategy. In this phase also the orientation shifts from long-term to short-term and the objectives should be adjusted accordingly. Business strategy also sets the demands for the skills, capabilities and competencies that enable the implementation. (Hrebaniak 2006, 19-21) Hence the competence development and identification are important parts of the process.

Coordination and integration across units during the implementation process are important for the success of the new strategy. Also business structure should guide the business structure of the company. Different divisions or business units do not necessarily need to have the same structure if they face different competitive environments. For the implementation of a new strategy to succeed there should be incentives, to pursue the change and controls to monitor the change but most of all feedback on performance in the transition process gives tools to evaluate whether the right things are being executed. (Hrebaniak 2006, 20-23.)

Competence development and strategy formation formulate the implementation plan and are also interdependent. Strategy sets demands for competences and competences have an effect on the success of the strategy. These issues will be further discussed and analysed together with the empirical findings in the chapter 6 where the path continues towards the actual implementation plan for the case company.

5 EMPIRICAL FINDINGS

The empirical part of this research, which was conducted in the form of interviews, included the following three main themes: background questions reflecting the case company's current situation, questions on value creation reflecting attitudes, and knowhow on the matter and questions on service-dominant logic for the purposes of identification and attitudes towards it. The persons interviewed within this thesis were as listed below:

- The CEO of CCC
- Vice President, Public Sector
- Vice President, Industry & Operators
- Vice President, Sales
- Key Account Director.

With this interviewee selection the answers give a managerial perspective for this study. A rather internal view of service-dominant logic and other aspects under study is gained from the CEO of CCC. The vice presidents have a dual role. They are leaders of their units and hence have internal responsibilities but are also active in the customer interface. Therefore, they may give a two sided view of the matter at hand. The key account director's role is mainly on the customer interface. Hence his views and opinions shall most likely reflect the situation in that perspective.

Additional data for these same issues was gathered through document review. There were two workshops that have produced relevant information. The themes of these workshops were strategy and project communication. In the strategy workshop the members were mainly managers who represented different functions in the organisation. The project workshop which entailed group works was compulsory for the whole organisation and therefore reflects also opinions and views of a common worker. For the uses of this work there was only one area within the workshop that produced relevant information and this handled customer-orientation in work. In addition to these data resources my own knowledge on the organisation through years of work experience in different business units is used in this thesis.

When considering the results the subjectivity of the results has to be kept in mind. However, as the focus of the analysis is the case company and understanding its

situation for the future strategic plans the subjectivity is acceptable. As I have also been in the role of the interviewer in the empirical part of this thesis and chosen the semi-structured interview it has surely had some influence on the direction of answers. The issues of subjectivity and my role as an influencer on the results have been more thoroughly discussed under the subchapters of chapter 2. Information cross-check and evaluation has been done between the respondents according to the analytical activities presented in Table 1 in the chapter 2.5. Cross-checking is also a part of the evaluation process as the information from different sources, interviews and document review, are compared. Also my own knowledge of the company serves as a reflection point in this thesis.

The main purpose of the empirical part of this thesis was to gain knowledge for building up the implementation plan for the service-dominant logic for the case company as a future strategy. In the following chapters the main findings on the different sources of information are presented. In addition if relevant views on other issues under study were found they shall be lifted up in the discussion.

5.1 The current situation of the company

To identify the company's current position, in terms of business model, questions on the company's focus on business operations and importance of processes were asked. The customer was identified as the focus of business operations with two remarks. One of the respondents felt that the company is aiming towards an installation where the customer is the focus of business operations. Another respondent felt that application of service production and the customer both are the focus of the company's business operations.

Business processes and the importance of them is another important measure when analysing the company and its business model. Customer relationship management was also seen as the most important process of the company with one exception. One of the respondents present that delivering comprehensive ICT-service for the customer is the most important business process of CCC. It was emphasised by particular respondents

that the process of customer relationship management entails sales, customer relationship management and development and that it leads to IT-service process.

Despite the high level unanimous views concerning the business focus, the most important process of the company, the positioning in the delivery chain as well as the future targets for it was dissenting. Three roles were described for CCC. The company views itself as a comprehensive operator with involvement from start to the end, in other words life-time management of the relationship. Two of the respondents perceived CCC as a trusted partner, with closest or almost the closest connection to the customer. One of the respondents pointed out that CCC has merely the role of producer in the end of the chain. Some of the difference in opinions here can be explained through the different positions of the respondents from which point they view the company and the matters under discussions during the interview.

Even though the positioning and the role in the chain are seen differently the respondents felt that it is the right position for the company and that it is in line with the strategy. Interestingly the discussion whether the position is what is aimed for, the role or the position of the company became clearer. For CCC the goal is to be the reliable partner of customer and to be in the customer's core business. To guarantee and to reach this position the company needs to be closer to the customer's business operations and to be involved in the process in an earlier phase.

Competences were discussed in three levels: processes or routines, assets or resources and future strategic opportunities. CCC's processes were seen as good and distinct. Carefully selected business fields and knowhow in those have enabled the company to build up and develop smooth processes and sub-processes. Production process and customer relationship management process were seen as competences for CCC as they provide clear and distinct guidelines for management and operations of the company. Depending on the position of the respondent in the company, processes were also seen agile and flexible and enabling willingness to serve or, that the company still has to develop its processes to have these features in its operations.

Sources of competences on assets and resources aspects the respondents felt that the company has strong technical assets in the form of knowhow and expertise. Customer loyalty and mind share are evidence and measurement of these competences, assets and

resources. If the company is competent in these areas, the customer's keep on coming back. And the share of CCC's service within the company keeps on growing. In addition to strong technical assets business field expertise in the chosen industries was brought up. Personnel are seen as assets as the knowhow and expertise are tightly bound to the persons within the company. Also to their ability and willingness to learn new and develop alongside market demands was seen as an important asset. Even though competences were found in the area of assets and resources a notion was made that the competences of CCC are for the past and need to be developed in order to stay on board of development.

The views on future opportunities were quite diverse and discussed only as small sectors and the big picture seemed to fall behind. Main issues that were seen as affective to the company's future rose from CCC's own operations. Three issues were brought up: need for a change in intellectual property rights policy, development of customer relationship management and shift to partially product or platform-based solutions. The change in intellectual property rights policy aims for gaining the rights for CCC for it to be able to manifold the systems or parts of those to other customers. Customer relationship management, the knowhow of it and the perspective of life-time management as such were seen as a future opportunity but also demanding development. The change to partially product- or platform-based solutions would bring cost advantage and gain new type of solutions and service offering for the company.

The discussion above reflects the company's current position in the software business. Competences are a source of competitive advantage but the value is the determinant of the sales and satisfaction. In service-dominant logic the concept of value is central and the process of creating and understanding it slightly different hence the second part of the empirical study concentrated on value and understanding of it.

5.2 Understanding of value creation

In service-dominant logic value and value creation are essential elements and these were handled in the second part of the interviews. Other value related questions were purely on fact basis but as determining when and where value is created their opinion on the

matter was asked to gain the understanding on the perspectives of the management. As the goal of this thesis is to be able to build up an implementation plan for the service-dominant logic, the distinction between theory of value creation and the reality in the eyes of managers has to be sought after. Are the views opposites of one another or are they truly identical or something in between.

The responses were quite clearly divided into two areas. Others saw that value is created in the early stages of the project when mutual understanding on what is going to be done is agreed upon. Others saw that value is created when the system or the solution is in use, it responds to the targets set to it and it can be developed alongside customer's business operations. One of the respondents pointed out that support activities on solutions that are built upon technologies that are fading is a crucial place for value creation especially in a poor economic situations that has been experienced during the past years. Through this type of service the customer may gain two to three years extra time for gaining up financial resources for the new investment.

All of the respondents brought up that sources of value are in the knowledge on customer's business operations and processes as well as on the technologies and products used to build or deliver a service or a solution. Knowledge is not enough. The ability to combine all the knowledge and players in the process to work for the same goal is important in value creation. One of the respondents encapsulated: delivery reliability, sincerity, communication, knowhow, innovativeness, though single actors but they all have an effect on value. To understand the sources of value CCC has to understand the set of values of the end user. Another respondent continued that whether it is a product or a service it is a commercial question, the sources of value for the customer are on the activities, flexibility and agility of the solution.

Creating customer capabilities is the mission of CCC and it well sums up the ways how CCC creates value to its customers. All respondents agreed upon that CCC's knowledge on its customer's business and processes together with the technical and technological knowhow are the means of creating value to the customer. The goal is to enhance their business and processes. The level of activity, on minor issues or on broader concepts, was the difference in opinions. To be the trusted partner of the customer in value co-creation, it is the goal. As one of the respondents pointed out, "Partner, it means certain attribute in sports, marriage and elsewhere, so it means also in business".

5.3 Familiarity and application of service-dominant logic

Service-dominant logic as a concept was quite unfamiliar to the respondents. Two of the respondents said that they had never heard the concept but from a short review given they agreed upon that customer and value are important elements. Others viewed service-dominant logic to be a business model where the supplier is close to the customer, service is standardised and it can be either routine type basic IT-services or more professional services that are related to customer's core business operations. One of the respondents viewed service-dominant logic as a transition from products to service in business model, as an example from the new model he presented that a company producing elevators is no longer selling elevators but lifting people. Also it was stated that the concept is not established in business life.

In this section an opinion question was targeted to the question what service-dominant logic is in the software business. The purpose of this question was to find out how the respondents view the logic in practise as it strongly effects on making the implementation plan. Opinions on service-dominant logic in the software business varied and it lead to discussions on product versus service deployment. It was pointed out that the production mechanism is not relevant whereas responding to the customer need with the service process. Whether the solution is provided as a service or a product is merely a financial question. It is about investments versus expenses. As a final remark one of the respondents stated that in the software business there will always be the division between product-dominant and service-dominant business models. However, service-dominant logic was seen as a form of outsourcing and as a fitting model for the software business which would bring orderliness to long-term customer relationships. Regardless of what was the respondents' opinion on service-dominant logic they all saw the transition to this type of logic should be quite easy in the software business.

Despite the variation in opinions all of the respondents saw that service-dominant logic will succeed in the software business especially when it will be recognised as a reliable business model and as long as it will not overrun itself. Especially lucrative feature in this model, was seen the liability of the expense to the actual utilisation of the service. Service-oriented business model is well suited for the needs of integrations, adaptation, utilisation and support of software products or its role can be in IT-process services or

outsourcing. Overall what it means in the software business, according to respondents, is that it will gain access but it means re-division of the markets, it shall bring new lucrative pricing models that for example Cloud computing offers and dependability on resources, one's own resources is questioned. It will develop alongside networks and other business models.

Overall opinion was that service-dominant logic would be easy to adapt to CCC or it shall not have any effect on our operations. Service-dominant logic represents the type of business that CCC has been in the past and where the company is heading for. CCC has not recognised that many of the elements important in their operations are foundational principles of this logic. One of the respondents found that this type of logic would mean that CCC should take general liability of customer's IT-services for example. Understanding the logic as a whole and its cause and effect reasoning alongside its benefits are a starting point of how this type of logic could be applied within CCC. For CCC this logic means development of project deliveries and service processes according customers' needs and demands.

Some of the consequences were already recognised in the earlier chapter. There was slight differentiation in opinions of the consequences of this logic. Some of the respondents felt that this new logic would not affect our core business operations or if it would be applied in a small scale it would not affect business operations. In these occasions the respondents still recognised that this new business model would require development of partner network. Other respondents recognised that the new logic would have bigger consequences or would need bigger changes within the company. In personnel-oriented business outsourcing is more difficult. To be able to apply service-dominant logic in its operations CCC would have to increase and develop its customer knowledge, on operation models of the logic and understand the new value choices that are related to the logic. The development of partner network would also mean development of resource management in a way that it reaches also the partners as well as development of network management as a whole.

An additional question was posed to the respondents on how to bring the new logic also to the lowest levels of the organisation. The views in this matter were quite different. One of the respondents saw that the daily routines and operation models agreed upon with customers are different of those that are in our terminology. Therefore, applying

the new logic would demand renewal of written instructions and work alongside updating of training and knowhow. Due to the willpower and new strategy guidelines the change is still seen to be quite easy. Another respondent saw that the new logic would not likely change the operation models and therefore the need is only on recruiting skilled personnel, who have the knowledge on products and product platforms that will be used in project deliveries. Also service-oriented architecture was seen as a potential service model for CCC. Change of the organisational structure, was the third view of how to bring service-dominant logic to the operational levels of the organisation. The organisation has to be flat, flexible and avoid being bureaucratic to be service-oriented. Giving independence to work teams, moving business responsibilities, power and production to lower levels in the organisation as close to the customer as possible are the key issues of success in service-oriented business. One of the respondents viewed that service-orientation has always been part of CCC. Human resources and intangible capital are most important elements of CCC's operations hence the service is within our business core. History of being the supplier of tailor-made solutions guarantees that co-operation together with the customer is not a new business element for us.

Despite the differing positions of the respondent in the organization, service-dominant logic was unanimously seen as a future strategy for CCC. Whether the company has recognized the logic or not it is the direction the company has been built on during the past years. Some deviation there still is among the respondents. Others see that CCC is already in this business or that it will not affect to our way of doing business. Others see that service-dominant logic is the business model that the company should apply and would give them power and keys to further develop their operations, bring predictability to the operations as well as better enable the holistic service of the customer.

Networking is incremental part of business therefore the views and recognition of the network and its role was asked from the company representatives, though not the focus area of this thesis. All of the respondents recognized the importance of network in today's business world and agreed upon its importance for CCC. One of the respondents viewed CCC as an integrator between product companies and customers and stated that in this type of role the importance of network is evident. Network also enhances CCC's competitive positioning as the company is enabled to offer complete solution packages and service together with its network partners. According to one of the respondents,

CCC has the ability to manage, take care and be responsible of complete systems but not the ability produce everything. It was also brought up that network and its management include many factors, how to manage the network in terms of contracts and risks for example.

Service-dominant logic, after a sneak peak, was viewed as a suitable business model for the software business. Another respondent again brought up that it was “exciting” to realize that service-dominant logic is operating within CCC at least in an intuitive level without that they have recognized that elements that are important for CCC can be brought up together under this type of umbrella. Another notion handled the importance of organizational change and the how it has to be reshaped for the new business before entering to the new business model. These were the free comments of the respondents in the end of the interview.

5.4 Internal workshops

Within the strategy work CCC’s mission and strategy were developed to enhance the company’s business operations as well as to better guarantee the value to be offered to the customers. Trends of the markets and economy were evaluated and their effects on not only to CCC but also on customers. Incremental findings of these trends and their effects were as follows: increase in e-business, internationalisation of markets, consultation as a mean of customer-centric sales, management of partner networks, support for customers’ business applications, knowhow on service sales, and strong image.

Results of this strategy work were presented as strategy choices categorised under leadership, customer and markets, resources, and product and service. The result under leadership was that customer relations predominates the decision making which leads to the need of adequate and skilled customer relationship personnel. The vision and strategy of the organisation is broken down into strategic choices and operation plans for all the lower levels in the organisation. The strategy was communicated through unit and team meetings and it was further developed to be involved in to the level of personnel management and development targets and discussions.

When considering customers and markets CCC's goal is to invest in existing strategic customers and to be attendant, innovative, agile and trustworthy partner for them. In resources the aim is to invest in top experts in customer interface. Every person within CCC should have a customer and they should know the business models of the customer and are entitled to know how satisfied their customers are. Service experience should also be developed into a competence domain and the experience should be better than those of competitors. Strategic choices in product and service level are those of developing a quality system to support product-based solution deliveries, continue important partnerships for example with Microsoft, and follow up the developments in business models based on cloud computing as well as their demand.

In addition some results were withdrawn from project communication (ProVi) workshops in which all the personnel of the CCC was involved. In these workshops personnel was challenged with questions on critical phases of the process when considering successful sales and project deliveries, what does it mean to be customer-oriented in the eyes of CCC and how can a single worker have an effect on the profitability of the company.

The answers from the workshop concerning customer-orientation within CCC were categorised in four groups: attitude, customer relationship, internal operations and knowhow. Willingness to serve, courage, flexibility and perseverance were the most mentioned characteristics for CCC to be customer-oriented. This discussion was taken further by asking what kind of hands-on operations would customer-orientation mean. The most mentioned issues in terms of customer relationship were listening to the customer, understanding the customer's business and its demands, to serve the customer and all in all willingness to serve. In internal operations to reach customer-orientation would demand communication, sharing information and knowledge, internal co-operation, openness and profitability thinking in the eyes of the personnel. On knowledge point of view substance knowledge, development of own professional knowledge, staying on the edge of development and cost-consciousness were seen as important actions or characteristics in terms of reaching customer-orientation.

Even though the last question of the workshop handled mainly person's ability to effect on the profitability of the company it raised many issues that reflect the customer-

orientation within the company. In addition to different stages in processes and project delivery such issues as internal customer-orientation, giving solutions also to fellow workers, stepping into customer's shoes, understanding of the customer's needs and continuous communication together with the customer as well as with the project team, which should lead to better customer and internal communication.

The results gained from internal workshops around strategy and project communication were used only in terms of what useful information there was for this thesis. For example the ProVi (project communication) workshop mainly focused on developing the internal communication and processes and only slightly grasped the surface of customer-orientation within the company. As source of information especially the results of project communication workshop was important as the results reflected the attitudes and opinions from the whole personnel of the company from top to bottom. And as the amount of workers is higher than the amount of managers the results most likely present the opinions of a common worker in these issues.

The results above reflect the company's current situation towards service, service-dominant logic and customer-orientation. In addition a short competence analysis was done within the interviews to enable the implementation plan of the service-dominant logic as a future strategy for the company. In the next chapters the results are further analysed, reflected to the theoretical framework and as a conclusion the implementation plan is presented.

6 DISCUSSION

There were four research questions for this thesis: what service-dominant logic is in the software business in Finland and why it is important, what demands it sets for competences and finally to create an implementation plan for the case company to execute service-dominant logic as a future strategy. The theoretical discussion has been the basis of the research. In this chapter the aim is to analyse the empirical findings, reflect them towards the theoretical framework and find a conclusion concerning the topics under research in this thesis.

6.1 Service-dominant logic in the software business

To be able to answer the main research question of this thesis, concerning the implementation of service-dominant logic, there were other issues to be addressed first. Two key elements of the logic, value and service, were discussed to gain understanding of what service-dominant logic is in the software business. Some operational models for service-dominant logic in the software business, for example Software-as-a-Service, Cloud computing and SOA were distinguished, that merely represent the service-orientation in production than the actual service-dominant logic. In the eyes of the case company service-dominant logic enables different earning patterns whether it is IT-process service or outsourcing or Cloud computing and its lucrative pricing models. Standardised service and outsourcing were seen as offering of the service-dominant logic. However, service-dominant logic as a business model has risen from the demand of customised tailor-made service from the customers rather than the need for standardised service.

For the case company service-dominant logic in the software business represents a close relationship with the customers, standardised service and most importantly transition from products to service. However, total consensus on the matter was not found. As there are many different operational models to choose from, it may explain the difference of opinions. In terms of service-dominant logic where value is the key, the case company has reached a level in the recognition of value and its importance. Derived from the answers it can be concluded that value is the end result that matters

whether value is reached through service-dominant logic or Cloud computing is not of importance.

It is rather difficult to determine the role of service-dominant logic is in the software business and there are number of ways that the logic can be executed. There are some elements that the business operations have to fulfil to have service-dominant logic. These elements based on the work of Vargo & Lusch (2004) and on the knowledge gained during this thesis process are as listed below:

- Exchange is based on service.
- Products are delivery mechanisms for service.
- Skills and knowhow are the most important resources and sources of value.
- Value is co-created together with the customer (and other potential suppliers).
- Company can only make value propositions.

The most important factor is that service-dominant logic is a business model, a strategic view of the company. Among the managers of CCC this model was seen highly suitable for the software business as the delivery mechanisms and the concept of product vary. Tough competition and limited resources further support the service-dominant logic as a suitable business model for the case company and explain the importance of it in the software business. The company may find its own operation model that allows it to follow the principles. It can be Cloud computing or service-oriented architecture (SOA) or something in between or it may develop its own operation model as Microsoft has done. The answer to the question what service-dominant logic is in the software business cannot be shortly said. Most importantly it is about following the foundational principles than acting according to certain operation models.

As it has been brought up a number of times service-dominant logic is a strategy and it has a strong connection to service-orientation and customer-orientation that also have been discussed within this thesis. They are all tightly connected to one another. Service-dominant logic leads to service-orientation and customer-orientation. Skills and knowhow are the most important resources in service-dominant logic and also sources of value. Service, as was defined by Vargo & Lusch (2004), is about acting upon operant resources such as skills to benefit another party. Hence when the company is in business in terms of service-dominant logic it means that the company bundles all the needed resources and makes it beneficial for the customer. This means service-

orientation in business operations, delivering in a form of service, to combine skills, knowledge and resources. As the process is done in the right way and customer is part of it, it means that customer-orientation is taken care of and the customer will come back. The combination or cycle of service-dominant logic, service-orientation and customer-orientation in the end can lead to customer loyalty.

Service-dominant logic and its principles set certain demands for competences and from there on to the operations of the company. For the company to have service-dominant logic it should aim for customer-orientation, value co-creation, skills and resources as competitive advantage, networking and business as a process or life-cycle management. These targets are derived from the principles of service-dominant logic and set a frame for the competence demands of the logic as was discussed in chapter 3.3.2.

From the point of view service-dominant logic the importance is in recognition and division of organisational and individual competences. Also long-term orientation, controllability, relativity and dynamism are important characteristics of competences brought up by Man et al. (2002, 128). As the competence discussion from the point of view of the research question was already handled in the theoretical discussion, chapter 3.3.2, there is no need to repeat them here. In this part the purpose is to reflect the empirical findings towards the theoretical framework which means that the competence discussion here is part of the situation analysis of the case company on the way towards the implementation plan.

6.2 Current position of CCC versus service-dominant logic

Within this new framework of service-dominant logic developed by Vargo and Lusch (2004) value is identified as a key element of the logic and the new challenges set by it are value-in-use and value propositions. In terms of service-dominant logic the understanding of value creation within CCC is already quite close to what Vargo and Lusch have defined. Value-in-use has been recognised and the process of co-creation is part of CCC's operations. As they recognise the importance of value as main influencer in the process, they are on the way towards the service-dominant logic.

According to service-dominant logic, the application of specialised skills and knowledge is the fundamental unit of exchange (Vargo & Lusch 2006, 44), hence it can be concluded that skills and knowledge are also the key elements in value creation. Knowledge is also seen as the fundamental source of competitive advantage (Vargo & Lusch 2006, 44). The company has understood the importance of knowledge and skills which could be seen also in the results of the interviews. The managers of CCC view that the fundamental elements of value creation are knowledge on customers, their industry, business and processes. In addition the company has to be able to combine the resources and technical and industry knowledge together to be able to co-create value with the customer. One of the key aspects of service-dominant logic is to do with the customer and co-created value. The case company views this aspect of service-orientation and value creation through partnership with the customer that is the fundamental aim of their business.

Value creation, as business as such, is also dependent upon the world's economic situation and its fluctuations. Instead of holding on to old procedures and beliefs, responding and flexing according to these fluctuations are important matters in value creation. In the discussions on value the matter was, in some cases, blinded by the installation between product and service. It was viewed as a disturbing installation as the relevancy is in responding to the customer need. Whether the value is offered through a product or a service was treated as a commercial question. Even though the representatives of the case company viewed value and value creation as important aspect of the business there are obstacles. If the focus turns into the product versus service installation, it may be a hindrance for the implementation of service-dominant logic. Therefore, the biggest challenge for CCC is the indifference of whether he offering will entail a product or a service.

Even though CCC does not, at least knowingly, act according to service-dominant logic the empirical findings suggest that it follows the principles. From the company's point of view there are two phases when the value is created; in the beginning of the process where common understanding on what is to be done is agreed upon and value-in-use, when the solutions is operating within the customers processes.

Value and more importantly value propositions that are the basis of service-dominant logic are dependent upon competences, skills and resources. Competence sources for

CCC are in its carefully selected business fields and knowhow on those. Together these domains form a competence for the company. Another organisational competence is seen in the processes, which in turn reflect the organisational culture. Production and customer relationship processes have been carefully defined. Overall processes are seen as agile and flexible throughout the company. Even though these are seen as competences for the company but do they respond to the current demand of the market and strategy of customer-orientation. Renewal and development of competences are key issues for success.

Strong technical assets, for example knowhow and expertise, are competence domains for CCC together with the business field expertise they form one of the core competences of the company. A down side in this type of core competence is that personnel actually are the asset as knowhow and expertise is largely tied on persons and their abilities. Organisational culture of the CCC is supporting personal development, which has led to ability and willingness to learn in the organisation. Task circulation is one of the internal competences of the company, which strengthens the knowhow on competence domains and thereon to core competence for the company.

A new competence for the company has been recognised in the solutions and service delivered by the company. For the company it would be beneficial to be able to move from fully tailor-made solutions to partially platform and product-based solutions. Especially as the company is operating in carefully selected fields of industry its ability to manifold part of the service or solutions to other customers would offer an advantage to it. Even though the company had been focusing on project deliveries it has a couple of very long and strategic customer relationships that prove that the company's customer relationship as well as life-cycle management processes are the core competence of the company.

The interviews brought up a rather unified consensus on the competences, and sources of competence within the case company. Skills and knowledge on both technical and industrial matters were among the most important competence that was brought up. As CCC has carefully chosen the business fields where to operate and what technologies to pursue it has already specialised itself in the market. Hence there is the need for networking. In terms of service-dominant logic the understanding that specialisation is needed and should be pursued is already reached but should also be continued. The

work on processes and process description is also an important competence for the company. Not only does it offer guidelines for management and operations but it was also pointed out in service-dominant logic that the approach to business operations should change from single activity into a long-term process. Customer relationship management and the long relationships because of it is a competence that is needed for service-dominant logic and that the company has. Attitude was one of the most important aspects brought up in the competence discussion. Willingness and flexibility in the transition process are important competences but also in the service-dominant logic where everything is closely tied to the customer and the needs and demands of the customer. Skills, knowledge, attitude are competences tied to individuals. A matter the case company has recognised.

Many of the competences defined by the managers of the company support service-dominant logic but developments are needed. Only one of the respondents recognised that the competences are the competences of the past. Even though the skills and knowledge for example respond the potential future strategy of the company it needs new competences alongside to support the transition and operations according to the new business model. In terms of future opportunities issues such as change to partially product and platform-based solutions, were recognised but the big picture seemed to be lost. The failure to truly recognise the potential of the future and most importantly to share the view throughout the company seemed to be lacking.

Competence development as such demands for effective management of internal and external competences as Teece et al (1997) argue. For the case company there is a demand for dynamic capabilities, to renew its competences. The company should boost its ability to recognise the opportunities in the market and there on to develop its processes, routines and assets such as technological assets to respond to the new demand. The company has to be able to integrate together different elements in order to be able to gain core competences. Another notion on the competence analysis of the company is its narrowness. The recognition of organisational competences defined by Man et al. (2006) which entails opportunity, relationship, conceptual, organising, strategic and commitment competences, lacked behind. These competences entail such elements as communication and interaction skills, resource organisation and management and most importantly when considering the future strategy planning and

management. Hence the company should pay attention to these areas especially during the change.

CCC's history in the project-based business is adamant and this shall be difficult to change in the processes of the company. Referring back to the work of Wikström et al. (2009) in Table 2 there are dimension where the case company already fulfils the criteria of business-dominant business model by which they refer to service-orientation which is a step closer to service-dominant logic than project-based business. For the company to have service-dominant logic as a future strategy it will need to develop a partner network with complementary skills and resources that support the goals and competences of the company. As customer-orientation is the key of the logic, the company would also need to increase and develop its customer knowledge. It also demands a thorough understanding of the principles behind the logic and the new value choices it brings about. In this business model the dependability of the company's own resources can be questioned, which means development of partner network. Partner network represent a part of the company's skills, knowhow and resources and therefore it requires a development of resource management to entail the partners.

Already between the managers of CCC, who have different areas of responsibility, there were inconsistency in answers in areas which concerned for example the focus of the business and the company's role in the software delivery chain. Also there was a slight disagreement on the level of effect that the shift to the service-dominant logic would bring about. Hrebaniak (2006) argues that managers can plan but not implement strategy and that it is the biggest problems that companies face while implementing a new strategy. CCC will face the same dilemma. It has to be able to communicate and bring the service-dominant logic to all the levels of the organisation if it is going to succeed in its new strategy. At this moment the daily operations and routines differ from those stated in the strategy of the company. For a transition of the business model to be successful they must be coherent. This means new written instructions of the processes and training of the personnel.

From the personnel's point of view customer-orientation, to which service-dominant logic should lead, demands for certain characteristics and hands-on operations. Attitude and communication were a common denominator on the responses towards customer-orientation. In terms of characteristics the overall attitude has to be customer-oriented.

In addition characteristics such as flexibility, willingness to serve and perseverance were brought up. Also hands-on operations are needed. The whole focus is to serve the customer this means listening and understanding the customer and the business of the customer. The personnel were also able to identify that to reach customer-orientation it will need certain demands in internal but also on internal operations. There are high demands on communication and interaction skills, need for information and knowledge sharing and most of all demand for co-operation, internally and externally. In addition to these competences that the personnel have recognised as a demand for customer-orientation, that also apply to service-dominant logic, they brought up the skills and knowledge as an important competence.

Another big change has to be made in the organisation structure. The future organisation has to be flat, flexible and aim for openness instead of bureaucracy. The problem that may arise here is the inability to view one's own organisation critically. As CCC has been project-oriented since its establishment and certain processes and routines have been part of its daily operations, can it critically view its own structure and re-shape it for the new strategy. Service-orientation, independence to work teams, moving responsibility, power and production to lower levels in the organisation as close to the customers as possible are key issues for the new organisations success.

Among the biggest challenge will be the understanding of the demands of the change. Some of the CCC's managers viewed that this type of service-orientation has always been a part of our business and because of willpower the transition will be easy. Certain type of customer-orientation as well as service-orientation has been part of the company's history which is proved by some of the very long and strategically important customer relationships but it is not enough to truly have service-dominant logic.

Within their current strategy, creating customer capabilities, CCC recognised their shortcomings and needs for improvement. Also the strategy was communicated from top to bottom in briefings, team workshops and in development discussions. Even though the plan was good, were the success and implementation monitored and the comprehension in all levels reached. The strategy that has been implemented until now has many similarities with service-dominant logic such as the importance of customer relationship management; every person within CCC should have a customer, partnerships and developing service experience into a competence domain. Still

inconsistency was found in the results of this thesis, which cause of concern of the success of the communication of the current strategy. These lessons learned can act as guideline while building up the new implementation plan.

6.3 Implementation of service-dominant logic

Service-dominant logic as a strategy support elements and goals defined in CCC's earlier strategy work. Hence they do not have to start the transition from scratch. This new logic, if chosen for the future, only takes the implementation to an extent. The company has defined steps in the strategy implementation and the process has been on-going for more than a year now. The target is to reach the customer-orientation fully by the year of 2012. Despite the fact that the process has been on-going for quite some time, the results of interviews reflect differing views of the company's position in the market and actual state of the company. Despite the differing opinions, service-dominant logic was viewed as a potential and suitable strategy for CCC. Some argued that it already represents the type of business that the company is whereas others saw it as a natural continuation of the customer-oriented strategy.

Service-dominant logic as a strategic view represents the direction where the company wants to go in the future. Within this logic are the strong points of the company and the sources of competitive advantage. CCC has a clear view on who are the customers and how to interact with them. Through service-orientation the specific offering can be delivered and represented to the customers. As a strategy service-dominant logic leads to service-orientation in operations, which, if it is done well, leads to competitive advantage that is seen in a form of customer loyalty.

The new strategy has to be well defined, implemented and monitored. As a response to the main research question, how does the company implement service-dominant logic in Finland, the purpose is now to create the implementation plan that is based on all the discussions and analyses represented earlier in this work. There are many obstacles for an effective strategy implementation. The obstacles were already discussed in the chapter 4.2 and are now guiding the formation of the new implementation plan.

Defining corporate strategy is the first phase of the implementation plan. For CCC service-dominant logic as a strategy would mean shifting the focus from project-based business onto service- and customer-orientation. Customer should remain as the focus of the business as it has been till today. In terms of processes, increased emphasis should be placed on customer relationship management to make sure that it is the most important process of the company. Skills and resources are the source of value propositions. Hence both offering and the value propositions of the company should be tied onto competences derived from skills and resources. CCC has been able specialise and therefore differentiate itself from competition. The company should continue on the same line.

Creating customer capabilities as a mission statement supports the new strategy. Hence there is no need to define a new mission for the company. To support the strategy, the company should continue aiming for the target that every person at CCC has a customer. The operation model should be changed into service-orientation for CCC to be able to fulfil service-dominant logic as a delivery mechanism. The company's aim to offer partially product- or platform-based service is not a hindrance for the new logic. Project as a delivery mechanism may be advisable to preserve as some of the customers' may demand such an approach. Service-orientation means intertwining skills, knowledge and resources together to benefit another party. This should be the guideline of operations despite the delivery mechanisms or other additions in the process.

Corporate structure has to change according to the strategy and in the case of service-dominant logic it means decentralised structure. In the case of CCC, the new organisation should be flat, flexible and customer-oriented. Decision making should be distributed to lower levels of the organisation. It is not enough to have the decision making distributed since also the importance of involvement in the business and responsibility on actions should be realised in all levels of the organisation. The understanding that every person affects to the company's business and profitability has to be gained.

CCC has made efforts to flatten the organisation and make it more flexible. This process is on-going and at the moment the division within the organisation is on areas of expertise whether it is the customer relationship management among industrial customers or technological skills and industrial knowhow. Alongside the structural

changes the distribution of decision making, responsibility and involvement should be tightly connected to the process. Without the distribution of responsibilities it will be difficult for the company to function across the units and find the best possible combination of skills and resources for the customer. To reach service-dominant logic as well as customer-orientation the coordination and integration of knowledge and skills is essential for CCC.

Even though the processes of CCC were seen as good it is unlikely that they will respond to the needs of current or future strategy, not at least in all parts. Before the strategy communication and implementation can start the company should review its processes and instruction from the point of view of service-dominant logic and update them to respond to the new strategy. Only then the strategy implementation can be started. If the processes and instructions are old, the new strategy cannot succeed.

As an offering and strategic choice for the tailor-made solutions and customisation have already shaped the focus of CCC's business as well as value creation. CCC is able to provide value propositions based on its core competences; skills, knowledge and experience in the chosen market areas and technologies. Through specialisation the company had been able to reach competitive advantage and it should continue market scanning and specialisation. Service-dominant logic as a strategy reinforces this chosen path but also sets demands for networking. Networking is the way to access additional resources that may be needed in building up the offering.

The position the company is seeking for in the market is to be the trusted partner among the chosen customers, a lifelong partner. The goal is not the amount of the customers but the quality of the customers. In terms of strategic objectives referring to market share, profitability and other financial metrics, I do not see why the same objectives and goals of customer-orientation could not apply to service-dominant logic. In the end in both strategies the focus is the customer and emphasis on customer relationship management only the implementation has changed.

In the market CCC's competitive advantage arises from couple of factors. It is often said that CCC is larger than the small companies but smaller than the big companies, which is used to indicate the flexibility of the company as well as the large enough resource and competence pool. CCC's customer strategy, to focus on selected segments,

to big, strategic and long-term partnerships and the life-cycle management approach represent another competence in the market. The choice for service-dominant logic supports the competences of the company as well as the choices made behind them. The implementation of the new strategy sets certain demands for the company. To be able to implement service-dominant logic the company should:

- Invest on customer knowledge (business, processes and industry).
- Shift emphasis to customer-orientation, long-term relationships, and life-cycle management.
- Focus on customer relationships and the quality of those (customer loyalty, sales).
- Choose flat and decentralised organisational structure to support the customer-orientation and flexibility and agility of operations.
- Enhance communication, interaction and involvement.
- Develop and renew processes to support the new strategy.
- Establish network to support the operations.
- Develop incentives and controls to support the transition and to gain involvement.

Communication and interaction are key ingredients in service-dominant logic but also in the change process. Co-operation demands good communication and interaction skills and therefore the company should pay attention to this. Also processes and routines of the company should be shaped accordingly. The renewal of processes and instructions should be done in workshops where different levels and areas of expertise are represented and further on the involvement in the transition emphasised. Workshops could be more ideal way to represent the new strategy and the changes it rings rather than only briefing the personnel. In workshops the personnel can be challenged and the nature of the event is more interactive which should increase the involvement and commitment of the personnel into the change process.

Investments on customer knowledge are needed but also on technical expertise in the chosen areas. It is part of the competence development, the need to further develop skills, knowledge and expertise to strengthen the position in the market. As service-dominant logic demands specialisation to be better able to serve the customers networking is needed. The company should reinforce its network to guarantee the variety of expertise and availability of resources. The demand for networking sets

pressure for effective network management and communication for the co-creators in the process to share the same logic in business.

In this type of business the first sales may not result revenue but more important aspect in the process is the partnership, the continuation of it and the revenue gained in the future. As short-term metrics in the transition phase, the company can view sales, customer loyalty and quality of service. Incentives and controls should be developed to all levels of the organisation to guarantee and ease the process of adapting new operational methods and strategic views. Financial incentives if customer-orientation in operations is reached. Feedback from customers and quality of service can be used as controls to monitor the service- and customer-orientation in operations. Overall the change process should be monitored. If there is a need further actions for better implementation should be developed.

Even though the company, its vision and partially also operations already support some elements of service-dominant logic the change will demand actions in all levels of the organisation. The key ingredients in the strategy implementation are commitment, communication and interaction. Especially for the management the process is a challenge. No implementation plan is fool proof hence the company has to monitor the process and develop new actions if needed to guarantee the success of the implementation.

7 CONCLUSIONS AND RECOMMENDATIONS

The service-dominant logic in the software business causes a shift in the thinking models of companies. The focus of business is on with whom the value is co-created. Instead of single transactions and sales the search is for partnerships and long-term orientation in operations. The software business is about forming partnerships with the customer and through co-operation answering the demands and needs of the customer. Customers know their power of demand. Hence the service-dominant logic is becoming increasingly important within the industry. In a rather small market such as in Finland, the company has to adapt to the situation if it wants to be successful. Therefore, it is important to understand the service-dominant logic and its demands for the software business.

For managers the situation is challenging as the companies are forced to reconsider their presence in the business. In addition to service-dominant logic the cycle where also service-orientation and customer-orientation are part of the process may further complicate the situation. There is a variety of operation models to choose from but among small and medium-sized companies the establishment of for example Cloud computing is rather challenging in terms of resources. Specialisation and competence building in skills, knowledge and capabilities will be the success factor in these markets. Hence the role of networking will become ever more important. Organisational and individual competences form the competitive advantage of the company. In service-dominant logic many of the competences are sources of value and are tied into persons, which emphasises the importance and dependency of individuals.

Service-dominant logic is possible to identify in the software market and its importance was also proven. Competence discussion around the logic is complex but the demands were found. In the process the linkages between service-dominant logic, service-orientation and customer-orientation were found and also different service-led operation models introduced. Among the most important aspect in the realisation is the role of service-dominant logic and how it affects in different operational areas. Implementation plan with overall guidelines and demands was defined for the case company but as change is a continuous process no plan is fool proof hence the monitoring is critical for the success for the strategy implementation.

This thesis purely concentrated on the case company and on business-to-business software markets within the borders of Finland. These focus areas set limits to the applicability of the results of this thesis. However, the results can work as a reflection or starting point for further studies. During this thesis project a couple of themes for further study have risen. The focus of this thesis is the software business in Finland. Research on how service-dominant logic is seen internationally, the differences and their effects on the company strategy for one represent an ideal continuation for this study. Also as the focus of this study was purely on the case company a comparative study among a small cluster of companies in the same business field would further develop the results found in this thesis. Also a research with network approach on the topic is a needed topic as the role of network in service-dominant logic is high of importance.

Service-dominant logic is a rather new and unfamiliar concept. If the lively discussion continues around service and service-orientation, service-dominant logic will most likely become a notable framework in different fields of business. For the software business which is not tied to physical goods as such the logic is a continuation of the market evolution. Strains of the market and customer demands bring up the advantages of the service-dominant logic. To which extent the company implements service-dominant logic is dependent upon the company and the customer relations.

REFERENCES

Printed

- Artto, Karlos & Wikström, Kim & Hellström, Magnus & Kujala, Jaakko 2008. Impact of services on project business. *International Journal of Project Management*. Vol. 26, Issue 5. 497-508.
- Bryman, Alan & Bell, Emma 2007. *Business Research Methods*. Second Edition. Oxford University Press.
- Demirkan, Haluk & Kauffman, Robert J. & Vayghan, Jamshid A. & Fill, Hans-Georg & Karagiannis, Dimitris & Maglio, Paul P. 2008. Service-oriented technology and management: Perspectives on research and practice for the coming decade. *Electronic Commerce and Applications*. Vol. 7, Issue 4. 356-376.
- Eisenhardt, Kathleen & Martin, Jeffrey A. 2000. Dynamic capabilities: What are they? *Strategic Management Journal*. Vol. 21, Issue 10-11. 1105-1121.
- Eriksson, Päivi & Kovalainen, Anne. 2008. *Qualitative methods in business research*. SAGE Publications.
- Ghuri, Pervez & Grønhaug, Kjell. 2005. *Research methods in business studies. A Practical guide*. Prentice Hall.
- Gold, Nicholas & Mohan, Andrew & Knight, Claire & Munro, Malcolm 2004. Understanding service-oriented software. *Software, IEEE*. Vol. 23, Issue 2. 71-77.
- Hrebieniak, Lawrence G. 2006. Obstacles to effective strategy implementation. *Organisational dynamics*. Vol. 35, No. 1. 12-31.
- Karpinski, Rich 2008. ASP to SaaS to Clouds – Oh my! *Telephony*. 28-31.
- Kotler, Philip & Keller, Kevin Lane. 2006. *Marketing Management*. 12th edition. Pearson Prentice Hall. Upper Saddle River. New Jersey.
- Lay, Gunter & Schroeter, Marcus & Biege, Sabine 2009. Service-based business concepts: A typology for business-to-business markets. *European Management Journal*. Vol. 27, Issue 6. 442-455.
- Lindgreen, Adam & Wynstra, Finn 2005. Value in business markets: What do we know? Where are we going? *Industrial Marketing Management*. Vol 34, Issue 7. 732-748.
- Lusch, Robert F. & Vargo, Stephen L. & O'Brien, Matthew 2007. Competing through service: Insights from service dominant logic. *Journal of Retailing*. Vol. 83, Issue 1. 5-18.

- Man, Thomas W.Y. & Lau, Theresa & Chan, K.F. 2002. The competitiveness of small and medium enterprises. A conceptualization with focus on entrepreneurial competencies. *Journal of Business Venturing*. Vol. 17 Issue 2 123-142.
- Ordanini, Andrea & Pasini, Paolo 2008. Service co-production aDemirkannnd value co-creation: The case for a service-oriented architecture (SOA). *European Management Journal*. Vol. 26, Issue 5. 289-297.
- Prahalad, C.K & Ramaswamy, Venkatram 2004. Co-creating unique value with customers. *Strategy & Leadership*. Vol. 32, No. 3. 4-9.
- Sheth, Jagdish N. & Sharma, Arun 2008. The impact of the product to service shift in industrial markets and the evolution of the sales organisation. *Industrial Marketing Management*. Vol. 37, Issue 3. 260-269.
- Teece, David J. & Pisano, Gary & Shuen, Amy.1997. Dynamic capabilities and strategic management. *Strategic Management Journal*. Vol. 18, Issue 7. 509-533.
- Vargo, Stephen L. & Lusch, Robert, F. 2004. Evolving to a New Dominant Logic in Marketing. *The Journal of Marketing*. Vol. 68, No. 1. 1-17.
- Vargo, Stephen L. & Lusch, Robert, F. 2008. From goods to service(s): Divergences and convergences of logics. *Industrial Marketing Management*. Vol. 37, Issue 3. 254-259.
- Vargo, Stephen L. & Lusch, Robert, F. 2007. Service-dominant logic: continuing the evolution. *Journal of the Academy of Marketing Science*. Vol. 36, No. 1. 1-10.
- Vargo, Stephen L. & Lusch, Robert, F. 2006. Service-dominant logic. What it is, what it is not, What it might be. In Vargo, Stephen L. & Lusch, Robert, F. (ed.) *The service-dominant logic of marketing. Dialog, debate and directions*. M.E. Sharpe, Inc. 43-56.
- Vargo, Stephen & Maglio, Paul P. & Akaka, Melissa Archpru 2008. On value and value co-creation: A services systems and service logic perspective. *European Management Journal*. Vol. 26, Issue 3. 145-152.
- Wikström, Kim & Hellström, Magnus & Artto, Karlos & Kujala, Jaakko & Kujala, Saara 2009. Services in project based firms – Four types of business logic. *International Journal of Project Management*. Vol. 27, Issue 2. 113-122.
- Yin, Robert, K. 2003. *Case Study Research, Design and Methods*. Volume 5. Third Edition. SAGE Publications

Non-printed

CCC Corporation Oy 2009. CCC 2012. Company internal Power Point Presentation.

- CCC Corporation Oy. 2011. Kannattavuusryhmätyö. 24.2.2011. Company internal Word document.
- CCC Corporation Oy. 2011. Provi workshop yhteenvedot.15.2.2011. Company internal Excel document.
- Kallio, Jorma 2010. Interview of the Chief Executive Officer, CCC Corporation Oy, Oulunsalo, 13.9.2010.
- Kujansuu, Harri 2010. Interview of the Vice President of Industry & Operators Business Unit, CCC Corporation Oy, Vantaa/Oulunsalo, 04.11.2011
- Lamb, John 2008. Software as a Service gets a second change. Downloaded September 11, 2010.
<<http://www.computerweekly.com/Articles/2008/08/19/231847/Software-as-a-Service-gets-a-second-chance.htm>>
- Michel, Stefan & Brown, Stephen W & Gallan, Andrew S. 2008. Service-logic innovation: How to innovate customers, not products. Downloaded June 13, 2010.
<<http://www.michel-partner.ch/documents/Michel2008CMRInnovateCustomersnotProducts.pdf>>
- Turner, Mark & Budgen, David & Brereton, Pearl. 2003. Turning Software into a service. Keele University. Downloaded October 1, 2010.
<<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.87.8356&rep=rep1&type=pdf>>
- Wang, Lizhe & von Laszewski, Gregor & Andrew, Yuonge & He, Xi & Kunze, Marcel & Tao, Jie & Fu, Chen 2008. Cloud computing: a perspective study. Downloaded October 5, 2010.
<http://www.chinacloud.cn/upload/2009-04/temp_09043010284496.pdf>

Interview questions – empirical study on CCC**General questions**

1. What is the focus of CCC's business operations? What about the most important business procedure?
2. What is CCC's position in the software supply chain? Is the actual position same as where CCC wants to position itself?
3. What are CCC's competences (sources)?
 - a. In processes or routines?
 - b. In assets or resources?
 - c. In future strategies and opportunities?

Value creation

4. In your opinion, where and when is the value created in the software business?
 - i. (Role of actors in the process and their contribution)
5. What are the sources of value in the software business?
6. How does CCC create value in its operations?

Service-dominant logic

7. How do you understand service-dominant logic?
8. What is your opinion on service-dominant logic in the software business? What it is in the software business and will it succeed?
9. How service-dominant logic could be implemented within CCC? What consequences would this implementation have for the company?
10. Do you see service-dominant logic as a future strategy for CCC? Why?

To conclude:

11. What is the role of network for CCC while considering all that was discussed?

Haastattelukysymykset – empiirinen tutkimus CCC:stä

Yleisiä kysymyksiä

1. Mikä on CCC:n liiketoimintojen kohde? Entä tärkein liiketoiminnallinen prosessi?
2. Mikä on CCC:n sijainti ohjelmistojen toimitusketjussa? Onko CCC:n nykyinen sijainti ketjussa sama kuin minne CCC haluaisi sijoittua ketjussa?
3. Mitkä ovat CCC:n kompetenssit (lähteet)?
 - a. Prosesseissa ja rutiineissa?
 - b. Vahvuudet ja resurssit?
 - c. Tulevaisuuden strategiat ja mahdollisuudet?

Arvon tuotanto

4. Omasta mielestäsi, missä ja milloin arvo tuotetaan ohjelmisto liiketoiminnassa?
 - a. Toimijoiden roolit prosessissa ja heidän panoksensa prosessiin
5. Mitkä ovat arvon lähteet ohjelmisto liiketoiminnassa?
6. Kuinka CCC tuottaa arvoa toiminnallaan?

Palvelukeskeinen logiikka

7. Kuinka ymmärrät palvelukeskeisen logiikan?
8. Mikä on mielipiteesi palvelukeskeisestä logiikasta ohjelmistotuotannossa? Mitä se tarkoittaa ohjelmisto tuotannossa ja tuleeko se menestymään?
9. Kuinka palvelukeskeinen logiikka voitaisiin toteuttaa CCC:llä? Mitä seurauksia tällä toteutuksella olisi yritykselle?
10. Näetkö palvelukeskeisen logiikan tulevaisuuden strategiana CCC:llä? Miksi?

Lopuksi

11. Mikä on verkoston rooli CCC:lle kun ajatellaan näitä aihealueita joista juuri keskusteltiin?