LAPPEENRANTA UNIVERSITY OF TECHNOLOGY
School of Business and Management
Master’s Degree Programme in International Marketing Management (MIMM)

Master’s thesis

CUSTOMER INVOLVEMENT IN NEW SERVICE DEVELOPMENT

Pia Hämäri, 2016

1st Examiner/Supervisor Associate Professor Hanna Salojärvi, LUT
2nd Examiner/Supervisor Prof. Sami Saarenketo

ABSTRACT

Author: Hämäri, Pia Satu Susanne

Title: Customer-perceived value of customer involvement in new service development

Faculty: LUT School of Business and Management

Major: International Marketing Management

Year: 2016

Master’s thesis: Lappeenranta University of Technology

90 pages, 10 figures, 10 tables, and 2 appendices

Examiner: Associate Professor Hanna Salojärvi

Prof. Sami Saarenketo

Keywords: new service development, service-dominant logic, customer involvement, co-creation, motivation, business-to-business, service business, customer engagement, customer-perceived value

This case study aims at filling the research gap in the literature, by researching how customers experience customer involvement in new service development, in addition to giving insight on what are the organisational customers’ motivations to become involved in service development. These subjects are studied by conducting three interviews.

The thesis gives a review of previous findings regarding customer-driven new service development, customer involvement, customer roles, modes of involvement, communication in the involvement process, what is the role of customer engagement and what are the motivational drivers for customers. The thesis also explains what new service development is and makes a distinction between new service development and new service design.

The results revealed that organisational customers want to be involved throughout the development process, with active involvement in the beginning and end phases. Moreover, customers prefer face-to-face methods and active and bidirectional communication throughout the process. The findings propose seven motivational factors, a new framework for customer-driven new service development and communication process map. The managerial implications list five themes for service providers to take into consideration when involving customers to the service development process.

TIIVISTELMÄ

Tekijä: Hämäri, Pia Satu Susanne

Tutkielman otsikko: Asiakkaan kokema arvo uuden palvelun kehitykseen osallistumisessa

Tiedekunta: Kauppatieteellinen tiedekunta

Pääaine: International Marketing Management

Vuosi: 2016

Pro-gradu - tutkielma: Lappeenrannan teknillinen yliopisto

90 sivua, 10 kuvaa, 10 taulukkoa, ja 2 liitettä

Tarkastajat: Tutkijaopettaja Hanna Salojärvi

Professori Sami Saarenketo

Hakusanat: uuden palvelun kehittäminen, palvelulogiikka, asiakkaan osallistaminen, yhteisluominen, motivaatio, B2B, palveluliiketoiminta, asiakkaan sitouttaminen, asiakkaan kokema arvo

Tämä tapaustutkimus pyrkii täyttämään tutkimusaukon tutkien sitä, miten asiakkaat kokevat uuden palvelun kehitykseen osallistumisen. Tämän lisäksi, tutkimus pyrkii antamaan käsityksen siitä, mitkä tekijät motivoivat yritysasiakkaita osallistumaan palveluiden kehitykseen. Tätä selvitystä tutkitaan kolmen haastattelun pohjalta.

Tutkimus antaa kuvauksen aiemmista tutkimuksista liittyen asiakaslähtöiseen palvelukehitykseen, asiakkaan osallistamiseen, asiakkaan rooleihin, osallistamisen tapoihin, kommunikointiin asiakkaan kanssa, asiakkaan sitouttamisen rooliin ja asiakkaiden motivaatiotekijöihin. Tutkimus selittää myös, mikä on uuden palvelun kehitysprosessi ja tekee eron uuden palvelun kehityksen ja suunnittelun välillä.

Tulokset osoittavat, että yritysasiakkaat haluavat olla osallisena kehityksessä koko prosessin ajan siten, että aktiivisin osuus on prosessin alku- ja loppupäässä. Lisäksi, asiakkaat haluavat mieluummin osallistua kasvokkain tapahtuvien tapaamisten kautta, sekä toivovat proaktiivista kommunikointia prosessin aikana. Teoreettiset tulokset ehdottavat seitsemää motivaatiotekijää, uutta viitekehystä asiakaslähtöiselle palvelukehitykselle sekä kommunikaatioprosessi kuvausta. Käytännön tulokset antavat yrityksille viisi eri teemaa, joihin kiinnittää huomiota osallistettaessa asiakkaita palveluiden kehitysprosessiin.

ACKNOWLEDGEMENTS

“Not all those who wander are lost.”
J.R.R. Tolkien

Writing this thesis has been one of my greatest obstacles thus far. The constant struggles of defining concepts and polishing the form of the thesis seemed like a never ending project. Countless warm, summer days have been spent writing this paper, which found its final form only two months before the deadline.

However, the project has finally come to an end. The four years I have had the pleasure of spending in LUT have given me the strength and knowledge on how to achieve your goals and much more.

I would like to thank my supervisor, associate professor Hanna Salojärvi for the support in both my Bachelor’s and Master’s theses. With your professional perspective and vast knowledge regarding my topic I truly feel that I got the best support possible for achieving my goal.

I would also like to thank my friends and family, who have supported me throughout this tough year. You have been my rock when I have been stressed out and on the verge of a breakdown. Special thank you to my nearest friends both in LUT and back home – you have kept me sane.

Expression of my deepest gratitude goes to ABB, who has given me the great opportunity to work on both my Bachelor's and Master’s theses there. Special thank you to my former supervisors, Marianne Hannula and Ilkka Kihniä, who made this all possible. My colleagues at ABB will always hold a place in my heart.

Even though the road has been long and winding, with the help and support I have never been completely lost.

Helsinki 29.7.2016

Pia Hämäri

TABLE OF CONTENTS

1. INTRODUCTION 8
   1.1. Research problems and objectives of the study 11
   1.2. Literature review 12
   1.3. Theoretical framework 17
   1.4. Delimitations 18
   1.5. Definitions 20
   1.6. Research methodology 22
   1.7. Structure of the thesis 24
2. NEW SERVICE DEVELOPMENT 26
   2.1. New service development process 28
   2.2. Customer-driven new service development 32
3. CUSTOMER INVOLVEMENT IN THE SERVICE DEVELOPMENT PROCESS 36
   3.1. Customer roles in the development process 38
   3.2. Modes of involvement 43
   3.3. Communication in customer involvement process 45
   3.4. The role of customer engagement in service development 46
   3.5. Customers’ motivations to engage in the service development process 47
4. EMPIRICAL RESEARCH: CASE ABB 51
   4.1. Customer focus group in practice 53
   4.2. Data collection and analysis 55
   4.3. Reliability and validity 58
5. RESULTS 60
   5.1. Motivations for involvement 60
   5.2. Expectations towards and experiences in customer involvement 62
   5.3. Information sharing 64
   5.4. Modes of involvement 65
   5.5. Encouraging and restrictive factors for involvement 68

5.6. Communication during development ... 70
5.7. ABB point of view ... 71
6. DISCUSSION AND CONCLUSIONS ... 73
6.1. Theoretical implications ... 82
6.2. Managerial implications ... 84
6.3. Conclusions ... 86
6.4. Recommendations and suggestions for future research ... 88
REFERENCES ... 90
APPENDICES ... 107

LIST OF TABLES

Table 1. Customer involvement in literature 13

Table 2. Customer involvement scope.. 15

Table 3. Comparison between transactional and relational view.................................... 16

Table 4. Structure of the thesis.. 25

Table 5. Differences between GDL and SDL 33

Table 6. Customer-driven innovation vs. older paradigms 34

Table 7. Customer-perceived value in this thesis 50

Table 8. Interview information 58

Table 9. Encouraging and restrictive factors for involvement.. 75

Table 10. Customer-perceived value based on empirical findings 77

LIST OF FIGURES

Figure 1. Theoretical framework... 18

Figure 2. Case study method 24

Figure 3. NSD vs. service design vs. service innovation... 27

Figure 4. NSD process... 30

Figure 5. Customer roles during new service development process 42

Figure 6. Customer roles in the development process.. 43

Figure 7. Target customer and service selection 56

Figure 8. Motivational factors 74

Figure 9. Communication process.. 81

Figure 10. New theoretical framework.. 83

1. INTRODUCTION

The service field of business is one of the fastest growing areas in the world. It was estimated that in 2014, services covered 73.1 % of EU's markets and 77.8 % of the USA's. Overall, services cover over half (62.5%) of the world's market. (CIA 2016) However, organisations are slowly starting to realise that to make outstanding services customers need to be involved in the process. Particularly in the technologically-driven industries, the focus has begun to shift from technology-driven to customer-driven new service development.

Service innovation can be seen as critical in business-to-business context (Kindström, Kowalkowski & Sandberg 2013) as it creates unique opportunities both within the market and the organisation (Kowalkowski, Witell & Gustafsson 2013; Gebauer, Krempl, Fleisch, & Friedli 2008; Miles 2005). In line with prior research findings (Spring & Araujo 2013; Kindtsröm & Kowalski 2009), also this research's case company ABB has started to widen its service offerings in order to provide a complete solution in their business-to-business markets, which enhances the importance of service innovation (Gebauer et al. 2008).

Companies seek to reduce uncertainty from the innovation process by involving customers in the process (Leonard-Barton 1995; Gales & Mansour-Cole 1995) and engaging them to innovate throughout the development (Carbonell, Rodriguez-Escudero & Pujari 2009). Nonetheless, customer involvement at certain stages of innovation is more beneficial than at others (Gruner & Homburg 2000), and this argument can especially be underlined regarding intangible services (Langeard, Reffait & Eiglier 1986; Martin & Horne 1995; Normann 1991; Vermillion 1999).

It has been studied, that customers can come up with suggestions for improvements during the development (Norling 1993; Prahalad & Ramaswamy 2000). Bitner, Brown, and Meuter (2000) recommend the close involvement of customers in the design process of technology-based services. Moreover, Wikström (1995) thinks that the intensive interaction with prospects is a likely source of generating new ideas. However, even though customer involvement has started to gain a foothold both in the academic literature and in the managerial world, many industries still believe in the technology-driven innovation process.

As previous research has already shown, the right type of understanding and interpretation of customers' needs is one of the most important factors in developing new services and in order for those to succeed (Alam 2002; Carbonell et al. 2009; Kristensson, Gustafsson &

Archer 2004; Mohr & Sarin 2009; Neale & Corkindale 1998). However, even though there is starting to be a greater number of studies conducted about customer involvement in new service or product development and the benefits those possess, there still is a lack of studies that would examine how customers experience their involvement in the service development.

The major critique that companies face regarding customer involvement is that the companies have not realised the full potential of customer involvement. As it is known, traditional market research methods cannot deliver information about customers' latent needs, but still, some companies only observe customers via surveys. (Dahlsten 2003; Flint 2002; Slater 2001; Matthing, Sandén & Edvardsson 2004; Witell, Kristensson, Gustafsson & Löfgren 2010) However, these methods have been studied to be reactive or backward looking (Johnson 1998) as well as being used only to figure out customers' spoken needs (Gustafsson, Ekdahl & Edvardsson 1999; Lilja & Wiklund 2007).

Another critical issue regarding customer involvement is that companies should be able to utilise gathered customer information and knowledge in their development process. Several studies have been focusing on the effects that customer involvement has to performance, as well as to the antecedents and consequences of utilising customer information (e.g. Cui & Wu 2015; Lau 2011; Carbonell & Rodriguez-Escudero 2014). However, all these studies mainly focus on the impact from the organisations' perspective, overriding the impact that customer involvement has on the customers.

When involved in the development process, customers create a service expectation that should be met once the final service is launched. This means that customers expect the companies to utilise the information given to them, to create superior services that match the customers' needs. The service expectation can act as one factor for becoming involved in the process; the customer becomes involved in order to get services that match the articulated needs. This brings in question that what is the customer-perceived value of customer involvement? As previously stated, lots of studies have been conducted regarding the benefits and sacrifices for companies when involving customers. However, there is still a lack of studies that would focus on the customers' experience in the phenomenon.

Customer-perceived value (CPV) has been studied already for decades. The customer-perceived value consists of the benefits received and sacrifices (monetary and non-monetary) given to achieve the wanted outcome or maintain a relationship with the service provider. This benefit-sacrifice ratio is then reflected in the customers' expectations (i.e.

needs and wants). (Berry & Yadav 1996; Day 1990; Haas 1995; Mazumdar 1993; Narver & Slater 1990; Ravald & Grönroos 1996; Slater 1996, 1997; Slater & Narver 1992; Zeithaml 1988) Thus, if the service providers want to involve their customers in the service development process, they also need to understand what the customer-perceived value of it is.

Customer co-creation is a concept that has been trending in the research field especially in 2010's (e.g. Perks, Gruber & Edvardsson 2012; Melton & Hartline 2010, 2013, 2015). The literature suggests that in co-creation the customer will be involved in the whole development process, instead of being stage-related (i.e. involvement only in the beginning or end phase of the development process), which has been the custom (Alam 2002). The justification promoting the use of co-creation is that the cooperation between the service provider and customer helps to achieve better mutual understanding as well as to create tailored solutions better matching to customer's needs (Salter & Tether 2006, 16). Also, in co-creation, the customer engagement can be seen as more intense, since co-creation better matches to the definition of customer engagement (interactive and co-creative (Brodie, Hollebeek, Juric & Ilic 2011a)).

This thesis acts as a continuum of a previous action research, which was conducted in 2014 at ABB Ltd. (Hämäri 2015) Since the chosen method of customer involvement in the previous study was a focus group, this thesis will examine in more detail the efficiency of using focus groups as an involvement method. Also, co-creation has been somewhat of a trend in the innovation literature. Thus, it is critical to assess whether or not it brings any added value to the process from the view of the customer.

Through this thesis, both the academic and managerial fields will get empirical information of possible modes of involvement in new service development through customers' point of view. It will provide insights into what motivates organisational customers to become involved, how to involve customers in the development process and what has been customers' experiences on customer involvement.

In order to follow a customer-driven method also in this research, the data has mainly been gathered from the customers and, thus will project the customer point of view and give answers on at least one efficient mode of involvement, as well as identify possible motivational factors for customers to get involved in the new service development.

This thesis goes through the theory of involving and engaging customers in the new service development process. The theory part acts as a literature review based on previous findings, which are then reflected in the empirical part. The empirical research binds together the different customer roles and modes of involvement, to explain how to involve customers to new service development and what benefits do those possess from the view of the customers.

1.1. Research problems and objectives of the study

This thesis examines the customer-perceived value of customer involvement in new service development in the context of business-to-business service market. Even though the theoretical discussion includes findings from both product and service innovation literature, the empirical findings come from service development.

The thesis aims to add knowledge to the different customer roles and methods of involvement in new service development as well as to what is the customer-perceived value of customer involvement. This thesis studies customer involvement in a situation where customers have been involved in the development mainly in the earlier stages, rather than being involved throughout the process.

Also, through the empirical research, this study aims at identifying possible motivating factors for involvement from the view of the customers. Through these possible motivating factors, the research aims at developing managerial implications on how to better involve customers in the new service development process. These objectives are studied via four research problems:

Main research problem:

“How to involve customers in new service development process?”

Moreover, three sub-problems:

“What is a new service development process?”

“How do customers experience being involved in the new service development?”

“What are the factors underlying customers’ motivation to become involved in the development process?”

1.2. Literature review

To get a deeper insight into the phenomenon and concept at hand, this section presents the previous literature regarding customer involvement and new service development. The section aims at bringing forward the most central theories regarding customer involvement and gives more information on the subject later on in the thesis. The literature review synthesises both customer involvement and co-creation literature.

Even though researchers have studied new product development and customer involvement in new product development process for decades, customer involvement in new service development has remained relevantly understudied (Sandén 2007). One reason behind the lack in service innovation literature – compared to product innovation – may lay under the fact that the study area is quite vast, with subjects varying from cognitive psychology to engineering design and thus can be characterised as truly nondisciplinary (Matthing et al. 2004).

If not counting the wide study area and significant differences between the viewpoints of studies there has been quite many studies about involving customers in the service development such as Ciccantelli and Magidson (1993), Gruner and Homburg (2000), von Hippel (2001), Kaulio (1998), Mullern, Wildman and White (1993), Pitta and Franzak (1996), Shaw (1985), Wikström (1996) and Voss (1985).

The most current studies regarding customer involvement in the service innovation process, have been focusing more on the benefits and performance of customer-driven services (Alam 2002; Carbonell & Rodriquez-Escudero 2014; Carbonell, Rodriguez-Escudero & Pujari 2012; Larbig, Storey and Wiertz 2012; Magnusson 2003; Matthing et al. 2004) as well as studying customer involvement and new product development in the perspective of performance effects (Campbell & Cooper 1999; Cui & Wu 2015; Lau 2011; Ryzhkova 2015).

Many companies have not yet internalised the true concept of customer involvement, and thus the customers are often involved after the company has developed a new concept for the service (McQuarrie & McIntyre 1986). However, customer involvement has also got its part of criticism. It has been argued that customers might not have any positive effects to justify the extra cost related to the involvement process (Gales & Mansour-Cole 1995; Campbell & Cooper 1999); that they do not possess enough technical knowledge for product creation (Christensen & Bower 1996) nor that they can express their needs (Leonard & Rayport 1997).

Despite the criticism customer involvement has faced, there have been several pieces of evidence in the literature that there are multiple benefits to customer involvement and that customers can produce qualitatively better innovations (Alam 2002; Carbonell & Rodriquez-Escudero 2014; Magnusson 2003; Matthing et al. 2004). Table 1 summarises the previously discussed customer involvement studies and gives more details regarding their primary focus, type of study and context.

Table 1. Customer involvement in literature

Author	Primary focus	Type of study	Context
Alam (2002)	Objectives, stages, intensity, and models of user involvement	Review of literature and case study research	B2B, financial services industry, Australia
Campbell & Cooper (1999)	Impact of customer partnering in NPD	Empirical study	multiple industries
Carbonell & Rodriquez-Escudero (2014)	Antecedents and consequences of using customer information	Empirical: questionnaire and statistical analysis	multiple industries
Carbonell et al. (2012)	The appropriateness of customer participants and their effect on service performance	Empirical: questionnaire and statistical analysis	B2B and B2C, multiple industries, Spain
Cui & Wu (2015)	Three dimensions of customer involvement	Conceptual	N.A.
Gruner and Homburg (2000)	The effects of customer interaction: A) intensity and B) customer characteristics	Empirical: interviews and statistical analysis	B2B, machinery industry, Germany
von Hippel (1986)	Launch the concept of lead users and a method	Conceptual and anecdotal	B2B and B2C
von Hippel (2001)	Toolkits for user innovation	Conceptual and anecdotal	B2B, B2C, multiple industries
Kaulio (1998)	Intensity of customer interaction	Conceptual: review of literature	N.A.
Lau (2011)	Impact of customer involvement to NPD	Empirical survey	B2B and B2C, multiple industries, China
Leonard and Rayport (1997)	Empathic design, based on observation	Anecdotal evidence	B2B and B2C, multiple industries
Magnusson (2003)	Customers as potential innovators in the early phase of the process	Empirical	B2B, IT industry, Sweden
Martin and Horne (1995)	Examination of most successful versus least successful innovations within the same firm	Empirical: interviews, group discussions, and survey	B2B and B2C, multiple industries, USA
Martin et al. (1999)	Customer-input uncertainty	Empirical: case study	B2B, consultant services, USA
Mullern et al. (1993)	Taxonomy of participatory design	Conceptual	N.A.

Author	Primary focus	Type of study	Context
Olson and Bakke (2001)	Implementation and follow-up of the lead user method	Empirical: longitudinal case study	B2B, IT industry, Norway
Prahalad and Ramaswamy (2000)	Co-opting customer competence	Anecdotal evidence	B2B and B2C, multiple industries
Ryzhkova (2015)	Actual usage of online methods for collaboration with customers and firms' innovation performance.	Econometric analysis	N.A.
Shaw (1985)	Level of customer interaction	Empirical: interviews and statistical analysis	B2B, medical equipment industry, UK
Ulwick (2002)	Presents a methodology that focuses on outcomes rather than solutions	Conceptual and anecdotal	B2C, B2B, multiple industries, USA
Voss (1985)	The role played by users based on their degree of participation in the innovation process	Empirical: interviews and survey	B2B, application software industry, UK

As previously stated, the study area for customer involvement is large. Even the concept of customer involvement differs from research to research, and quite often the definitions are absent (Matthing et al. 2004). One of the earliest studies regarding customer involvement is von Hippel's (1986) research regarding lead user method. In von Hippel's study, the concept of involvement was based on a group of lead users that can be used in the development process. Other labels under which customer involvement has been discussed are; co-development (co-creation) (Andersson & Crocca 1993; Neale & Corkindale 1998), co-opting customer competence (Pralahad & Ramaswamy 2000), user involvement (Alam 2002), consumer involvement (B2C context) (Pitta & Franzak 1996) and customer interaction (Gruner & Homburg 2000).

In addition to the vast study area, also the scope of the customer involvement studies has differed a lot throughout the years. During the earlier years (the 1980's) the customer involvement studies mainly focused on the degree or intensity of customer involvement, customer characteristics and to the phases of the innovation process itself. Later on, the research scope has started to widen, representing the different trends in customer involvement research. Nowadays the trend is shifting more on utilising the relationship with the customer as well as to utilising customer knowledge. The customer co-creation trend is discussed next, and Table 2 summarises the different scopes in customer involvement literature.

Table 2. Customer involvement scope

Scope of customer involvement research	**Source**
degree or intensity of customer involvement	Alam 2002; Gruner & Homburg 2000; Kaulio 1998; Martin & Horne 1995; Shaw 1985; Voss 1985
customer characteristics	Carbonell et al. 2012; Gruner & Homburg 2000; von Hippel 1986
objectives of customer involvement	Alam 2002; Anderson & Crocca 1993
phases of the innovation process	Alam 2002; von Hippel 1986; Mullern et al. 1993
customer role in the process	Mullern et al. 1993; Wikström 1996
modes of customer involvement	Alam 2002; Ciccantelli & Magidson, 1993; Durgee et al. 1998; von Hippel,1986, 2001; Gustafsson et al. 1999; Leonard and Rayport 1997; Pitta and Franzak 1996; Ryzhkova 2015; Thomke 2003; Ulwick 2002
contributions	Neale & Corkindale 1998; Prahalad & Ramaswamy 2000
inhibiting factors of customer involvement	Martin et al. 1999; Olson & Bakke 2001
utilising customer knowledge	Carbonell & Rodriguez-Escudero 2014; Cui & Wu 2015

Nowadays companies learn from their customers, and the new technologies also push into a more open innovation direction (Chesbrough 2003; Chesbrough & Appleyard 2007; Lichtenhaler 2008; Prandelli, Verona & Raccagni 2006). Prior literature emphasises that services are co-created with the customers, at least, to some extent (Kunze von Bischhoffshausen et al. 2015). Customer co-creation has gained a larger share of the discussion regarding new service and product development in the 21st century. Moreover, the co-creation literature tends to be concentrating on radical (new) service innovations (e.g. Perks et al. 2012; Melton & Hartline 2010, 2013, 2015) or new product development (e.g. Cui & Wu 2015; Mahr, Lievens & Blazevic 2014; Smets, Langerak & Rijsdijk 2013; Wagner 2013; Menguc, Auh & Yannopoulos 2014; Nishikawa, Schreier & Ogawa 2013).

In customer co-creation, a large emphasis is put on the difference in relationship management. For a company to shift its perspective to a more service-oriented view – with emphasis on the customers – there needs to be a clear distinction between transactional and relational view. A transactional view of customer relationship relies on single transactions and short-term exchanges, whereas relational view aims at creating close mutual, and long-term relationship. The relational view sees customers as partners, rather than faceless consumers. (Kunze von Bischhoffshausen, Hottum & Straub 2015)

Moreover, in transactional view, the firm is an independent actor, whereas in relational view the company recognises the need for a two-party dyad or network interconnection. Also, the relational view interacts more with their customers, by involving them into firm's marketing, and embeds choice-making into the social system. In the relational view, both parties trust each other and thus are willing to allocate and share resources to improve the relationship. (Donaldson & O'Toole 2003) Table 3 summarises the major differences between the two views:

Table 3. Comparison between transactional and relational view based on Donaldson and O'Toole (2003)

Strategic dimension	*Transactional view*	*Relational view*
Structure	Based on each individual transaction	Close mutual relationship
Strategy formulation	Firm induced - firm as independent actor	A two-party dyad or network interconnection
Organization environment	Firm has control over choices	Embedded in a social system
Study of the customer relationship	Customer as external passive respondents to a firm's marketing effort	Customer as active/interactive participants in a firm's marketing
Resource allocation	Control of resources and risk of sharing are major concerns	Allocation and effect of resources on the relationship
Coordination mechanism	Power is advantage and gives control	Parties trust each other and act equitably
Nature of exchange	Short-term view minimizes investment in the relationship	Long-term view permits committed action

However, the literature lacks a coherent conceptualization of different forms of customer involvement. Although both the service (Blazevic & Lievens 2008; Moeller, Ciuchita, Mahr, Odekerken-Schroder & Fassnacht 2013) and innovation literature (Alam 2002; Coviello & Joseph 2012) have rich accounts of the roles customers can play in the development process, these studies lack the empirical proof of the concept used in a wider context. Thus, there would be a need to study the different conceptualizations of co-creation and customer involvement, to find a more general or universal definition.

The previous conceptualization efforts have either focused on the intensity of involvement (Bitner et al. 1997; Meuter & Bitner 1998) or are applicable only to specific contexts (McColl-Kennedy, Vargo, Dagger, Sweeney & Kasteren 2012; O'Hern & Rindfleisch 2010). Without a clear conceptualisation, research has rarely distinguished different forms of customer involvement from understanding how they may be driven by various factors or have a differential impact on performance outcomes. The literature lacks theoretical development that explains the differences in various customer involvement approaches (Bogers, Afuah & Bastian 2010) and is thus unable to offer better guidelines for firms' decisions to adopt the right approach (Baldwin & von Hippel 2011).

1.3. Theoretical framework

Figure 1 shows the theoretical frame of reference for this thesis. The object for the theoretical framework is to explain the phenomenon under research, as well as to reflect the concepts and objectives of this thesis.

The underlying context in this thesis is new service development (NSD), which follows the 10-stage process model created by Alam and Perry (2002). This study concentrates on customer-driven new service development in which the customer can be involved in the process either in the beginning or end stages (Alam 2002), or throughout the process. This thesis' main focus is on the *early-stage customer involvement* since the interviewed customers have been involved only in the early stage.

Since the topic of this thesis is the customer-perceived value of customer involvement in new service development, the study needs to cover new service development process, as well as customer involvement and what are the different parts related to involvement: motivation, customer engagement, customer roles, communication, benefits and different modes of involvement.

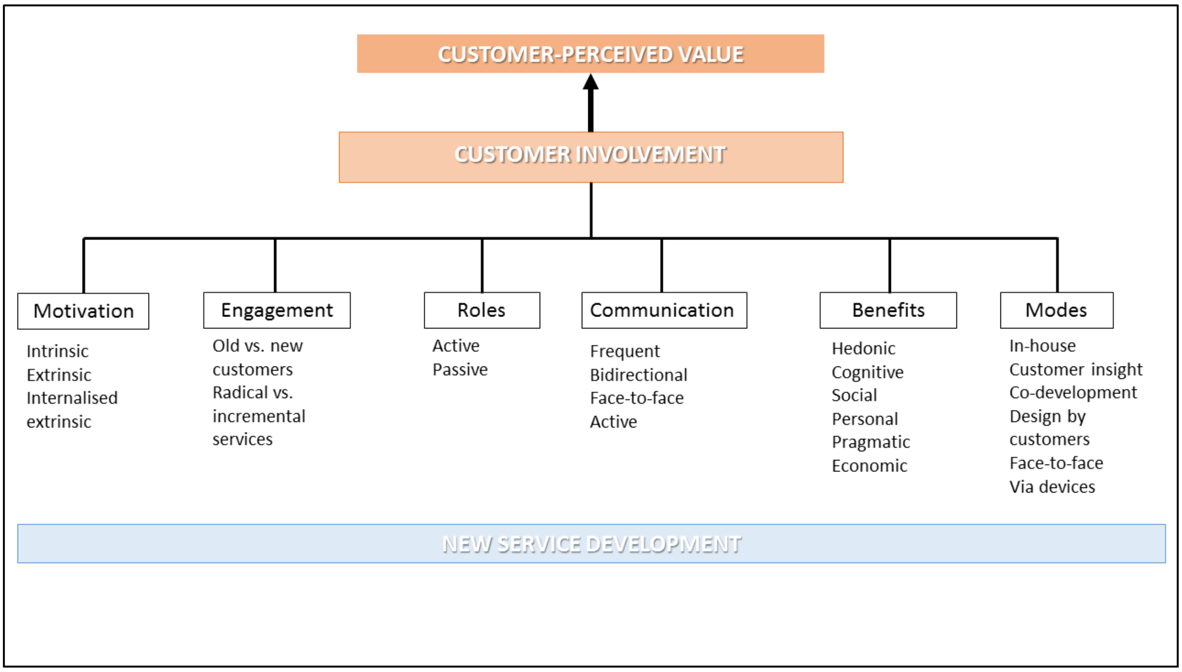
CUSTOMER-PERCEIVED VALUE
CUSTOMER INVOLVEMENT
Motivation
Intrinsic
Extrinsic
Internalised extrinsic
Engagement
Old vs. new customers
Radical vs. incremental services
Roles
Active
Passive
Communication
Frequent
Bidirectional
Face-to-face
Active
Benefits
Hedonic
Cognitive
Social
Personal
Pragmatic
Economic
Modes
In-house
Customer insight
Co-development
Design by customers
Face-to-face
Via devices
NEW SERVICE DEVELOPMENT

Figure 1. Theoretical framework

1.4. Delimitations

This thesis is concentrated on the service business in the business-to-business markets. To narrow the subject of this thesis, the topic has been chosen to include only customer-driven new services, which means, that the customers have been involved in the new service development process. Also, this thesis mainly takes into account those new services, where the customer involvement has happened already at the beginning of the development process (i.e. in the idea screening and idea generation stages (Alam, 2002)).

Since the thesis relies on a customer-driven new service development method, the chosen NSD model to discuss is the one created by Alam and Perry (2002). The other models are shortly explained in chapter 2, but not gone through in much detail. Since the study area of customer involvement is quite vast with the definitions varying from time to time, this thesis concentrates on previous findings, in which the definition of customer involvement and concept related to it, are similar to the ones used in the study. This option is chosen in order to have more clear definitions of the concepts and distinct some of the most similar concepts (customer involvement, customer co-creation, customer engagement) from each other.

The research studies the phenomenon of customer involvement, which on its own is quite vast and much studied. Thus, to narrow down the subject of this thesis, the study concentrates on customer involvement in six different dimensions that can be easily conceptualised. To study the phenomenon in-depth, the researcher does not delimit the previous findings on a large scale. The main delimitation concerning previous findings is that they need to have been conducted on customers, in other words focusing mainly on the business-to-business environment. However, in some cases, where there is a lack of findings regarding business-to-business environment or when the finding is of importance for this study, also the cases with consumers are discussed.

The study aims at bringing more information and empirical findings on the customers' experience on customer involvement. This thesis refers to this customer experience as the customer-perceived value of involvement. The choice has been made since the customer-perceived value better represents the different underlying choices in the process for the customer to be involved in the development process. However, some of the literature regarding customer-perceived value has been left out on purpose, since CPV in previous literature is quite strongly related to consumers and business-to-consumer markets.

The theory presents multiple roles that customers may possess during service development. However, some of the roles do not support the ideal customer involvement (for example passive involvement, or role related to becoming involved in the end phase), and thus those will not be reflected in the empirical section.

Moreover, the empirical part consists of customer-driven services, where the involvement method has been a focus group. Also, since the aim of this thesis is to find out how to involve customers in the development process, with a special focus on early-stage involvement, the research excludes customer-driven new services, where the customer role has been more of a lead user, and thus the involvement happens at a later stage. This is done, to get a better understanding of how to involve customers in the new service development process already at the beginning of the development. I.e. if the customer has had a say in the early stage of development process, it would be easy to presume that the service better answers to customers' needs.

The empirical data is a continuum of the findings of previous research (Hämäri 2015), and thus, the delimitations need to follow the same structure as given in the previous study. The data gathered from the empirical research relies solely on few companies' experiences, and as such, may not be generalised.

1.5. Definitions

This chapter goes through some essential definitions to get a better understanding of the approach of this thesis. These terms have been selected to get the reader a right mind-set for understanding the concept of this thesis and the world it represents. This chapter includes only a few definitions critical to be recognised at this point of the thesis. Other definitions are explained later on in the text.

Customer-perceived value: Customer-perceived value is a customer's assessment of the utility of a product or service based on benefits received and sacrifices given (Zeithaml 1988). Also, other definitions and components of customer-perceived value have been suggested. The customer-perceived value should be distinguished from customer satisfaction since they differ regarding the target, orientation, benefits, etc. (Miller & Swaddling 2002). In this study customer perceived value refers to the extent, in which customer weighs the possible cost/benefits of being involved in the development process.

Customer Involvement: Customer involvement in new service development refers to the extent in which the companies (producers) interact with customers in various stages of the development process (Alam 2006; Matthing et al. 2004). In this thesis, the term customer involvement can be identified with what other authors have labelled as customer interaction (Alam 2006; Gruner & Homburg 2000) and customer partnerships (Campbell & Cooper 1999). The term customer involvement works as a higher-level definition for involving customers in the development process, including all possible methods of involvement as well as both passive and active customer roles.

Customer co-creation: In this paper, customer co-creation refers to the extent of active, social and creative collaboration between the company (producer) and customer, which is facilitated by the company. Customers become active participants and take part in the development of new services. (Piller, Ihl & Vossen 2010) Moreover, co-creation needs to be established at a high frequency, in face-to-face meetings with two-way communication (Gustafsson, Kristensson & Witell 2012). In this thesis, the co-creation refers to the ideal customer involvement situation and is seen as part of customer involvement. The thesis speaks of both these terms, in which the co-creation refers to active and more customer-driven way of involvement. Other terms used for co-creation are co-development and co-design.

Customer engagement: In this research, customer involvement (participation) is seen as an antecedent for customer engagement. The difference is made due to the fact, that customer engagement *"is based on the existence of a customer's interactive, co-creative experiences with a particular engagement object"*, which in this case refers to a certain service. (Brodie et al. 2011a, 264) Customer engagement does not hold a certain definition and Gambetti and Graffigna (2010) have discovered that the definition varies between academic and professional fields. However, this research modifies the definition by Brodie et al., (2011a) and defines customer engagement as the phenomenon in which the customer actively participates and communicates with the service provider in order to achieve a better service. Moreover, customer engagement is the aimed consequence of customer involvement. Thus these two concepts are linked to each other.

Service expectation: Service expectation in this thesis, relates to the expectation customers get towards a service after they have been involved in the ideation phase. The definition is closely related to the assumption that companies would act on the knowledge created (Carbonell & Rodriguez-Escudero 2014). Thus customers expect that the end solution answers to their needs and requirements.

Service innovation: Service innovation as a concept is difficult to define, due to the fact, that there is a large variety of service sectors and also due to the finding that service firms innovate differently from industrial firms (Tidd & Hull 2006). In its simplicity, service innovation is defined as; *"the creation of a new market offering in the form of a service."* (Kohler, Schmitz & Neus 2015, 101)

New service development: Alam and Perry (2002) have created a 10-stage model for NSD, which combines the new service development processes of Bowers (1987; 1989) (an eight-stage model) and Scheuing and Johnson (1989) (a 15-stage model). The model by Alam and Perry (2002) is the first customer-driven development model and is thus used in this study. The stages according to Alam and Perry (2002) are:

1. Strategic planning
2. Idea generation
3. Idea screening
4. Business analysis
5. Formation of cross-functional teams
6. Service design and Process system design

7. Personnel training

8. Service testing and pilot run

9. Test marketing

10. Commercialization

Service design: *"The systematic application of design methods and principles to the creation of service concepts for new or improved services."* (Feldmann & Cardoso 2015, 109)

1.6. Research methodology

This thesis has been done by using a qualitative research method, and more specifically by conducting an exploratory case study research. The case study method has been chosen, since as the literature review indicates, there is still a lot to be explored in the area of customer involvement in new service development. The qualitative research methods are well suited in in addressing these theory-building studies. (Adams, Day & Dougherty 1998; Bonoma 1985; Parkhe 1993; Wilson & Vlosky 1997) Moreover, this study uses a holistic (single unit of analysis) multiple-case design in its empirical research. The holistic method has been chosen, since even though the case is a project work (Customer Focus Group), the project includes several cases within itself. Every CFG meeting has had a different service under evaluation as well as mostly different people attending, which is why all the meetings need to be evaluated as individual cases.

The case study method has been chosen for the purpose of this research is to illustrate how to do something (customer involvement) and the focus is on a contemporary event. (Yin 2009, 8) Moreover, a case study can be described as empirical research that studies a contemporary event or people in a certain environment, by using various and multiple ways of data collection (Yin 1983, 23). According to Yin (2003, 13), a case study is an empirical inquiry that "investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident". Since the empirical part of this research relies on an on-going project, and since the customer involvement (phenomenon) is so tightly connected to the new service development process (context), the case study method was seen as the most suitable research method. The case study also supports the manifold and various ways how the data is collected in this thesis.

However, case study research method faces some critique; the first one being the lack of rigour while conducting research. The second concern is the lack of providing enough evidence for the basis for scientific generalisation. The third critique is that case studies take too long and require an insufferable amount of time, however, in this case, there is a slight chance of making an error between case study method and specific method of data collection. The fourth and final concern relating to case study research is its inability to explain causal relationships. However, this critique answers to the need of case studies; they can give a deeper explanation of why and how the phenomena are happening. (Yin 2009, 14-16)

Moreover, case study research is a suitable solution for a continuum work, since the inquiry "*copes with technically distinctive situation in which there will be many more variables of interests than data points, and as one result relies on multiple sources of evidence with data needing to converge in a triangulating fashion, and as another result benefits from the prior development of theoretical propositions to guide data collection and analysis*" (Yin 2009, 18).

The data collection plan follows a case study method process (figure 2). First, a concise and comprehensive literature review is conducted in order to create a profound basis and background for theory development. The theory will determine the relevant research questions, which have narrowed the selection for suitable cases and determined design data collection protocol. This research includes multiple cases in a single unit, and each of the cases is observed and researched separately. After individual valuation, the cases will go through a cross-case analysis and conclusions, which will finally conclude into the final case report.

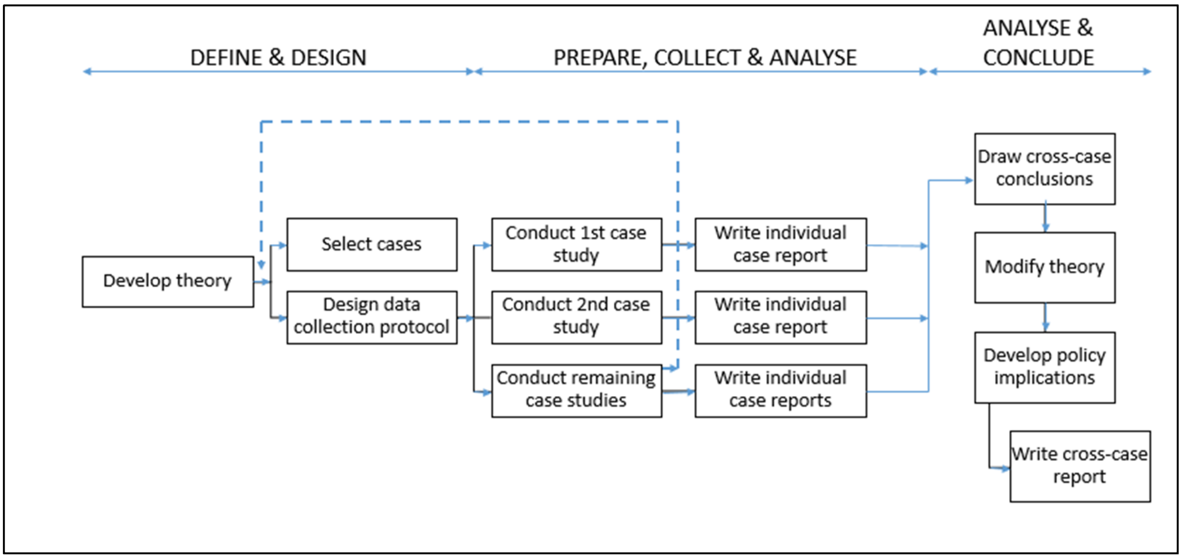
DEFINE & DESIGN
PREPARE, COLLECT & ANALYSE
ANALYSE & CONCLUDE
Develop theory
Select cases
Design data collection protocol
Conduct 1st case study
Conduct 2nd case study
Conduct remaining case studies
Write individual case report
Write individual case report
Write individual case reports
Draw cross-case conclusions
Modify theory
Develop policy implications
Write cross-case report

Figure 2. Case study method (Yin 2003, 50)

1.7. Structure of the thesis

The first chapter introduces the reader to the topic of this thesis, by giving a thorough introduction, explains the main definitions and terms used, as well as sheds light on the theoretical background and methodology underlying this research. The second chapter gives a more detailed explanation of what is new service development; what is the process and what makes it customer-oriented.

The third chapter opens up the concepts of customer involvement and co-creation more thoroughly, by paying attention to the different modes of involvement, communication and different roles customers may possess during the development process. It also introduces the concept of customer engagement to the readers and its role in the whole process. The main concept of the thesis, customer-perceived value, is gone through in the final section along with the previous findings regarding customers’ motivations to become involved.

The fourth and fifth chapter focus on the empirical section of this thesis. They give a detailed description of the background of the case based on previously conducted work, as well as introduces the results of the empirical research. Sixth chapter focuses on the empirical findings, and discusses their theoretical and managerial implications as well as provides recommendations and suggestions for future research. The final and seventh chapter summarises all the major findings and how those are connected to previous literature. Table 4 summarises the structure of this thesis.

Table 4. Structure of the thesis

Chapter name and number	Content
1. Introduction	Background of the thesis, research problems, and objectives, literature review, theoretical framework, delimitations, definitions of main concepts, research methodology, structure.
2. New service development	The difference between new product and service development, new service development process, new service design, a difference of NSD and service design, customer-driven new service development.
3. Customer involvement in service development	What is customer involvement, customer roles in development, modes of involvement, communication with customers, the role of customer engagement, customer-perceived value and customers' motivations to become involved?
4. Empirical research: case ABB	Introduction and background of case company, introduction to Customer Focus Group method, case introductions, data collection and analysis methods, discussion on reliability and validity.
5. Results	Results of the study.
6. Discussion and conclusions	Analysis of the results, theoretical implications, managerial implications, conclusions, recommendations and suggestions for future research.

2. NEW SERVICE DEVELOPMENT

As stated before, the research regarding new service development has remained quite understudied. One reason for the fact might be, that quite often innovation has been associated with tangible products (Alam & Perry 2002). However, the new product development literature and different development models, cannot be directly transferred to creating new services. This is because new service development differs from product development due to the unique characteristics of services; they are intangible, heterogeneous, perishable and inseparable. (Zeithaml, Parasuraman & Berry 1985)

The major difference between new service development and new product development lies in the customer involvement. Services tend to involve customers in the delivery of the service and also, services usually require longer commitment with the customers, thus building a deeper connection. (Martin et al. 1999) Hence, the four service characteristics cause that the customer orientation plays a larger role in service firms than in tangible product firms. Due to which, customer input and involvement might be more beneficial in new service development rather than in new product development. (Martin & Horne 1995; Normann 1991; Vermillion 1999)

As lies at the core of the service-dominant logic, customer value creation forms the foundation of service innovation (Chew 2014, 44). Moreover, new service development can be characterised as a human-centric method for creating or improving services. Also, new service development can be seen as an overlapping concept also involving the terms *service design* and *service innovation*. (Feldmann & Cardoso 2015, 105, 108) However, these three previously mentioned terms vary from each other. New service development can be seen as the process which holds all the steps from idea generation to commercialization (Alam & Perry 2002). Whereas, service design is delimited only to overlap partially with the different stages of NSD, due to service design's aim in creating a service concept. Finally, nowadays service innovation has shifted to mean more of a management discipline since the recent service innovation literature varies and covers a wide range of topics and views. (Feldmann & Cardoso 2015, 110) Figure 3 displays visually the differences and overlaps between new service development, (new) service design and service innovation.

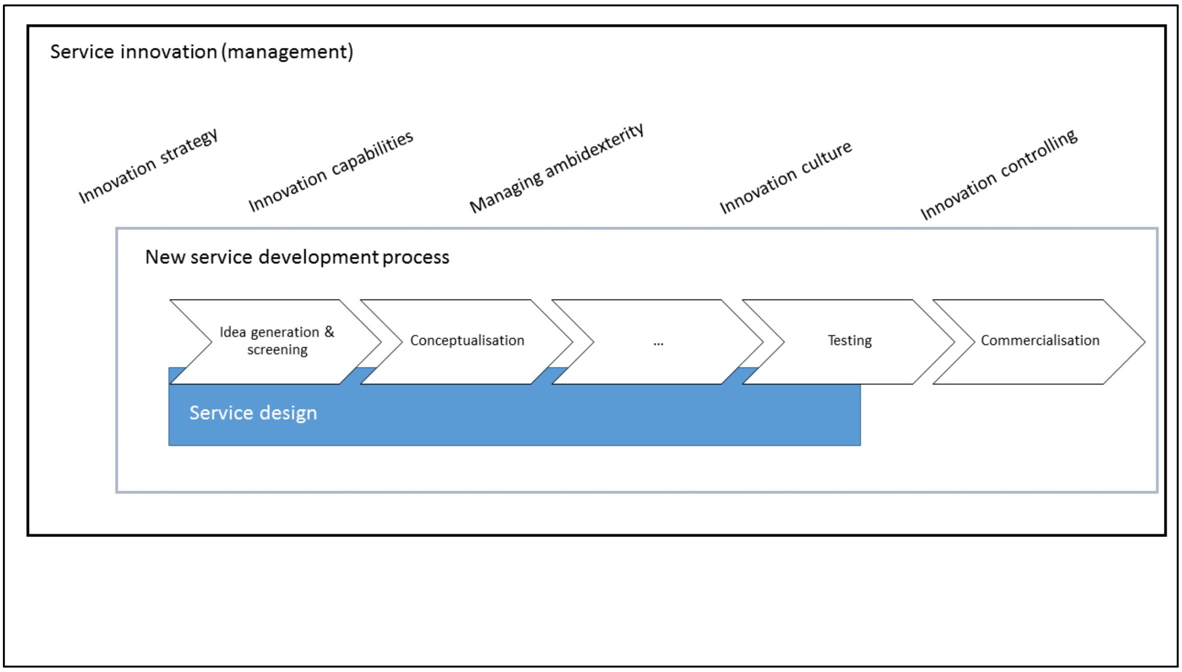
Service innovation (management)
Innovation strategy
Innovation capabilities
Managing ambidexterity
Innovation culture
Innovation controlling
New service development process
Idea generation & screening
Conceptualisation
...
Testing
Commercialisation
Service design

Figure 3. NSD vs. service design vs. service innovation (Feldmann & Cardoso 2015, 110)

As can be seen from the Figure 3, service design and new service development are somewhat similar, and the main differences lay in the application of design methods as well as in the principles of such creation methods. However, some studies have found that service design is more valuable since it puts more effort in improving and understanding service experiences through focusing on customers and their interactions with the service provider. Moreover, researchers have come to the conclusion that service design derives from five cornerstones thus being human-centric, interactive, holistic, iterative and prototype-based. (Erlhoff, Mager & Manzini 1997; Mager & Gais 2009; Meroni & Sangiorgi 2011; Stickdorn & Schneider 2012)

Both new service development and service design follow the principles of service-dominant logic. Service design can also be seen as overlapping with the new service development, though having its stages for the creation of a service. However, there is even a slighter distinction between customer-driven new service development and service design. The next chapters will be focusing more on the development processes of NSD and service design, as well as to the similarities between service design and customer-driven new service development.

2.1. New service development process

The development of the service concept and its processes happen in the new service development process (NSD). It is important to think about, whether to include customers in this process or not. However, as stated in the previous literature as well as in this thesis, it would be vital to include the customers to the development process, since in services the customer is always the co-creator of value and customer involvement can be seen as one of the key factors of a successful service. (Alam & Perry 2002; Lusch & Vargo 2008) Also, the role of the customer needs to be evaluated. Would it be reasonable to include only a small number of lead users, who could test the service and adapt to new features, or would it be better to include strategically important customers, whose needs are aimed to be fulfilled? (Grönroos et al. 2007, 63-64)

As stated, service design is based on five factors, it is; human-centric, interactive, holistic, iterative and prototype-based. Being human-centric means that in service design, instead of having a technology or management perspective to service development, the service designer develops from the customer perspective. Also, service designers aim in interacting with the customers as much as possible for the purpose of comprehensively understanding how the customer perceives the service. Unlike in new service development, where the customers can often be seen as segments, service design sees customers on an individual level and wants to understand the system in which the service is being implemented. Service designers base their actions on continuous learning and want to visualise their ideas by using mostly prototypes in the development. (Erlhoff et al. 1997; Mager & Gais 2009; Meroni & Sangiorgi 2011; Stickdorn & Schneider 2012)

According to previous studies, there are two different models used for new service development (NSD). The first is an eight-stage model created by Bowers (1987; 1989) whereas the second is a 15-stage model conducted by Scheuing and Johnson (1989). In contrast, new product development (NPD) models usually have seven to ten stages, whereas the service design follows only four stages; exploration, creation, reflection and implementation (Feldmann & Cardoso 2015, 113).

In new service design, the four steps reflect the principles of service design. The difference between NSD and service design lies in their different definitions; NSD can be defined as describing the development process of a new service from the early development to the market introduction. Service design, on the other hand, focuses on a smaller section of the development process and applies different design methods and principles systematically in the creation of a service concept for new or improved service. (Feldmann & Cardoso 2015, 133) In a similar manner with NSD, also in service design, the biggest emphasis is on the first two stages. The first stages of service design aim in better understanding humans and their needs, after which they aim in creating a solution for the customers' problems. (Feldmann & Cardoso 2015; 113-114)

This brings out the largest difference between NSD and service design, since even though the processes may seem somewhat similar, it is the difference between the initial stages that separates them from each other. Service design aims at achieving a deeper understanding of their customers than NSD. (Stickdorn & Schneider 2012) Also, service design relies heavily on certain design methods that should or could be used, whereas new service development can be seen in being a more free-form development process. Even though the customer is the key factor both in Alam and Perry's NSD model as well as in service design, there is a difference. In NSD, the customer can be seen as becoming involved for the service provider to get insight on customer needs and to involve the customer possibly to the decision-making and ideation of the actual service or solution. Whereas, in service design, the key issue is the customers' perception of the service and how do they experience it. Thus, it could be stated that service design is closer to the customer experience management perspective whereas new service development relies on customer relationship management.

Alam and Perry (2002) have created a 10-stage model for NSD, which also takes notice of the customer involvement during different stages of the process. The NSD model provided by Alam and Perry is also important because it was the first model that tied together new service development and customer involvement and input (2002). The 10-stage model is the NSD model used in this thesis not only due to the noticing of customer involvement but also because the model was developed especially for business-to-business services. The stages in Alam and Perry's model are:

1. Strategic planning
2. Idea generation
3. Idea screening
4. Business analysis
5. Formation of cross-functional team
6. Service design and process system design

7. Personnel training
8. Service testing and pilot run
9. Test marketing
10. Commercialisation

Alam and Perry (2002) divide NSD process into two different models: linear and parallel models. In the linear model, all the phases follow each other in a linear and chronological order. However, the parallel model takes into consideration the fact that sometimes the development process does not happen under a strict plan, but instead different phases can be executed simultaneously. This thesis follows the parallel model on NSD due to the competitive market of the case company, which causes the effect that the development might not happen in sequences. The phases of the chosen new service development process are presented in Figure 4.

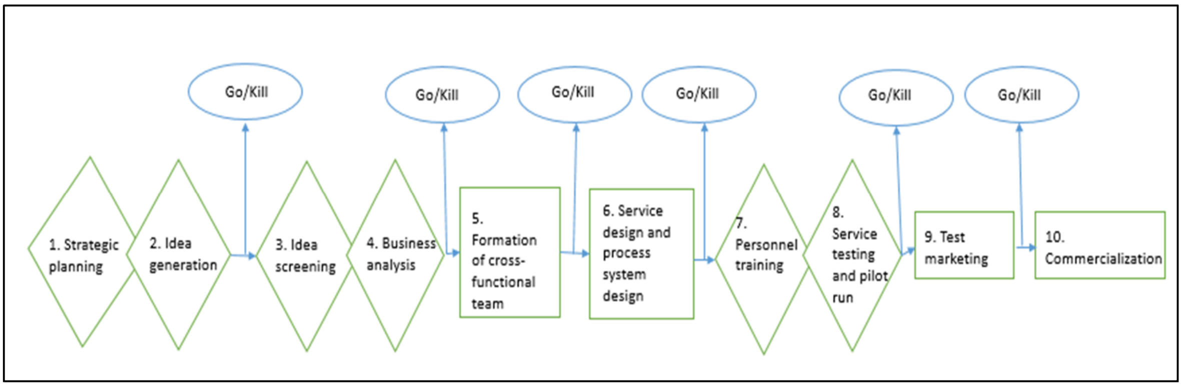
Go/Kill
Go/Kill
Go/Kill
Go/Kill
Go/Kill
Go/Kill
1. Strategic planning
2. Idea generation
3. Idea screening
4. Business analysis
5. Formation of cross-functional team
6. Service design and process system design
7. Personnel training
8. Service testing and pilot run
9. Test marketing
10. Commercialization

Figure 4. NSD process

New service development differs from new product development since in NSD the customer has enhanced role in all of the phases of NSD. In addition to NPD model, the previous NSD models by Bowers (1987, 1989) and Scheuing and Johnson (1989) lack of understanding that the key success factor for new services and an important part of the process is customer interaction. Thus, the process cannot rely solely on creating or developing a service or a product, but the customer needs to be involved. (Alam & Perry 2002; Martin & Horne 1995)

In the strategic planning phase, it is imperative that the company works in cooperation with the customer, hence the customer-driven new service development process concept. In the beginning, the company needs to identify both its core business as well as the core business and supporting processes of the customer's. In the strategic planning, the company can utilise its networks, when deciding the width of the service. Other things to take into consideration in the strategic planning phase are the company's capability of taking risks as well as the earnings logic related to the new service idea. (Grönroos et al. 2009, 67)

The beginning stages of the development process play a large role in the creation of new services. They enhance the identification of possibilities and it is paramount that the idea generation would be made in cooperation with the customer. (Grönroos et al. 2009, 67) In Alam and Perry's (2002) NSD model, the idea generation phase is the most crucial along with the formation of a cross-functional team. More importantly, the company needs to ensure that both the customer and the organisation are engaged in the process. In some cases, the service idea might not be a new one, but instead an expansion of old service concept. Nevertheless, the involvement of customers has been proven to reduce development life cycle time, which once again emphasises the importance of involving customers in the development process early on. It is also important to notify that the organisations need to be proactive towards customer involvement and acquire customer input. (Alam & Perry 2002)

When starting to the create the concept for the service – how will the service and its process be built – the customer's needs and expectations play an enhanced role – thus, it is important for the company to have information regarding the customer impact related to the service offering. (Grönroos et al. 2009, 68) Since, in order to create customer-driven services, the input gathered from the customers, needs to be implemented and utilised in the development. Otherwise, the service provider might involve customers to the development process, but the end service might not meet customers' needs. It must also be mentioned that strategic role of the customer for the company has a say on how much weight is put on the customer opinions. The stages for highest frequency for customer input are idea generation, service design and process system design and pilot run. Thus, customer involvement can be seen as critical in these three stages (Alam & Perry 2002).

The service specification phase concentrates on determining and defining the service levels – the scope, quality and responsibilities regarding the service. Once again, the role of the customer is enhanced in this section. The design phase concentrates on the implementation of the service; the purpose is to ensure that the service can be deployed to the market. The final phase in NSD before the commercialisation and launching phase is testing and piloting, which should be done together with a customer. (Grönroos et al. 2009, 68-69) However, quite surprisingly, in the business-to-business service business environment, the test marketing phase is seen as the least relevant development process phase (Alam & Perry 2002).

2.2. Customer-driven new service development

Customer involvement has various degrees and models in the literature. Edvardsson et al. (2006) present two different types of customer involvement in the innovation process: traditional and new model. In the traditional model, the customer is seen as a user of the product, service or solution, and the involvement means analysing and understanding customer's latent needs, preferences, wishes, and experienced values.

The traditional model can also be referred to as *goods-dominant logic*, in which the value is created when the goods are produced, and the customer is involved in the process only when it consumes the goods – usually in the end phase of innovation and development process (Mele, Colurcio & Russo-Spena 2014). In GDL, the main purpose is to produce goods and sell them. This means that the GDL relies on transactional perspective; the value is added to the product when the product and money are transacted between the producer and buyer. Since products are usually tangible, it means that their value diminishes over time. GDL uses operand resources (tangible, such as raw material) which are used to manufacture tangible goods that are the sold and transferred from the producer to the buyer. (Gruen & Hofstetter 2010)

Because companies following GDL only see customers as a source of information, they get asymmetric information, which means that the information is likely to be uncorroborated, unbalanced, and perhaps misleading which might have a negative impact on the customers' experiences and value co-creation. Since the one-sided views can be seen as biased, the message can be perceived as propagandistic resulting in distorted, intrusive or even abusive communication. (Edvardsson, Ng, Min, Firth & Yi 2011)

The new, proactive model introduced by Edvardsson et al. (2011) shifts the phase in which the customer is involved in the process: instead of using customer only as a source of information, the customer participates in the process as a co-innovator. The new model is often referred also to as *service-dominant logic*, a term coined by Vargo and Lusch (2004). In SDL, the value is created through the process of serving; the main question that needs to be answered is how to fulfil customer needs through a service process? In other words, the fundamental basis is the exchange of services (Vargo 2009). Since the value is defined by the way how the service fulfils customer needs and desires, it evokes customer experiences. Unlike with tangible products, in services the value can be long-lasting through a positive service experience. SDL uses operant resources (intangible such as employees), which are dynamic and non-linear and will generate immediate and/or persistent value when applied. (Vargo 2009; Vargo & Lusch 2004) According to the SDL perspective, knowledge is a sustainable source of competitive advantage (Edvardsson et al. 2011).

In SDL the information is gathered from all stakeholders; customers, employees, partners and other actors, which allows a balanced view to make informed decisions. On the contrary to GDL, SDL uses conversations and dialogs when discussing with customers. (Edvardsson et al. 2011) That way, a trustworthy consensus of value is created, and educated customers are not affected by advertisements when making buying decisions. Instead, the customers rely on peer-to-peer opinions from viral marketing or word-of-mouth. Unlike in goods-dominant logic, the companies can only make and communicate a value proposition, but it is the customer who decides whether or not the proposition matches their benefits received-sacrifices given a ratio. When the service is put to use, the customer and provider co-create the value, and it is often only then when the customer can confirm the value proposition. (Vargo 2009; Vargo & Lusch 2004) SDL relies on a relational approach, which requires an intimate and deep engagement with the customers to ensure that their needs can be addressed by created relational contracts.

In practice, this means that in SDL the customers set up and review idea-making, plan new solutions to fill their needs and improve processes making them less expensive to themselves. Thus, the value is created jointly by the producer and customer when the service is used. Research has also proved that service-dominant logic evokes an overall better customer experience when used in service systems (Edvardsson et al. 2011).

The goods-dominant logic and service-dominant logic can also be referred to as transactional view and relational view, which were presented in chapter 1.2.2. The main differences between goods-dominant logic (GDL) and service-dominant logic (SDL) are summarised in Table 5.

Table 5. Differences between GDL and SDL (Lusch & Vargo 2008, 90)

Goods-dominant mind-set	Service-dominant mind-set
Goods	Service(s)
Tangible	Intangible
Operand (tangible) resources	Operant (intangible) resources
Asymmetric information	Symmetric information
Propaganda	Conversation
Value added	Value proposition
Transactional	Relational
Profit maximization	Financial feedback

On the other hand, Desouza, Awazu, Jha, Dombrowski, Papagari, Baloh and Kim (2008) identify three different ways of customer involvement: "1) identifying, analysing and communicating with customers, 2) incorporating them into their existing innovation process through transformation of their business processes and 3) by encouraging customers to engage in improving existing products and services". Desouza et al. (2008) bring forward the general fact that for companies to survive, the key innovation strategy should be customer-driven innovation. As stated in the article, innovating is becoming limitless, and companies are required to provide tools for customers to express their ideas. Desouza et al. (2008), come to the nearly same findings as Kaulio (1998) in his study regarding new product development; companies need to shift from the traditional way of involving customers to the new, relational, and customer-driven way. Kaulio (1998) and Desouza et al. (2008) have marked the differences between old and new ways with terms *innovation for customers, innovation with customers* and *innovation by* customers. The main differences as according to Desouza et al. (2008, 43) are summarised in Table 6.

Table 6. Customer-driven innovation vs. older paradigms

	Customer-driven innovation	*Customer-centred innovation*	*Customer-focused innovation*
Central entity	Customer	Customer and organisation	Organisation
Degree of customer involvement	Innovation *by* customers	Innovation *with* customers	Innovation *for* customers
Role of organisation	Coordinator	Communicator	Innovator
Type of innovation	Dynamic innovation	Open innovation	Closed innovation
Degree of control	Impossible to control	Hard to control	Easy to control
Degree of coordination	Emergent coordination	Difficult to coordinate	Easy to coordinate
Critical innovation stage	Commercialization (Ideas are over-generated and developed, but difficult to commercialize	Idea development (Ideas are abundant but difficult to develop)	Idea generation (Ideas are scarce)
Types of innovation to focus on	Products and services, output interaction; interaction with products and services	Communication with customers; customer interaction with the organisation	Customer segmentation and customer analysis
Critical issues with innovation types	"Sticky" and tacit knowledge transfer requires high levels of human interaction. Customers must be segmented for proper analysis	Investment in infrastructure. High-quality communication needed. The risk of copycats.	The analysis must be ongoing. Systems must be integrated. Information overload possible

In the new, customer-driven model, the central entity is with the customers, who also does the innovating. Thus, there is a large difference in comparison to the older paradigms, where the central entity has been the company, or the customer might have had a small role in the development process. In the traditional (goods-dominant logic) way – customer-focused innovation – companies innovate new services based on their assumptions and expectations of customer needs. The customer-centred model places itself in between the traditional and new model – the innovation is co-designed with the customer, but the idea of the innovation originates within the company.

The most critical stage in the customer-focused innovation is in the idea generation phase since there is no proof-base that the solution answers to customers' needs. Whereas in the customer-centred model, the critical stage is the idea development (idea screening) phase, since customers may give abundant of ideas, but they might be difficult to develop and refine into a service. In the customer-driven innovation, the critical stage is faced when the innovation is ready to be commercialized. Since the innovation is often based on one customer's needs, there lies a risk that the innovation is over-generated and tailored to meet the needs of the customer base.

3. CUSTOMER INVOLVEMENT IN THE SERVICE DEVELOPMENT PROCESS

Customer involvement in the service innovation process is crucial especially in the industrial markets due to industry dynamics regarding competitiveness, growth, and survival of the companies (Sandén 2007; Edvardsson, Kristensson, Magnusson & Sundström 2012). However, it holds certain challenges that need to be taken into consideration (Carbonell & Rodriguez-Escudero 2014). First of all, there is the important process of choosing the appropriate customer to involve to the service development (NSD) (Alam 2002; Carbonell et al. 2012; Nambisan 2002). Especially in the industrial markets, where customers are often major and of strategic and/or financial importance, the management of involvement is important (Lehtimäki, Pääkkönen, Oinonen, Ojansivu & Salo 2012).

Secondly, there is the challenge concerning the knowledge gathered from customers: there lies an assumption that by involving customers in the new service development process, companies would also act on the knowledge created (Carbonell & Rodriguez-Escudero 2014).

Customer involvement is based on the fact that sticky information and insights cannot be separated from the social context in which they are created (Sandén 2007). Thus, in order to transfer the information and knowledge between the service provider and customer, there needs to be deeper interactions and processes of communication (Gales & Mansour-Cole 1995; von Hippel 1994).

The underlying basis of customer involvement is that the input (information, knowledge, ideas, prototypes and/or solution) from the customers in various development stages should influence the development of a new service, thus resulting in a service better matching customer needs. (Sandén 2007) By involving customers in the service development process, service providers can have a better output, and the resulting services offer added customer value and satisfy the needs of customers'. (Gupta and Wilemon, 1990; Iansiti and MacCormack, 1997).

The role of customer involvement is to ensure that the voice of the customer is heard during the innovation process (Larbig et al. 2012) – however, the role is not always fulfilled (Berchicci & Tucci 2010). Thus, it is justified to argue that for the customer involvement to be effective, companies should utilise the new knowledge that is created by the customers. Also, service innovation in the industrial context demands that customer involvement is both proactive and collaborative. (Carbonell & Rodriguez-Escudero 2014) Business service innovation needs to be customer intensive since it gives industrial service companies the opportunity to create the expectations and design for a new service concept together with the customers (Kindström et al. 2013).

As research has shown, instead of just involving customers to the development process, companies should also act on the knowledge created to ensure better performance (Carbonell & Rodriguez-Escudero 2014; Cui & Wu 2015) According to previous studies on the matter, the usage of customer information can be divided into two sections: conceptual and instrumental ways. Conceptual information refers to the indirect use of information that provides enlightenment to the knowledge base (Menon & Varadarajan 1992), whereas instrumental information infers to its direct use to marketing strategy decisions (Moorman 1995). Moreover, Carbonell and Rodriguez-Escudero (2014) argue, that to achieve the benefits of customer involvement in business service innovation, companies should utilise the insights and feedback gotten from the customers when solving particular problems or making decisions.

Also, the recording and sharing of customer information outside and within the NSD team can resolve to greater information flow, thereby improving new service performance. By using the information created by the customer, companies can get a better understanding of “sticky information” and create better matches in market offerings as well as influence profits gathered from new services (Witell, Gustafsson & Johnson 2014). Also, the use of instrumental information can lead to the development of unique and superior services (Carbonell & Rodriguez-Escudero 2014).

Research has shown, that ideas generated by the customer are more innovative: customers can produce better and original ideas compared to service producers all the while creating a situation for learning about the customers’ latent needs (Magnusson 2003; Matthing et al. 2004). The development of highly innovative services is also a possible result of customer involvement. New insights about opportunities and problems may also result via close collaboration which may provide companies with a better understanding of the challenges and needs of the customers. (Carbonell & Rodriguez-Escudero, 2014)

3.1. Customer roles in the development process

Previous studies recognise several different roles that customers can have in the service development process. In their research regarding service innovation, Kuusisto and Päällysaho (2008) divided customer involvement opportunities into four different parts based on previous findings. According to their study, customers can have four alternative positions, which are **consumer, co-performer, co-creator** and **co-designer**. Thus their research relies heavily on the relational view or service-dominant logic in involving customers.

On the other hand, customer roles can be based on strategic positions and the activity by the customer. These strategic roles include **interactive co-designer, integrated co-designer, form filler** and **real-time fieldsource**. (Mannervik & Ramirez 2006) In their research regarding the utilisation of customer knowledge in innovation, Cui and Wu (2015) identify three forms of customer roles based on previous findings (Blazevic & Lievens 2008; Fang 2008; Jeppesen 2005; Nambisan 2002): **Customer as information source (CIS), customer as co-developer (CIC)** and **customer as innovator**. The breakdown that Cui and Wu use also matches the findings of Desouza et al. (2008) and Kaulio (1998).

The consumer role provides a traditional aspect and goods-dominant logic, in which the customer is seen as a passive consumer of provider’s services. Participation in the new service development is non-existent, and the value-creation happens through using the service, which supposedly fills the customers’ needs as well. (Kuusisto & Päällysaho 2008) The consumer role reflects the role definition of Blazevic and Lievens’ (2008) passive user of electronic services, in which the co-creation of knowledge is small, and access to information is comprehensive and continuous.

However, unlike in the consumer role, in electronic services the customers are often not aware that information is being gathered from their usage. Whereas, in the consumer role, the information is collected knowingly to develop services. Literature also provides other definitions of these roles, such as Ojasalo’s (2009) informer, in which the service provider can gather information to develop its services. Subconscious information, such as buyer behaviour, is also provided in Mannervik and Ramirez’s (2006) real-time fieldsource role, where the company can utilise the collected information in better targeting their offers.

Another example of the traditional attitude toward customer involvement includes the roles where customers are seen as an information source and form filler. In both parts, the customer is differentiated from the offering, operating, for example, as a support to R&D. The customer is utilised mainly by listening (answering inquiries) or observing (focus groups). (Cui & Wu 2015; Mannervik & Ramirez 2006) However, previous studies identify another role that differs slightly from the previously presented ones: an active informer. The active informer provides information to the service provider by their own willing, in the hopes that they might be able to exploit it. (Blazevic & Lievens 2008)

The previously identified roles have presented customers in a somewhat passive manner. However, in the co-performer, co-developer, and co-creator roles, the customer actively influences the focal service. When working as a co-performer, the customer brings input to the development process, which is however organised by the service provider. A similar role to co-performer is the interactive co-designer in which the role is predetermined by the service provider and customers communicate and interact in hopes of bringing out new ideas or new ways to co-innovate. The customer can either perform some functions belonging to the service provider, or the service’s nature may insist customer’s input in the production mode, to achieve better value. (Kuusisto & Päällysaho 2008; Mannervik & Ramirez 2006)

When acting as a co-developer, the customers participate directly to the development process, combining information and technology to create new solutions (Cui & Wu 2015). The customer is part of the development team, and interacts and engages closely in joint problem solving in cooperation with service provider’s employees (Bogers & Horst 2014; Jeppesen 2005). They do not offer only information regarding their needs, but also put input into creating solutions to match better those needs (Lilien, Morrison, Searls, Sonnack & von Hippel 2002). The development still happens within the company, but it is a collaborative process between the service provider’s employees and customers, where they work as partners and share the responsibility for the development. However, the company needs to monitor the process closely and manage its interaction with the customers carefully (Mahr et al. 2014). In this case, the company is closely coupled with its customers, and the development process is enlarged due to the integration of customers in the process (Hoyer, Chandy, Dorotic, Krafft & Singh 2010).

Co-creator differs from the previously discussed roles because the service provider does not have a complete service offering when customer works as a co-creator before they take part in the process. In other words, co-creators do not acknowledge their needs beforehand. The details of the position fine down during the process, when the service provider gets a picture of the potential of the customer. Typically, the customers pursue a solution to their problem, though not knowing what the problem is they are trying to find a solution for. Interaction and exchange of information are important to get success. (Kuusisto & Päällysaho 2008) The literature finds two similar roles to co-creator – bidirectional creator and integrated co-designer. When acting as a bidirectional co-creator, the customer can act as a creator of the knowledge by influencing the development of solutions and creates information to the process itself (Blazevic & Lievens 2008). In the integrated co-designer role, customers consciously invest in innovating more developed solutions by exploiting their special know-how (Mannervik & Ramirez 2006).

When acting as a co-designer, the customer's role differs from the previously presented ones. In the co-designer model, the provider and customer together divide the production and personnel inputs evenly, by deciding who produces which services. (Kuusisto & Päällysaho 2008) Straub, Kohler, Hottum, Arrass and Welter (2013) identify the co-designer role as one of the most relevant ones according to previous studies. Another definition for co-designer is cooperation with a co-creator (Ojasalo 2009).

In the customers as innovators model (Cui & Wu 2015) the service provider does not collect information from the customers to use in the development, but instead wants to move the focus of development towards customers, so that they would handle the innovation (von Hippel & Katz 2002). By providing customers innovation platforms and technical support – thus sharing certain technological knowledge – the customers become the primary contributors in design. By doing that, the companies' tasks change, from designing services to utilising customer input and providing technical support. (Nambisan 2002; von Hippel and Katz 2002). The companies acquire indirect customer knowledge by observing customer-developed innovations and their market responses, and as such do not directly transfer customer knowledge to the focal company (Cui & Wu 2015).

However, nowadays the idea that customers would only have one role in the innovation process is abandoned. Instead, customers can have various, varying roles in the innovation process. (Öberg 2010) The positions can be stable or differ during the whole innovation process (Fang 2008) or customers can act as a lead user (von Hippel 1986) or as a co-designer (Buur & Matthews 2008; Kuusisto & Päällysaho 2008). Lead users bring forth the fundamental fact that sometimes the need for something new can serve as an important role while creating and developing innovations. This discloses the essential need of using customers both as informers and co-innovators.

When acting both as an informer and co-designer, the roles can be differentiated from each other. In the informer role, the customers do not necessarily be only a source of information, but act as a critic to commercialisation (Janssen & Dankbaar 2008), as well as a tester of innovations in the early development stage (Raasch, Herstatt & Lock 2008). As a co-designer, the customer can participate in the design and solution seeking processes.

Mannervik and Ramirez's (2006) study differentiate the customer roles by four dimensions. The first dimension follows the division between traditional-new or transactional-relational view, by dividing the customers to active and passive. The first dimension takes a view regarding how firmly the customer controls the process, how much resources will it offer, how much risk is the customer willing to take and how much work will it be ready to do. A passive customer has a strong, indirect influence on the service design, whereas an active customer reacts to development decisions and creates signals for the service provider already in the early development stage so that the provider can make possible changes.

As stated, an active customer is involved in the development process already at the early stages. When summarising the previously mentioned roles by comparing them to the position of the customer and the development phase, it is reasonable to argue that the roles that fall under the category "active" or otherwise known as relational view are: co-performer, co-developer (CIC), co-creator, interactive co-designer, bidirectional co-creator, integrated co-designer, co-designer, cooperation with co-creator and customer as innovator (CIN). Thus, to create successful service innovations, these roles should be utilised already from the early development phases, and in most cases, the role should be continuous throughout the development process. Also, the "passive" roles or roles following the transactional view are: consumer, passive user, informer, real-time fieldsource, the customer as an informer (CIS), form filler and active informer, and these roles are mostly utilised at the final stages of the development process. Even though the passive roles can also be identified at the early stages of the development process, in most cases, the information is gotten once the customer uses the final product or service. Figure 5 displays how the roles are connected to the different phases of new service development.

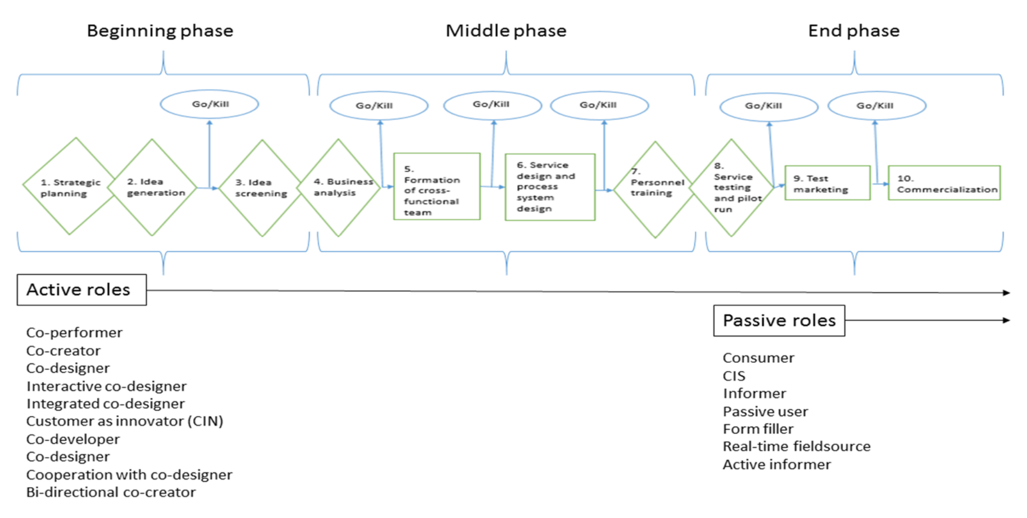
Beginning phase
Middle phase
End phase
Go/Kill
Go/Kill
Go/Kill
Go/Kill
Go/Kill
Go/Kill
1. Strategic planning
2. Idea generation
3. Idea screening
4. Business analysis
5. Formation of cross-functional team
6. Service design and process system design
7. Personnel training
8. Service testing and pilot run
9. Test marketing
10. Commercialization
Active roles
Co-performer
Co-creator
Co-designer
Interactive co-designer
Integrated co-designer
Customer as innovator (CIN)
Co-developer
Co-designer
Cooperation with co-designer
Bi-directional co-creator
Passive roles
Consumer
CIS
Informer
Passive user
Form filler
Real-time fieldsource
Active informer

Figure 5. Customer roles during new service development process

The second dimension used in the Mannervik and Ramirez’s study is customers’ preferences, meaning whether they will be developing incremental (existing) innovations or creating radical (new) innovations. Those that innovate radical services are often further apart from the existing goods since they can only rely on the image of the service that would answer their needs. Thus, they will work in focus groups to collect information for the company’s R&D. On the contrary, when developing incremental services, customers are usually more integrated to the offerings since the effect of co-innovation is built inside the services. Which is why instead of individual development acts that customers perform it is more about the continuous development process. Figure 6 summarises the discussion regarding different customer roles in the development process.

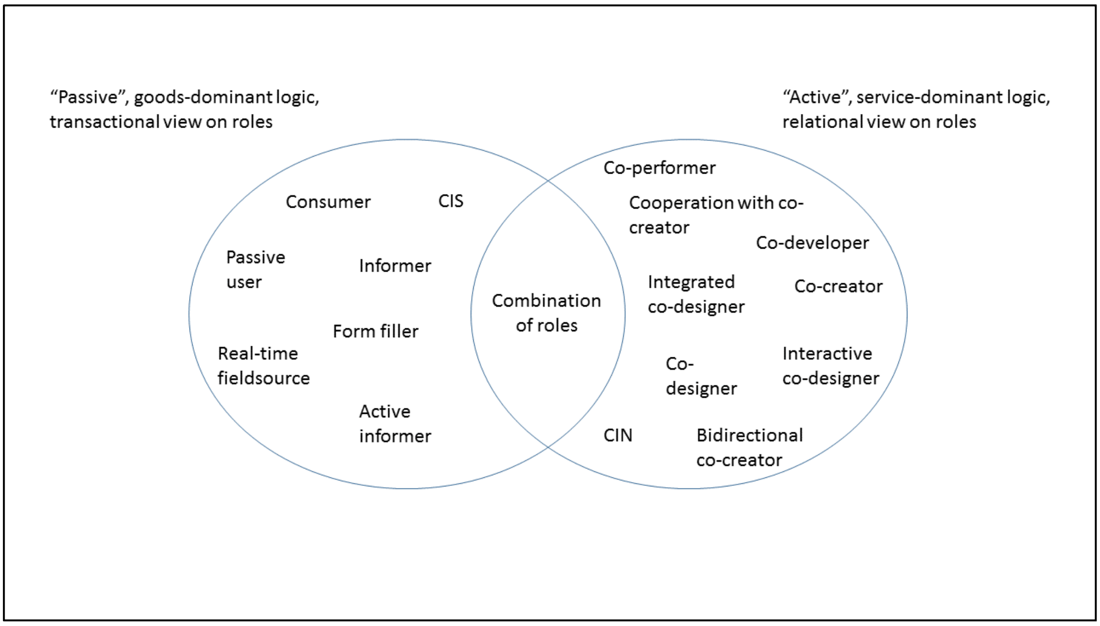
"Passive", goods-dominant logic, transactional view on roles
"Active", service-dominant logic, relational view on roles
Consumer
CIS
Passive user
Informer
Form filler
Real-time fieldsource
Active informer
Combination of roles
Co-performer
Cooperation with co-creator
Co-developer
Integrated co-designer
Co-creator
Co-designer
Interactive co-designer
CIN
Bidirectional co-creator

Figure 6. Customer roles in the development process

3.2. Modes of involvement

Organisations have the opportunity to affect to customers' value creation, by involving them in the development process and by directly interacting with them. (Grönroos & Voima 2013) In their study Korhonen and Kaarela (2015) combined the previous customer involvement theories by Kaulio and Desouza et al. with the findings of Westerlund and Leminen (2011), to create involvement practices especially for business-to-business environment.

In their study Korhonen and Kaarela (2015) divide customer involvement practices into four dimensions; *in-house development and supplier co-operation, development based on customer insight, co-development with customers* and *development by customers.* In in-house development or supplier co-operation, the organisation leaves customer intentionally out of the development process. However, the organisation still includes internal departments to the development process. (Korhonen & Kaarela 2015)

In order to develop based on customer insight, the company takes an advantage of sales, customer interfaces and communities. The customer insight based development emphasises the importance of customer knowledge and the effective utilisation of customer information. In order to succeed, the insights need to be "operationalized, documented, and shared with the right people." (Korhonen & Kaarela 2015, 602)

Co-development with customers refers to the extent in which both the customer and service provider actively participate in the service development process, and both have opportunities to impact on the outcome. (Korhonen & Kaarela 2015) In co-development (or co-creation as used in other literature) engagement plays a more significant role since it requires more commitment from both parties for the development to be beneficial. It is also an important finding that co-development is used more when creating radical (new) services instead of creating incremental (improved) services (Korhonen & Kaarela 2015).

The researchers also point out the criticism towards co-development, by stating several factors affecting the choice of customer insight based development over co-development. Firstly, especially in the business-to-business environment, individual relationships with customers are of great importance. Secondly, service providers are not willing to take the risk that their customers' expectations might rise above their service level, which can easily happen in a co-development situation. Thirdly, the organisation wants to protect its know-how and prevent knowledge spill-overs. Finally, the co-development is resource-intensive. (Korhonen & Kaarela 2015)

The last method for customer involvement by Korhonen and Kaarela (2015) is development by customers in which companies provide incentives and platforms for customer's to conduct the development work for the companies' benefit. This method can be used both for radical and incremental services. The development by the customers method gives customers quite free hands when it comes to the direction of the development, which can also be criticised by the companies since customers may create a solution that is harmful to the company.

Alam (2002) has taken a more practical approach to the involvement methods, by creating six different ways for customer involvement. As said, the ways identify the practicalities involving customers and how the customers' input is targeted to the process. The first method is face-to-face interviews where companies aim in finding out customers' input opportunities for service development from different perspectives by creating in-depth interviews. The companies aim in finding information related to – among others – users' needs, wants, preferences, satisfactions, and dissatisfactions, gaps in the market, competitors' offerings, desired improvement in the service delivery process, timeliness of the service delivery, comments on the marketing mixes and service acceptance criteria. The second method is user visits and meetings, in which the users (customers) are invited to take part in several service development team meetings, where they provide input on different aspects of the development process.

Brainstorming is the third method for involving customers and it includes creative techniques for innovating ideas and solutions between the service provider and customer. Another method is users' observation and feedback, where the users are asked to observe and give feedback to different development stages and background activities happening during the development. Even though considered as a bit old-fashioned in the modern world, the fifth method includes phones, faxes, and e-mails, in which the exchange of information about development process shall be treated via electronic devices, brochures, and other publications. Alam's sixth and final method is a focus group, in which the users are invited to attend service development team meetings in which they provide information and input to several aspects of the development process.

3.3. Communication in customer involvement process

In addition to choosing the role of the customer and mode of involvement, a great importance needs to be laid on how the communication is handled in the customer involvement process. As service providers' aim when involving customers is to create better services matching customers' needs, they need to acquire the sticky and tacit information from customers. Previous studies have found, that the tacit and sticky information and insights cannot be disconnected from their social context (Lundkvist & Yakhlef 2004) since sticky aspects of information and knowledge require richer interactions and processes (Gales & Mansour-Cole 1995). Moreover, both Gruner and Homburg (2000) and Lundkvist and Yakhlef (2004) have argued that the socially rich interactions with customers alongside the process of communication is one of the determinants of product success, and could be easily converted also to include services in that matter.

Even though previous literature has emphasized the importance of communication with customers (Gruner & Homburg 2000; Gustafsson & Johnson 1997; Joshi & Sharma 1997), most of the previous literature has focused on *when* to listen to customers (Gruner & Homburg 2000) rather than focusing on *how* to communicate with them (Gustafsson et al. 2012). According to Gustafsson et al. (2012) communication with customers in the involvement process should be frequent, bidirectional, face-to-face and active. These four factors enable bilateral trust and information exchange regarding customers' needs.

Gustafsson et al. (2012) have created a framework for communication, which relies on four dimensions; frequency, direction, modality and content of communication. Frequency refers to the amount of time used for the communication whereas direction refers to the extent in which party exerts power over others. If the communication is distributed evenly, both parties have the opportunity to contribute to the result, which should lead to more novel ideas (von Hippel 2005). Modality explains how the information is transmitted, for example, does the communication happen face-to-face and do both parties have the opportunity to provide immediate feedback. The final factor, content, gives detail on what is being transmitted during communication. In the case of customer involvement, this factor refers to what is the purpose of involvement (strengthen relationships, improve the outcome of development processes, ideate new solutions, etc.) (Gustafsson et al. 2012)

3.4. The role of customer engagement in service development

Customer engagement as a notion is not new, but research around this concept has increased over the last decade (Brodie et al. 2011a) and it has been proven that customer engagement can play an important role in the new service development (Hoyer et al. 2010; Kothandaraman & Wilson 2001; Nambisan & Nambisan 2008), especially if the customers are involved by co-development (Korhonen & Kaarela 2015). Moreover, the modern marketing literature has been focusing on the *positive* effects of customer engagement rather than the *negative* (Brodie et al. 2011a; Fournier 1998; Palmatier, Dant, Grewal & Evans 2006).

The concept of customer engagement has its foundations in the service-dominant logic (Vargo & Lusch 2008). As Brodie et al. (2011a, 264) conceptualize, customer engagement differs from “involvement” or “participation” since it encompasses a “*proactive, interactive customer relationship with a specific engagement object*”. Moreover, authors argue that customer engagement differs from involvement since it requires the satisfaction of both experiental and instrumental value. Experiential value is the value gotten from consuming the service or product, whereas instrumental value refers to the extent in which the information assists in achieving the desired behaviour (for example purchase of the service), that is also acknowledged by the customer. (Mollen & Wilson 2010) This viewpoint once again highlights the interactivity and customer experience which are the core nature of S-D logic (Vargo 2009). Thus, the current relational theory conceptualises relationships as highly interactive, experiental and fundamentally co-creative (Brodie et al. 2011a; Brodie, Ilic, Juric, & Hollebeek, 2011b; Hollebeek 2011a, 2011b, 2013; Ramaswamy 2011; Sashi 2012; Vargo 2009; Vargo & Lusch 2004, 2008).

There also needs to be a distinction between new and repeat customers, because when the customer gets more familiar with a brand over time, the customer develops more elaborate knowledge of the brand as well as a different psychological frame of reference. New customers also present unique characteristics in relation to previously purchased customers. (Söderlund 2002) Thus, it can be argued that the engagement process, as well as attributes related to the engagement, differ both in the relationship of the customer (new or old) as well as the type of service innovation (radical or incremental). This is important especially in the business-to-business industrial markets, where the customer relationships are often long-lasting and of great importance, such as is the case with ABB. From the basis of these findings, it can be argued, that customer involvement modes cannot be the same for old and new customers nor new and improved services since customer involvement is often seen as an antecedent for engagement. However, customer involvement should not be seen as a dimension of engagement. (Bowden 2009; Brodie et al. 2011a)

3.5. Customers’ motivations to engage in the service development process

Customers’ motivations to engage in the service development process have been left quite understudied. It would be greatly important for both academics and companies to understand the underlying factors for engagement and decisions to become involved, especially since customer engagement and co-creation are entwined concepts. Only a couple of studies have been conducted regarding consumers’ motivation to engage, but the organizational customers’ motivational factors lack research. This next chapter surveys the findings related to the issue from the viewpoint of consumers.

Firstly, when talking about customers’ motivation to become involved and engaged to new service development, the concept of customer-perceived value needs to be addressed. In simplicity, customer-perceived value refers to the extent in which customers ponder the utility of the service based on benefits received and sacrifices given (Zeithaml 1988). Thus it is important to not only study what drives the customer towards becoming involved but also to take notice of the possible hindering factors for the involvement.

Lapierre (2000) proposes key drivers for customer-perceived value in the industrial context. Although not all the drivers cannot be seen as valid for the sake of this research (drivers for choosing/buying products or services), the drivers behind relationship-based customer-perceived value are extremely close to the motivational aspect of customer involvement. According to Lapierre (2000), three key drivers are behind relational benefit; image, trust, and solidarity, whereas two drivers can be seen as sacrifices; time/effort/energy and conflict.

The image consists of the reputation and credibility of the company. Trust is a more multidimensional key driver, associated with issues such as the accuracy of information provided by service provider, the fulfilment of promises to (customer) company and the sincerity of service provider. Solidarity, on the other hand, refers to issues related to service provider's willingness to meet needs. (Lapierre 2000)

Customers must have the motivation to engage in the co-creation or development process since they invest a significant amount of time, which is often scarce and considered as a premium resource. (Etgar 2008) Moreover, the customers' motivation to engage relates to their resources, goals, and expectations on value outcome (Vivek, Beatty & Morgan 2012) or the perceived co-creation value (Hollebeek 2011b). In other words, customers compare the monetary and non-monetary costs of involvement to the benefits of engagement (Hoyer et al. 2010).

More importantly, people who put effort into an activity are motivated by the expected returns (Blau 2004). According to Nambisan and Baron (2009), customers expect four types of benefits from customer involvement: hedonic (pleasurable experiences), cognitive (knowledge about services), social (relational ties among participants) and personal (status). Füller, (2010) has also discovered, that the benefits occur in this specific expectation order. However, Verleye (2015) adds two more expectations – pragmatic (solutions better-matching needs) and economic (compensation in line with the effort made) – in her studies regarding the expected benefits. Even though the initial study conducted by Nambisan and Baron (2009) was in a context of virtual co-creation, other studies have found that these expectations also hold true in general co-creation situation (Etgar 2008; Hoyer et al. 2010)

Vivek et al. (2012), on the other hand, divide the motivations to two categories; to intrinsic and extrinsic motivations. Intrinsic motivation refers to active participation for own sake, without external incentives, whereas, on the contrary, extrinsic motivation comes from the external incentives, with active participation aiming in reaching the desired outcome, or avoiding an undesired one. Both of these motivational factors might have an effect on customers' motivation to engage (Fernandes & Remelhe 2016).

Moreover, Füller (2010) has discovered, that the motivation may, in fact, consist of a combination of intrinsic, internalised extrinsic (e.g. learning) and entirely extrinsic motives. Also, the motivations by Fernandes and Remelhe (2016) and Füller (2010) can be tied to previous findings in which intrinsic motivation includes hedonic benefits, extrinsic motivation consists of pragmatic and economic benefits and finally internalised extrinsic motivation holds cognitive, social and personal benefits. However, these benefits might not be equally important to all customers (Verleye 2015), which is why empirical evidence in this field is necessary.

In their study regarding consumers' motivation to engage in collaborative innovation, Fernandes and Remelhe (2016) widened the motivational factors from previous literature. Their study divided motivational factors to four different categories; intrinsic motives, knowledge motives, social motives, and financial motives. According to the study, all four factors were relevant to customer's willingness to engage and intrinsic and knowledge motives were seen as more important than social or financial factors. More importantly, especially in collaborative innovation, knowledge was considered to be the most influential factor, which also followed the findings by Füller (2006) and Wu et al. (2007).

Roberts, Hughes and Kertbo (2014) have also studied consumers' engagement motives in their study, in which they studied the motives specifically in the context of collaborating directly with the firm. Their findings articulate that the motivating factors in this context are; influencing new product development, desire for the better product, recognition, passion, career opportunities and to see the change take place (implementation).

In this thesis, the customer-perceived value is evaluated on the traditional benefit-sacrifice combination, instead of focusing only on benefits. Moreover, the benefits are looked more closely following the findings of Füller (2010), Nambisan and Baron (2009) and Verleye (2015), in that the benefits are divided into motivation-expectation dimensions. Table 7 summarises displays the categorisation for evaluating customer-perceived value in this thesis.

Table 7. Customer-perceived value in this thesis

Benefits			**Sacrifices**	
intrinsic	internalised extrinsic	extrinsic	monetary	non-monetary
hedonic benefits	cognitive, social and personal benefits	pragmatic and economic benefits		

4. EMPIRICAL RESEARCH: CASE ABB

ABB Ltd is a global leader in power and automation technology. The company is based in Switzerland but operates in roughly 100 countries and employs 135 000 people. ABB offers solutions for utility, industry, transport and infrastructure customers to improve their productivity and reduce environmental impact. The company is managed by divisions, and the markets are divided into three regions. The team in question in this study is the global service product management -team of Drives Service, which is part of the Discrete Automation and Motion division (DM) which is the second largest division of the company by both orders and revenue. (ABB 2016) The global service product management -team is based in Helsinki and consist of eight members.

ABB Ltd went through organisational changes in 2013, in order to improve their service product business related to ABB Drives Service function. The company underwent a transformation, where they hired a head of global service product management to lead a team of six global service product managers, each of them responsible for their area of expertise. To ensure smooth innovation and development process run and to establish good communication with the customers, the global service product management team worked in close collaboration with Drives Service’s service product R&D team. During the same time, global service product management team tried to come up with a solution to involve and engage their customers in the development and innovation process. Being a global and leading company in its market, ABB had various ways of involving customers, but usually, it meant using customers as a source of information on a form filler role. Now, they needed to come up with a solution, which could be adjusted to the global market, but executed locally.

First, ABB created an internal platform for idea collection, by creating a module called “Service Lab.” Service Lab is a visual meeting held twice a month, where the key personnel from Drives Service (mostly members of the global service product management team) come together to generate ideas and brainstorm them together. Originally, each new idea was put on the wall so that people were visually reminded of its existence and following the development phases. Nowadays, the concept has grown further, and the company is gathering ideas from any Drives Service person and has created an online based platform, where anyone can propose new ideas. The purpose of Service Lab is to identify new service product ideas and their possible effect on revenue and customer needs. The development is visualized through a funnel model, which includes eight different phases (or gates) in which the new service idea can be placed. From August 2013 to May 2016, the Service Lab has developed by decreasing development phases, to better match the actual process and by opening the Service Lab idea gathering for the global community of ABB through SharePoint. In August 2014, the Service Lab had gathered approximately 50 new ideas in its first running year. In May 2016, the funnel consisted of 171 ideas in different phases of the funnel.

However, ABB realised that in order to improve its customer intimacy – and create a more customer-driven development process – it needed to create a platform for collecting ideas straight from its customers, instead of creating solutions based on expected customer needs. Thus, the company wanted to improve its customer intimacy in new service development process. Customer intimacy refers to tailored service solutions, which satisfy both articulated and latent customer needs. The company’s broad understanding of close customer relationships' value to the business is at the core of this approach. Systematic gathering and exploitation of information about the customer and the customer relationship are important. With the customer intimate approach in mind, ABB created a customer event called Customer Focus Group – also known as CFG.

ABB has often involved its customers in the new service development process in the end phases of the NSD, which matches the findings of Alam (2002) who stated that the customers are usually involved in the beginning (stages 2-3) and end phases (stages 8-10). Through Customer Focus Group activity, ABB aimed at involving customers already on an early stage, without even having a complete product to present – often only a new service idea - thus being able to adapt to customer wishes and needs. The Global Service Product Management –team began to develop Customer Focus Group concept, together with Diagonal – a Finnish design agency. The first Customer Focus Group was held as a kick-start, on August 13th, 2013, with three customers from the process industry.

From February 2014, the CFGs started to evolve as a monthly event, and the management saw a great potential in it. During summer 2014, the Customer Focus Group activities stopped, to observe the outcomes of the already had events and to improve the concept and make it widely known within the organisation. During 2015, the development had a minor drop, and the company was not able to hold a meeting on a monthly basis. At the beginning of 2016, ABB wanted to expand the CFG meetings to other ABB countries. For that purpose, the material related to CFG concept was renewed and the concept began to have a more detailed shape.

However, there also raised a question on whether or not the CFGs were the proper way of involving customers in the development process. The Global Service Product Management –team wanted to find out if there were other viable solutions for the involvement. Since the CFGs had been on a hiatus for several months between the turn of the year, the timing was right to make some objective observations on the development of Customer Focus Groups.

A researcher was hired to figure out what other ways could be found to involve customers and more importantly, to determine whether or not the focus group was the correct action. In order to follow a customer-driven research method, the researcher chose to go the main source for information directly. Since most of the previous theory regarding customer involvement was conducted from the company perspective, it was paramount to study, what are the customer-perceived values of customer involvement in the new service development process.

4.1. Customer focus group in practice

CFGs (Customer Focus Groups) are half-a-day workshops aimed to be held on a monthly basis. Customer Focus Group activity was created for the purpose of improving existing service products as well as to develop new solutions better matching to ABB’s customers’ needs and expectations. The event is executed by inviting 3-5 customers – by person – to the event to express their opinions on a service product or service idea at hand. The workshops can be organised either on a regular basis or case-by-case. The events require the work effort of at least three people: subject expert (knows the topic and owns the event), facilitator (facilitates the preparatory work and discussion during the session) and assistant (takes care of practicalities such as invites the customers and communicates with them as well as takes responsibility on documenting the event). From these three roles, the most responsibility lies on the assistant, who needs to ensure that the event and knowledge gathered from the customers are carefully documented and stored in all necessary databases.

The service product in question or the service idea usually determines what types of customers are targeted for the event. The aim is to have 3-5 customers attending each event to ensure that the information gathered displays a large enough variety as well as to make sure that each customer’s views and opinions are truly listened and heard. ABB does not limit the amount of events one customer company can attend, nor does it limit that an individual service product or idea could hold only one CFG. For example, since ABB is a global company, a Customer Focus Group with the same theme can be held in multiple countries where ABB is present. Sometimes the customer relationship may require a one-on-one meeting in exception to having a CFG in order to ensure customer privacy. Usually, one-on-one meetings are although held when ABB wants a deeper insight into a certain industry and its needs and expectations towards ABB's services.

Usually, the event timing for individual service product or service idea is determined by the phase of the development process in which the product is and also if the product is considered as trendy at the time. The development stage of the service product varies from event to another, but the main idea of the CFG is to present services that are still in the development phase and sometimes not even near launch. That way ABB can ensure that the possible service features that come up during the meeting can be adapted to the service, if possible, thus ensuring customer satisfaction by fulfilling their needs.

The meeting gets documented by the assistant, who takes general notes during the meeting. Quite often the discussion related to the service at hand is formulated as an open discussion lead by the facilitator, however, to ensure even better customer intimacy, small groups are also an often used method. The open discussion enables customers to express their opinions openly and publicly, which on the other hand might generate more discussion on the topic. In the small groups, one customer tends to have two ABB faculty members discussing and asking questions from the customer. At the end of the session, every participant fills a feedback form about the session.

Immediately after the session ends, the ABB participants have a meeting in order to discuss the findings of the event and brainstorm possible upcoming service ideas. The assistant ensures that all of the discussion is digitally documented to a general memo which will be uploaded to the corporation's online sharing platform – SharePoint. Since the general memo is written in the local language, there is also a summary written which highlights the main findings of the session in English. From the summary, it should be easy to identify the potential changes and improvements to existing products, as well as point out possible new service product ideas. The customers will also get their separate memo from findings of the session. This is done in order to show the customers that something concrete was achieved from their input. Since service development process usually takes a long time to finish, it is important to try and engage the customers by showing that they were able to have an impact on the service under development.

When looking into the customer roles in the development in comes quite evident that the roles are closest to *co-performer* and *interactive co-designer.* This is due to the fact; that service provider organises the development process, and the customers only bring input to it (co-performer), and the roles are predetermined (attendance to CFG as a customer), and customers communicate and interact in hopes of bringing new ideas to the table. (Kuusisto & Päällysaho 2008; Mannervik & Ramirez 2006) The customer involvement in this matter has two goals; to get information regarding ABB's customers, their industries, and needs, as well as, to gather information and ideas to improve not only the service at hand but possibly the service portfolio in general.

4.2. Data collection and analysis

The data was collected by conducting semi-structured interviews, which were held to the chosen group of customers, who had participated in the Customer Focus Group -project. The research questions and the objective of this research advocated for the selection of semi-structured interviews, since the customers (interviewees) had participated to different CFGs, and thus the common ground for the interviews were based on the experience and perceived value of the involvement, rather than the content of the events. The semi-structured interview method was seen as the most beneficial collection method since it enabled a more in-depth interview, and the same themes of questions could be conducted for different customers. Another interview was also carried out by using the semi-structured questions, to interview ABB's employee, to get a deeper understanding of the possible variations or similarities between the experience and perceived value from both organisational and customer point of view.

Since in the Customer Focus Group activity, customers were invited to share their opinions about an existing service, while simultaneously possibly sharing new ideas based on their latent needs, not all the new service ideas were brought forward. Thus, not all the customers who participated in Customer Focus Group were selected, since the selection criteria were narrowed only to those new service ideas that were brought forward into the development process. Also, the selection criteria took into consideration the fact that the original service which was brought up in the CFG meeting, might have been modified. Since the objective of CFG was to give customers the opportunity to express their opinion towards a service as well as express spoken and possible latent needs, sometimes the original service might have:

a) Been abandoned
b) Been put forward into development with modifications
c) Two different services from various meetings have gotten jointed
d) One meeting could have brought up another service idea that has been put forward

Figure 7 shows the general idea of how the customers and services to be observed are chosen.

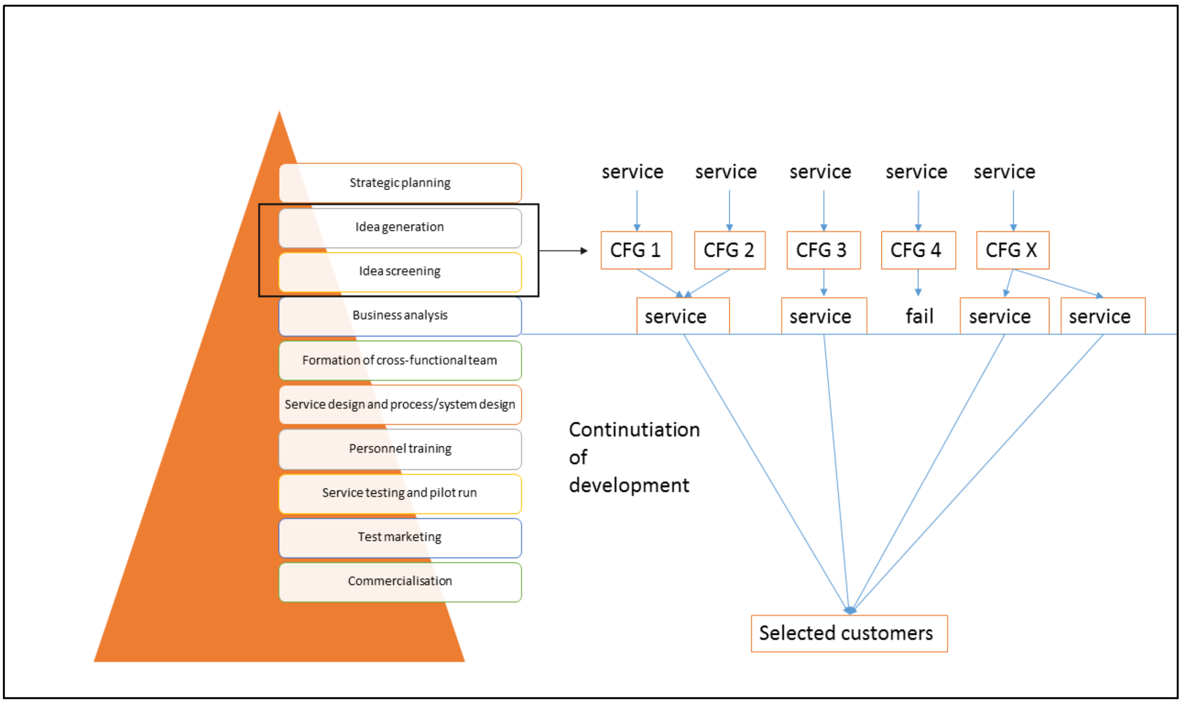
Strategic planning
Idea generation
Idea screening
Business analysis
Formation of cross-functional team
Service design and process/system design
Personnel training
Service testing and pilot run
Test marketing
Commercialisation
service
service
service
service
service
CFG 1
CFG 2
CFG 3
CFG 4
CFG X
service
service
fail
service
service
Continutiation of development
Selected customers

Figure 7. Target customer and service selection

By following the general filtering method for choosing the service products and customers for the research a total of seven different service products were potential for this selection since they filled the selection criteria. All of the chosen service products had had a CFG event conducted; they were formulated as a service concept and productised, and they made it through the development funnel towards launch. From the selected service products, a total of 12 customers were potential to be used for interviews.

However, due to scheduling conflicts, only three customers were interviewed for this thesis. Two of the customers were from the same company and had attended the same Customer

Focus Group. To protect the identity of ABB's customers, these two customers are referred to as *Person X* and *Person Y* from Industrial company 1. The third customer who was interviewed had participated to two CFGs, which were both related to the same theme, however having two different services under surveillance. This third customer will be referred to as *Person Z* from Industrial company 2. Both of the companies which were chosen are large-scale industrial enterprises operating in international markets. The first one works in the plastics industry and the other in the food and beverage industry. Both of the companies have a large installed base of drives and have experience with several other drives providers. Thus, neither of the two are using ABB's services and drives exclusively, which gives more reliability for the results, since the answers are not biased. In case studies and qualitative studies in general, the reliability for the non-standardised study is not necessarily supposed to be repeatable because the data is collected in a situation that is subject to change (Marshall & Rossman 1999).

Persons X and Y had attended one Customer Focus Group in which they gave their opinions on ABB's existing customer portal. The questions asked were related to for example the different functions, views and feature the portal should hold. ABB also presented how the portal functions and how it could be utilised in the everyday working environment. Person Z had attended two different Customer Focus Groups, both around the same service concept. In both of the cases, the focal service had was already at the idea stage, and the feedback was related on how to deliver the actual service, what type of reports should customers get out of it, how to handle the web-based services' information security and how should data be stored. In both of the cases in which Person Z was involved, the customer feedback was taken into notion and used in the development, before the services were launched in 2014 and 2015. However, it should be noted, that the Customer Focus Groups are not the only used method when ABB develops new services.

The interview with Industrial company 1 was conducted at the customer's facility as a face-to-face interview, with both of the previous CFG participants present. The interviewer ensured that both of the interviewees got to tell their opinion on the matter. Interview with Industrial company 2 was held via Skype due to long distance. The parallel interview with one of ABB's Drives Service's service designer was held as a one-on-one, face-to-face interview. This person will be referred to as *ABB employee*. The results from the ABB interview reflect one person's point of view and as such do not present the official ABB opinion. The interview information is summarised in Table 8.

Table 8. Interview information

Company	Person	Role/Title	Duration	Time and date	Transcription
Industrial company 1	Person X	Electrical manager	1:02 hours	9.6.2016 13:30-15:00	Word to word from audio record
	Person Y	Unit electric officer			
Industrial company 2	Person Z	Automation manager	51 min	10.6.2016 12-13:00	Word to word from audio record
ABB	ABB employee	Industrial designer	34 min	20.6.2016 13–14:00	Word to word from audio record

The questions for customer interviews were divided into two categories; questions related to the customers' participation to Customer Focus Group and customer involvement in general. This solution was taken, in order to get as deep understanding as possible, of the customer-perceived value behind Customer Focus Groups and to find the "ideal" way to involve customer to service development. The customer interview questions were also reflected in the ABB employee interview, to get parallel data to the customers' answers. The ABB employee did not know what had the customers' answers been until after the interview was taken.

Since the semi-structured interview method was taken, it was possible to modify the order of the questions as well as to ask focusable questions. None of the interviewees were made aware of the questions that were going to be asked. However, they were told what types of questions would be asked and what was the theme revolving them. The interviews did not follow the question list strictly but were flexible based on the answers given. More importantly, the initial interview with company 1 gave more insight on which sections to focus on more in order to get as comprehensive answers as possible from the other interview. The questions for all the interviews can be found in Appendices I and II.

4.3. Reliability and validity

Quite often the most common measure of reliability in qualitative research is generalisability (Stenbacka 2001). However, as stated in chapter 1.6. in case studies the generalisability is often a question mark and dependable on sufficient amount of evidence. Fortunately, when following the inductive research approach, as in this thesis, there are less concerns on the generalisability, since the approach relies on a small sample of data. (Saunders, Lewis & Thornhill 2009, 127) Also, the reliability and validity can be measured based on whether or not the study can be repeated (Hirsjärvi, Remes & Sajavaara 2003, 123). Once again, that is often a problem with case studies, since they are bound to the environment and situation at hand during the study.

Despite the criticism, the most important criteria for the reliability of qualitative research is the researcher herself. Thus, the evaluation of the reliability covers the entire research process. In the inductive research approach there is a realisation that the researcher is part of the research process (Saunders et al. 2009, 127). The reliability and validity of qualitative research can be advanced through a careful description of the research and the research process. In addition, there is the question of how compatible the theory and empirical data are. (Eskola & Suoranta 2008, 208, 212)

In this study the reliability and validity were measured via five themes conducted by Meadows and Morse (2001); *methodological coherence, sampling sufficiency, developing a dynamic relationship between sampling, data collection and analysis, thinking theoretically*, and *theory development.* The methodological coherence of this research was considered as being good, since the research methods, research problems and data collection method all supported each other. The research problems were modified after the interviews, to suit better and match the data. In the modification, the main research problem was changed to “How to involve customers in the new service development process” since it gave a universal outlook on the collected data.

The sample of data includes the best representations for the topic at hand. In order to saturate the customer data, a parallel interview with the ABB employee was also conducted. Thus increasing the sufficiency of data. However, it can be stated, that the amount of collected data could have been higher, to get even more comprehensive results. The researcher was, however, able to have a good discussion and analysis of what was known and what needed to be known, as well as reflecting the previous literature to new findings. Lastly, the theory and empirical data were bound well together, with findings saturating the previous literature. The analysis verifies the findings that were driven from the collected data and compared them to the previous literature.

5. RESULTS

The analysis followed an inductive method, which supports the collection of small sample data from multiple sources. This analysis method was chosen, since helps in gaining understanding of how people (interviewees) attach meanings to customer involvement. Moreover, it helps in having close understanding of the context of this research. (Saunders et al. 2009, 127) The findings were categorised into different themes, which partly follow the theoretical framework of this study. This chapter will explain the findings in each category.

5.1. Motivations for involvement

All of the three customer interviewees were asked why they wanted to participate in Customer Focus Group. Person X stated that there had been some trouble with the interaction with ABB, which was one of the driving factors for the participation. Also, both Persons X and Y agreed that the topic of the CFG was interesting, which also gave a push for the attendance. Both of the Industrial company 1 employees stated that they had an interest both towards the topic as well as the development method that ABB was using. Neither of them had participated to such development method, so the event also held a novelty.

Person Z had attended Customer Focus Group on two different occasions. For the first time, the main motivation for participation was, that there was a social interest for the service that was under development and the topic of the event. A big part was played on the fact, that no other service provider had been able to provide the application necessary for the service in question, so Person Z was extremely interested in the opportunity to have a say in the matter:

> *"It sort of felt that it was an opportunity ground to get involved, to be able to have a say on the matter. Because it was only then when people started doing them (service), or that even ABB did not have it, or that the frames for the service were still under development. So there was the*

> *opportunity to bring customer point of view to the table, I presume that was the biggest reason." (Person Z 2016)*

When asked about the second attendance in CFG, Person Z told multiple motivations for the involvement. Firstly, the company had had negotiations regarding a similar service with another service provider other than ABB, which is why Person Z was interested to hear about the scope ABB had on the service. Secondly, the person was interested to hear how the development had progressed, since even though the service product in question was a different one from the previous case, it was around the same concept. Thus, the person was intrigued to hear both about the development as well as, whether or not the development had gone to the direction of the person's expectations.

Another crucial motivational factor was brought up by Person Z. For customers to get involved in the service development process, they need to get the idea that it is a ***win-win situation*****.**

> *"For, if I am coming to give input for a company, then I do experience, that I would also get something from the other company. It should be a two-way street; for example, learning, bringing things forward and sharing of information." (Person Z 2016)*

When asked to describe more in detail, what a customer should get in order to feel like being in a win-win relationship Person Z stated an example from the participation to ABB's Customer Focus Group:

> *"Well, for example about this ABB's project regarding service concept X, I got ideas regarding how an ABB-sized company has thought about this whole concept, what are their thoughts on the matter, so yes, I would say that you will always learn something." (Person Z 2016)*

5.2. Expectations towards and experiences in customer involvement

Neither of the employees from Industrial company 1 had previous experience on being involved with a new service development process, at least not in a similar manner that was used by ABB. They both agreed that there had been some minor incidents in which the customers have been able to ask questions regarding a service, but they have not been exactly involved in the development. The Industrial company 1 also has not been part of any form of co-creation project regarding services. They have had one co-creation project, but that was more about standardising common processes.

Since neither of Person X or Y had had previous experience of attending a focus group, they did not have that much of expectations towards the event. Person X stated:

> *“It was okay, I did not quite know what to expect, like what was the plot of the whole thing, but it did leave a positive image.” (Person X 2016)*

Both Persons X and Y had a more negative image on what the event would be like since they did not have the previous experience. Both of them had imagined horror pictures in their heads, but overall they got the feeling, that the event in practice was more relaxed, which helped in the creation of a positive image.

Person Z did not have that big of expectations towards the first CFG attended. Person Z stated, that, of course, there was the general interest around the topic, plus a social order for the service, but all in all, it was quite an open-minded approach. Regarding the second participation, Person Z’s expectations were more related to hearing about the progress in the development after the initial event, and since technology had moved forward within the year, there was also an interest or expectation to hear about the latest trends in the development and how that might have affected the ideas.

All three of the interviewees experienced that Customer Focus Group was a working method for customer involvement. The previous participants felt that CFG was a convenient mode for them to get the opportunity to express their feelings and needs. All three had enjoyed the structure of the event, which enabled that all the participants got the opportunity to give their opinions and voice their concerns. Person Z also stated that it was a good thing, that the people (mostly ABB's customers) attending change a little from event to event. Otherwise, it would start to get boring if only one viewpoint would be on display. The same attendees are also not seen as bringing any added value for the involvement. All three stated that they had gotten the impression that ABB truly aimed in following a customer-driven development method and was interested in hearing what the customer has to say.

Industrial company 2 had had quite much experience in service co-creation, and Person Z had attended to several different workshops regarding both new service and product development. For example, Industrial company 2 had just undergone a project relating to a service concept portal that was also the topic of an attended CFG.

Both Persons X and Y agreed that the personal benefit gained from attending the CFG event came from having a feeling of accomplishment; they had a feeling that they were able to give out valid information and feedback and influence the outcome of the service development. From the organisational perspective, X and Y thought that Industrial company 1 would benefit from their participation in the future when the company is ready to start using the service application in question.

The personal benefit for Person Z came from the eye-opening experience; it was good to hear what were the service provider's insights regarding the service concept compared to own insights. It was also great to get more knowledge on how the service provider thought about the latest service trends and how to utilise them, for example, related to network and its security. The event also worked as a great place for networking with colleagues, which has made it easier to communicate with them in the future. Person Z agreed upon the presumption, that a lot could be placed on the internal learning experience, which can be utilised later on in the customer's company and everyday work life. The involvement can also act as a funnel for collecting new ideas and viewpoints.

Regarding the benefit gained by Industrial company 2, Person Z stated that every time one attends a workshop – whatever kind – there is always something they take back home. Through that experience, people can then teach other ones and spread the knowledge, which definitely also impacts the organisation as well.

> *"Well, I would say that definitely (the company has benefitted), one can also gain something out of it (attending), it does not matter which workshop or what topic it is. You always learn something yourself that*

> *you can teach and spread your workmanship forward. And that knowledge I have spread at Industrial company 2. I do believe that it has been beneficial.” (Person Z 2016)*

5.3. Information sharing

> *“We gave everything we got” (Person Y 2016)*

The quote from Person Y summarises quite nicely the overall discussion related to sharing of information. From Industrial company 1’s point of view, both of the employees agreed, that they wanted to be actively involved and speak out their minds about the service. Both of them also agreed that they wanted to share as much as possible;

> *“I am personally willing (to share) information that I need in my work and which eases my work, which of course culminates to benefitting Industrial company 1, that all I can share if it is not classified. By all means, if it helps our commissioning, I am willing to share it.” (Person X 2016)*

In general, the employees in Industrial company 1 were willing to share all the knowledge that is not classified, although, if the service would clearly ease and simplify their processes, there were not that many limits. If the company would be piloting a service, neither Person X nor Y saw any conflicts of interest in sharing their special know-how with the company, even if it meant that the service provider would be able to utilise that know-how with their other customers as well.

The case with Industrial company 2 was quite similar with Industrial company 1. Person Z wanted to be actively involved in the discussion and voice opinion regarding the service. The situation was the same in both of the CFGs, which Person Z attended, stating that;

> *“ – the idea kind of is, that if you attend an event like that, you have to be able to voice your opinion and bring it forward, since otherwise, things will not develop, and it is useless to go there if do not open your mouth.” (Person Z 2016)*

Person Z also stated, that in the event all the information that could be told, was told and that the information also covered the sharing of know-how. In their co-development project with another service provider Industrial company 2 used NDA (non-disclosure agreement), which was also the starting point for the whole cooperation. The company told all the information to the other service provider that was necessary to develop their processes. Person Z said, that if the company would be involved in a project like this, they also needed to give something and not just take.

When asked about sharing personal know-how during development, Person Z stated, that there was not any conflict of interest in sharing own special know-how, which has been gathered through years of experience. For example, when sharing information and know-how related to the service or product that is being piloted in the company, Person Z feels, that as long as information regarding partner is not told to another service provider, there is no conflict in sharing.

5.4. Modes of involvement

All three of the interviewees had enjoyed ABB’s method of customer involvement. For Person Z, these workshop-styled events rose as the most preferred mode of involvement. For Person X, these workshops were okay, but it was also indicated, that the workshops are fine when services are discussed on a more general level, or when the service is still clearly in ideation phase. However, in order to better understand the needs of individual customer companies, Person X felt, that service providers should come and observe the employees in their natural working environment and that way get more insight on their processes, working methods and company culture. Moreover, Person X pointed out, that it would be great if Industrial company 1 and ABB would synchronise their working methods, to better serve the customer.

When discussing the involvement in more detail with Industrial company 1, Person X stated that service providers should have more of a continuation with their customers, instead of coming only on a case-by-case basis. The desire for continuing projects affected all the aspects of mutual communication to being involved longer within the development process. Regarding the development process, Person Y said, that the ideas for the service can come either from the service provider or the customer company – it depends on what is the problem they are finding a solution for? Both Person X and Y stated that it would be crucial to be involved at the beginning of the development process, to brainstorm together. They do not feel the need of being involved in the middle of the process since both of them felt that they did not have that much to say on things more related to the service provider’s internal processes. However, when the service would face the testing phase, both X and Y thought, that the customer should be once again actively involved.

From Industrial company 2’s perspective, it does matter when the customer is involved in the development process. Person Z told about their pilot project regarding a new service concept, in which things have not exactly gone as planned. Industrial company 2 was involved already in the beginning stage of the development process, and Person Z was there to explain their company’s needs and wishes regarding the service, which was new also for the service provider who had not had such concept before. However, when the other service provider had concretised the customer’s vision, the result had turned into “engineer porn” (Person Z 2016). The screen of the application had turned into a lot more complicated and did not meet the customer requirements.

Thus, Person Z thought, that it would definitely be beneficial for the customer to be involved in the development process further along than just in the ideation phase. That way, the service provider could better ensure, that the result meets the customer needs and wishes. When asked more specifically, if it would suffice that the customer would be involved in the beginning and end phases, Person Z stated, that it would be a good idea – if the service provider had a lot of resources (money) for R&D. Otherwise, the message might get lost in the process, and the development would need to start all over again. This argument was also made by Person X.

Person Z – as stated – had also enjoyed CFGs, and prefers workshop-style events, but also gave some criticism towards Customer Focus Group. Since in the CFG, the event starts with a general discussion about the topic at hand with all the participants. For those customers, who are already talkative by nature, this type of approach is suitable. However, Person Z criticised that for people who were less talkative or even shy, would have more issues in voicing their opinions in a large group discussion. Although Person Z did admit, that by also having a small group discussion, this issue was dealt with quite nicely.

Regarding preferring the workshop method in customer involvement, Person Z justified the choice by saying that, it is more enjoyable to meet people face-to-face since their facial expressions also tell a lot in the discussion. Timetable-wise, it is also easier to stick with the meeting, if you physically need to leave the office to go somewhere. If the meeting would be held via the electronic device, and something would come up before or during the meeting, it would be a lot easier just to quit or skip the meeting altogether. Persons X and Y were in unison with Person Z’s arguments. They also felt that it would be better to meet face-to-face and ditch electronic devices. They also argued, that meeting in a physical location, it is easier to ensure that all of those involved are on the same page. In their opinion, face-to-face meetings are also more effective, and it is easier to get a straight answer to questions. Although Person X and Y agreed, that smaller matters can be handled differently and that it needs to be ensured that the number of participants is small enough to facilitate the meeting well. Person Z also raised the fact, that by meeting physically, you also get a face for the name, instead of being just anonymous, which helps in the future contacting.

All three interviewees agreed that they would rather choose an involvement method including several other people (focus group) rather than having a one-on-one meeting. They justified their preference by stating that when there are also other people involved, you can collect ideas from them, and it will keep the discussion livelier.

> *”In the end, I think it would get really boring for me (one-on-one session). I truly enjoy, when people have different points of views on things, and you really get to discuss and twist about issues, and that is something I personally enjoy more.” (Person Z 2016)*

Although, Person X stated, that even though it is a good idea to have a larger group in the beginning when all participants brainstorm and ideate the new service when we move along in the development process, it would be better to have one-on-one sessions instead. All three were eager to be involved in the end phases on a more active and intimate level (one-on-one), but they all also realised that some compromises would need to be made since the service cannot be too tailored and only serve one customer's needs.

5.5. Encouraging and restrictive factors for involvement

For Industrial company 2, there were a few factors that determined whether or not the company would get involved in a co-creation project. The major factor determining the go-decision is the company's need for the proposed idea. If the company is not interested in the topic under development, they will not pursue being involved. Also, the proposing company's image and reputation have a role in accepting the co-creation offer. Since Industrial company 2 is an LSE, the company also pays attention whether or not the service provider company has enough resources to accomplish the goals set for the development project.

When asked about whether or not the relationship with the service provider played a role in the co-creation decision, Industrial company 1 answered, that it would prefer a cooperation with a company it has a long history with. However, they were also willing to give a chance to an unknown company, although that type of co-creation might face some restrictions if the customer company has long service agreements with another provider. On the other hand, Industrial company 2 was very strict about only cooperating with companies they have a long and strong relationship with. Other service providers were completely out of the question. This decision was based on knowing the service provider and its company culture.

In Industrial company 1's case, there were several internal factors that needed to be taken into consideration, if the company wanted to encourage involvement. Firstly, Person X stated, that they need to have the approval from the board, since these co-development or piloting projects are time-consuming, and something that needs to be worked on alongside other projects. Secondly, they need to ensure, that they also have other resources available for the project. However, in the case when the new service would boost the maintenance of production (i.e. win-win situation for both), the resources are more easily found. Lastly, the company's know-how can have an effect on whether or not the organisation will get involved in the development process. The parties involved need to know enough about the subject while being able to provide something concrete to the development relationship. The company’s know-how can be seen as both encouraging and restrictive factor. Whereas, for Industrial company 2, social order (own need) for the service played the largest and most influential role on the internal, encouraging factor side.

On the restrictive factor side, the most influential factor for both companies was time. It is crucial that the project falls neatly to the customer company’s and service provider’s schedules. Since “time is money”, the timing of the approach plays a crucial role for the customer companies. Together with the topic of the event or the service under development, these two form the key factors that often have an influence on the negative outcome.

> *” Timetable is the largest (factor). And then, of course, the topic. If the topic is interesting, then one might somehow make enough time (for meeting). But if it is the other way around, if the topic is not interesting, I am not going to bother reorganising my calendar.” (Person Z 2016)*

Industrial company 1 pointed out, that the communication with the service provider impacts on their decision. Person X said, that their company has had many problems with the communication since quite often they need to be the ones calling after service provider since they do not contact customers. On the other hand, if the communication works, it functions as an engaging factor in the process.

Person Z stated, that for personally and both for Industrial company 2, another impacting factor that would result in not participating, is who are also joining the meeting? This is more related to workshop-styled involvement methods, but Person Z said, that there needs to be attention paid to the people that are coming to the event. Even though it is always a positive thing to learn something new and hear insights on other industries or new viewpoints, an LSE cannot attend just any meeting. If there are smaller companies attending the meeting, Person Z said, that the participation would not happen. That is justified by stating, that when smaller companies (with smaller resources) attend the meeting, the facilitator (service provider) might need to start making compromises so that the solution would also fit the smaller companies’ needs. It does not give Industrial company 2 the win-win situation, of they are in a meeting, talking about the same thing, but on a completely different level.

> *” There is no point in going in there talking about a topic, with a group, where there is a company of 10 people, and where the production capacity is not the same as for Industrial company 2.” (Person Z 2016)*

5.6. Communication during development

Industrial company 1 raised the issue regarding communication during customer involvement. Person X stated critique towards ABB and its involvement method since neither Person X nor Y had heard anything back about the development. Both of them agreed that the company should keep its customers in the loop about the progress of the service development process, and not just disappear after the meeting.

More importantly, all three interviewees agreed, that whoever the service provider is, or whatever is the service or concept under development, the service provider should be able to collect the customers’ needs and wishes and build a coherent picture of the upcoming solution, already during the first meeting. When the development process continues without the active involvement of the customers, the service provider should inform the customers and occasionally check, that the development is going in the right direction. Major notice came from Person Z, who stated that:

> *“There are a lot of drive providers in Finland, and good communication would definitely be the differentiating factor, that would bring added value to the service. “*

Also, all three stated, that during the middle phase of new service development process (stages 4-7), the communication should come actively from the service provider’s side. As both Person Y and Z said, the customer cannot know where in the development process the provider is going, neither what has been the direction of the development after the initial phase. Person Z also agreed, that in the beginning and end phases of the development process, the communication should be actively two-way, and once the customer goes to a more “passive” role regarding communication, the service provider should still have midway checks. As has already been stated, this would ensure that the result would be closer to a customer-driven solution.

5.7. ABB point of view

To get a more thorough view of customer involvement in the case company, a parallel interview was conducted. It should be noted, that the interview is based on a single person's answers, which are partly personal and thus, as such, may not be generalised nor confused as being the official corporate opinion.

In ABB employee's opinion, Customer Focus Groups have been working well. They have all driven a bit different purpose, but all in all, they have fitted well in the initial stage ideation phase; the company has gotten to know customers' problems and how they use ABB's drives which they have installed. As for benefits, the employee feels that there have been both personal and organisational benefits involved. For the personal benefit, the employee has enjoyed getting information straight from the source, without it getting distorted along the way. There has also been the opportunity to learn; who are our customers, how do they communicate with us and what are their needs and troubles. From the organisational perspective, it is stated that every time ABB listens to its customers, it is beneficial.

When communicating with the customer on a collaborative project, it is usually determined already early on (before visiting customer), what type of information can and will be shared. Usually, ABB is quite open with the customer, however there as some topics that are left out of the discussion that is usually related to price or possible troubles faced during development. The typical change of information is often related to the made changes after the previous meeting, how has the customer been heard and what have been the customer-driven changes. If the service happens to be an application or otherwise a software solution, ABB might use electronic devices for communication. However, it has been noted, that the best way to communicate with the customers, is to arrange a meeting face-to-face.

ABB does not consider that there would be only one way of involving customers in the development process. Focus groups have been working, however, usually there has been people from the middle management attending, in which case the company has gotten information from people that do not necessarily use the products, but instead are buyers or references. In order to get information closer to the end users, ABB must go and observe the customer site. In other words, for information regarding practicalities, the company has to go to the customer.

An encouraging factor for customer involvement in ABB's new service development would be for example, that the company would visit their customer sites more actively and conducted fundamental research, which observes how the customer install drives and are their processes running. Moreover, when the visits would be active, it would also hand out opportunities for co-development.

Another factor would be internal collaboration, which would enable better share of knowledge. In ABB employee's opinion, the Service Lab concept has been working, but it still requires development to a more interactive direction, to prevent that the information does not get lost. The Service Lab would require great facilitation, to keep up an active atmosphere. Thus, the knowledge should be shared within the company's different portals.

However, ABB has had a bit of a challenge with the fact that the company culture is still on a more expert-driven than customer-driven direction, meaning that there still lies the assumption that ABB knows better than the customers (what they want). Although, this way of thinking is slowly starting to turn, even in a company as large and technically-driven as ABB.

As with the customers' viewpoint, also ABB struggles with the schedule related to development projects. The company has service designers that can (and should) be utilised when conducting customer-driven new service development since they are educated to listen to the customer and ensure that the customer opinion is taken into notice. However, the company still lacks in utilising the service designers, since they are often invited to the process to justify the assumptions on customers' needs. In which case, it might be that the development has already gone to the wrong direction and people need to take a step back in the process.

Other restricting factors, of course, are resources and then communication. Resources are scarce, and everyone has a lot on his or her table. The communication is difficult or low, which can still be seen as a lack of sharing the information and personal know-how whether it is about developing services or products. This can cause the fact that the customer gets asked the same questions over and over, which puts pressure on the customer relationship management.

6. DISCUSSION AND CONCLUSIONS

The previous research had been strongly focusing on the organisational viewpoint of customer involvement. To get customer insights on the matter as well, three interviews were conducted, from which five different themes can be drawn for analysis; *motivation and factors underlying involvement decisions, modes of involvement* and *timing and communication.* The findings related to customers' motivations are especially under extreme interest since there are no studies conducted yet on the organisational customers' motivations.

Motivation and factors underlying involvement decisions

It came quite clear that customers enjoy and want to be involved in the development process. All three interviewed customers were able to point out several benefits both from personal and organisational perspective. Some of these gained benefits can also be seen as drivers for motivational factors.

One of the strongest factors that came up in the interviews was learning and the increase of knowledge. Both of these factors were pointed out both as a motivation and benefit of involvement. The finding that knowledge is the most influential motivational factor goes in line with the previous studies regarding consumers' motivation (Fernandes & Remelhe 2016; Füller 2006; Wu et al. 2007). The findings also support Roberts' et al. (2014) motivational factors, since influencing new product development and seeing change take place were considered as two of six factors. These can also be seen in the findings, since it comes clear from the interviews that the interest towards the topic and the mode of involvement also played a role, in addition to the feeling of accomplishment generated from getting to be involved (Person X 2016). These two findings can thus be compared to the findings of Roberts et al. (2014).

Interestingly, even though the scope of the data was quite small, with only three customers being interviewed, the social aspect as a motivational factor was put forward, even though Fernandes and Remelhe (2016) did not find it as influential in their study. As Person Z stated, the networking factor could be seen as a motivational factor, which brings the social benefit to the table. Other motivational factors that can be raised from the findings are: (need for) better communication and benefit in future usage. The learning aspect together with the benefit in future usage brings a future aspect to the motivational factors, which indicates, that the decisions regarding whether or not to get involved are based on both short-term and long-term benefits. However, despite all these individual identified factors, the decision whether to get involved is always dependent on whether or not it is considered as a win-win situation or not.

From the company perspective, ABB's motivations to involve its customers are quite similar to why customers want to get involved. The major factor lies on the learning aspect; ABB wants to learn more about its customers, what are their needs and troubles and how they operate. The learning aspect simultaneously works as knowledge factor, since by learning from its customers, ABB also manages to increase their knowledge regarding certain customers and the environment they are all operating at. However, even though not clearly indicated in the interview, it is quite clear that for an LSE like ABB, a financial factor almost automatically plays a motivational role in the process. ABB wants to learn and increase its knowledge regarding their customers, in order to create services and products, better matching to customers' needs, which, in other words, will result in a better revenue flow. The motivational factors are summarised in Figure 8.

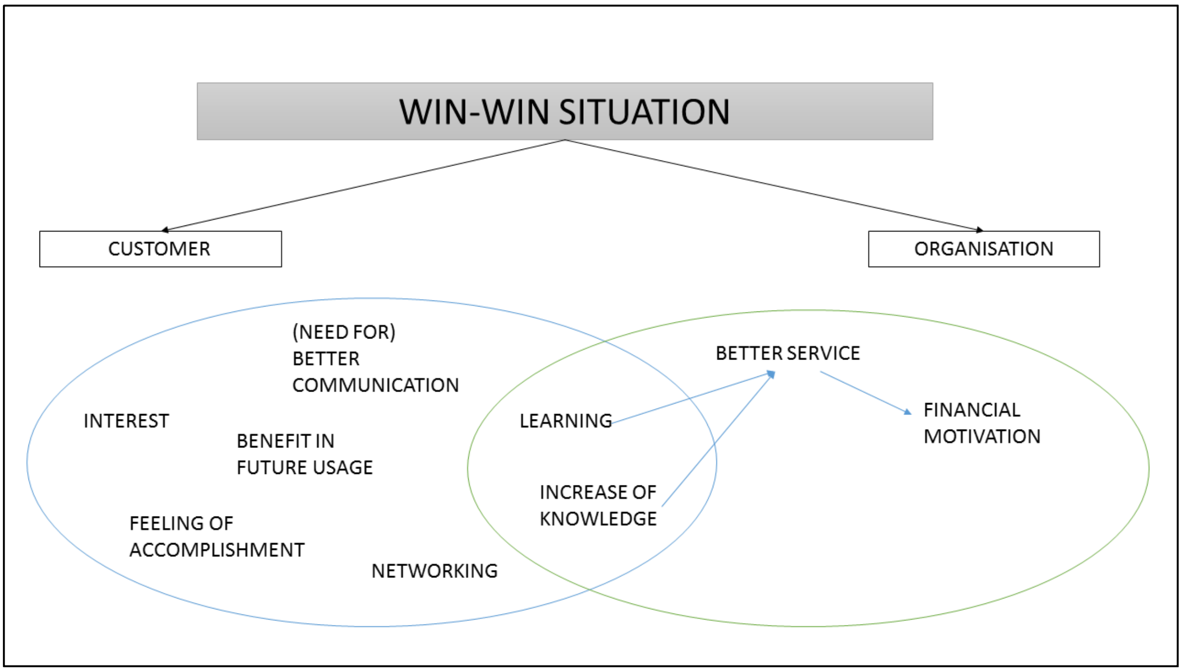
WIN-WIN SITUATION
CUSTOMER
ORGANISATION
(NEED FOR) BETTER COMMUNICATION
INTEREST
BENEFIT IN FUTURE USAGE
FEELING OF ACCOMPLISHMENT
NETWORKING
LEARNING
INCREASE OF KNOWLEDGE
BETTER SERVICE
FINANCIAL MOTIVATION

Figure 8. Motivational factors

In addition to identifying motivational drivers for becoming involved, encouraging and restrictive factors for involvement were found. A few of the factors fell under both encouraging and restrictive themes. First of all, the need for the service proposed for involvement plays a large role in the decision process. Due the scarce resource of time, the customer needs to have a need and social order for the service to become involved. However, if the customer is extremely interested in the service, they are willing to find time for the involvement. The need and timing together construct the foundation of decisive factors for involvement.

Secondly, the internal know-how can be seen as both encouraging and restrictive. If the customer feels, that the company has enough knowledge on the matter, they take part more easily. However, if the company feels that they do not have enough knowledge to have a say in the development or ideation, they will not become involved.

Thirdly, the relationship with the service provider can work as a hindering or promoting factor. Especially in Industrial company 2's case, the relationship had a huge say whether or not they would become involved in the development process. In Industrial company 1's situation, they would prefer a service provider with which they have a good, and long relationship with, although they were not completely shutting out the opportunity to cooperate with a less known provider. Quite closely related to the relationship is also the interaction with the service provider; if the communication has been working well in the past, the company is more eager to start the cooperation. Since both of the case customers were international LSEs, the reputation of the service provider has a say on the matter as well; the companies cannot be cooperating with just anyone in the industry. Table 9 summarises the encouraging and restrictive factors for customer involvement:

Table 9. Encouraging and restrictive factors for involvement

Encouraging		Restrictive	
Internal	External	Internal	External
need	relationship with the provider	need	relationship with the provider
know-how	interaction with a provider	know-how	service provider's reputation
approval from the board		resources	other participants in the workshop
		time/schedule	

Together, the motivational drivers and decision factors build the customer-perceived value of customer involvement for the previous participants of Customer Focus Groups'. As also in the definition of customer-perceived value, also, in this case, the value consists of benefits received versus sacrifices given. The benefits received play a larger role compared to sacrifices or restrictions related to customer involvement. This finding may indicate, that the benefits received from customer involvement in customer opinion are larger than the sacrifices.

The motivation towards becoming involved drives mostly from internalised extrinsic and entirely extrinsic dimensions. The intrinsic motivation consisting of hedonic benefit expectation cannot be seen as a motivational factor in this case, due to the fact, that customers did not know what to expect nor did they not have any expectations towards the CFG event. Hence, the hedonic benefit, as referring to the expectation of a pleasurable experience, was not supported. Same applies for the organisational perspective.

For the extrinsic motivation part, the pragmatic benefit (i.e. solutions better matching needs) was quite high and a benefit that was supported by all the interviewees. However, the economic benefit was not that clearly stated by the interviewees. However, they did see that the knowledge gathered by the customers during the event, would eventually be beneficial both for the customer's company and the customer itself. Hence, there might be a small linkage to economic benefit, although not being that clearly indicated. All in all, from the extrinsic point of view, the pragmatic benefit was highly supported. The economic benefit played a larger role in the ABB's perspective, and for the organisation's point of view, there is strong support for extrinsic motive.

Finally, there is an internalised extrinsic motive in the customers' participation. Alongside with the pragmatic benefit, also cognitive benefit (knowledge about services, development et cetera) was clearly indicated in the findings. Quite surprisingly, as stated before, the social benefits were raised in the interviewees and in this case, play a larger role than in previous literature (Fernandes & Remelhe 2016). The customers found that the networking and need for better communication were motivational drivers, and also, the relationship between the customer and service provider is highlighted in the findings, since the relationship affects the decision of becoming involved in the process.

The personal benefit is more complex, since even though the interviewees felt that they had benefited from their participation to the CFG both on a personal and organisational level, which would indicate that there is a personal benefit involved, the personal benefit could also be transformed to a negative. Since one aspect of personal benefit is self-efficacy (Nambisan & Baron 2009) the benefit is not that straight-forward. The self-efficacy was raised as being one of the hindering decision factors for involvement. Hence the personal benefit gotten from the involvement, and affecting customer-perceived value, can be questioned. The self-efficacy, however, cannot be seen as a sacrifice either, which is why it would be reasonable to argue that in this case, the personal benefit is not strongly supported. Table 10 summarises how the customer-perceived value consists in this case based on the empirical findings.

Table 10. Customer-perceived value based on empirical findings

Benefits					**Sacrifices**	
internalised extrinsic			extrinsic		monetary	non-monetary
cognitive	social	personal	pragmatic	economic	financial resources	time people
learning increase of knowledge	networking need for better communication relationship with the provider	feeling of accomplishment	services better matching needs need interest	benefit in future usage		

Modes of involvement

In customers' opinion, the involvement method should always be a mode that includes face-to-face interaction between the customer and the service provider. The customers justify their answers by stating multiple reasons for this preference.

First of all, by meeting face-to-face in a physical location both the customer and service provider would be able to tackle the largest hindering factor for involvement – scheduling. It is harder to cancel a meeting when people need to move physically from one place to another. Secondly, as Person X stated, in a face-to-face meeting it is easier to ensure that the goals of the project are clear to all of those involved, and it is also easier to ask questions and clarify things straight up. The third justification for a face-to-face meeting was that people get a face to the name they have been communicating with, which helps a lot in the future customer relationship management.

The second thing, which customers preferred in the involvement method, was that there should be a workshop-styled meeting especially in the beginning (in other words, in the ideation phase). Customers said that they want to get more insight and the learning experience from other participants. A one-on-one meeting was considered as boring (Person Z 2016) as being an involvement method. Moreover, Person X (2016) stated that sometimes, a few okay ideas could be generated into one excellent idea. Thus, it can be considered even necessary to have more people involved in the ideation. Another aspect that came to light was that by having several people in the meeting, both the customers and service providers get the opportunity to network with their colleagues. The customers also did not see any conflicts of interest in sharing their knowledge for a larger group, which is why that factor cannot be seen as having a hindering impact for this type of involvement method.

However, customers' preference regarding the mode of involvement changes when the development process progresses. Instead of having a larger group present, customers would like to have more personal meetings and observations on their site. Of course, this method can also be used at the beginning, which is something that ABB has done, but customers think, that it is not that necessary until starting to get closer to the final stages of the development process. Customers still acknowledge, that even if they would have one-on-one meetings, it might not lead to a tailored service, since service providers need to make compromises end up with a solution that would satisfy the needs of a larger target group.

These customer preferences indicate that customers would be more willing to follow the co-development method by Korhonen and Kaarela (2015) according to which both the customer and service provider actively participate in the service development process, and both have opportunities to impact on the outcome. According to the findings, customers themselves revoke most of the criticism that co-development has faced. Firstly, it is true that in BUSINESS-TO-BUSINESS environment individual relationships are of importance, and customer's relationship with the service provider is one factor which impacts on the involvement decision.

Secondly, the critique towards rising customer expectations, even the customers themselves acknowledge that they cannot have everything and that there is always the need for compromise. Also, this concern does not come up with the interview with ABB employee, which would indicate, that at least in ABB's case, the company is not worried about the matter. At least when not directly asked about the issue. Thirdly, it was stated that the organisation wants to protect its know-how and prevent knowledge spill-overs. However, that does not seem to be the case on ABB's behalf, since the company is quite open with sharing information, which is also the case on the customers' point of view. Finally, both

ABB and the customers agree that co-development is resource-intensive (Etgar 2008), but do not see it as a threatening factor, but instead more as a hindering factor. (Korhonen & Kaarela 2015; Person X 2016; Person Y 2016; Person Z 2016; ABB employee 2016)

On the basis of these findings, it seems that Alam (2002) has been able to present customer-driven involvement methods in his study regarding involvement in practice. From the six stated involvement methods, customers can stand behind five of them; face-to-face interviews, user visits and meetings, brainstorming, users' observation and feedback and focus groups. All of these five methods require meeting face-to-face in a physical location. The face-to-face interviews, in this context, are defined as not having a one-on-one meeting, but more as one component in a workshop. Also, users' observation and feedback do not concern observation done by the users', by instead the service provider being the active observer of customers' processes.

Based on customers' preferences regarding the customer involvement mode, it can be indicated, that instead of having a *customer-driven* innovation or development process, the customers prefer *customer-centred* development (Desouza et al. 2008), in which the ideation is done in cooperation with the service provider and customer. Also, the main focus is on the service provider acting as a communicator, and high communication and interaction with the customer being the main target. This is the development method currently used – at least partially – by ABB, but the company needs to put more effort on the interaction and communication for the development to work in the customer preferred way.

In addition, as already stated, the customers want to be actively involved in the service development process. Thus they should have an active customer role. Currently, the customer roles in the service development processes at ABB are close to co-performer or interactive co-designer. The customers seem to be pleased in these roles brought upon them, but once again, the communication flow should be improved. However, if the service provider would be willing and ready for it, the customer roles even closer to the articulated preferences would be co-creators. Moreover, the definitions of bidirectional co-creator (Blazevic & Lievens 2008) or integrated co-designer (Mannervik & Ramirez 2006) would even better match the customers' preferences regarding the way they would like to be involved.

To summarise and combine the findings and theory, customers prefer a co-development relationship with their service providers, in order to create and ideate services in a face-to-face interaction. The next section will give more insight, on the timing of the involvement (when to involve customer to the development process).

Timing and communication

The results of this thesis support the findings by Alam (2002) who stated that the involvement is more intense in the beginning and end phases of the project. Quite surprisingly, customers were not interested in being actively involved throughout the whole development process. Instead, the customers found that it would be more important for them to be actively involved in the beginning and end phases, whereas in the middle, they were fine with staying in the background.

However, this finding should not be mistaken as to involving customers on a case-by-case basis. Even though the customers might not be actively involved throughout the process, they still want to be informed about the progress of the development. This brings more attention to the service provider’s choices on customer involvement. As Person Z (2016) stated, ongoing communication and interaction between the service provider and customer are a value-adding benefit for both participants. These arguments support the previous finding, according to which communication should be frequent (Gustafsson et al. 2012).

Moreover, there are clear indications of a communication process for customer involvement. Firstly, the customer expects, that service providers can collect their troubles, needs and wishes already from the first meeting and create the service based on their notes. More importantly, customers expect, that when they are actively voicing their concerns and telling their opinions, the service provider not only remembers their feedback but acts on the gathered information. This expectation confirms the assumption by Carbonell and Rodriguez-Escudero (2014) in that there is an assumption that the service providers would act on the knowledge created since the higher recording of information collected resulted in higher utilisation of knowledge, which will eventually lead to enhanced service performance. Also, this argument supports Gustafsson’s et al. (2012) finding, according to which communication should be bidirectional.

Customers expect, that when they are back actively involved in the process (stage 8 onwards), the service provider should present them with a prototype that resembles the customers’ service expectation based on the information given. However, if the service provider is unsure about the direction of the development, and wants to follow a customer-driven development method, they should be proactively communicating to the customer about the progress of the development also in the passive phase (from customer viewpoint). Thus, it is possible to formulate a communication process map, based on the NSD development process. This communication process map is presented in Figure 9.

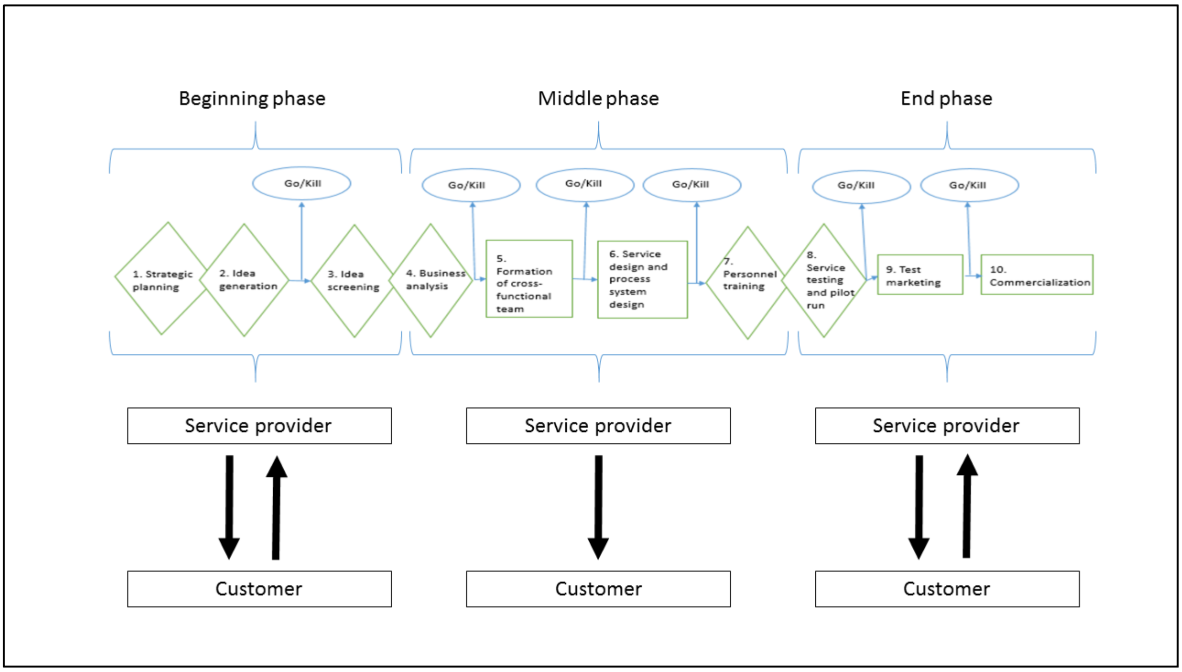
Beginning phase
Middle phase
End phase
Go/Kill
Go/Kill
Go/Kill
Go/Kill
Go/Kill
Go/Kill
1. Strategic planning
2. Idea generation
3. Idea screening
4. Business analysis
5. Formation of cross-functional team
6. Service design and process system design
7. Personnel training
8. Service testing and pilot run
9. Test marketing
10. Commercialization
Service provider
Service provider
Service provider
Customer
Customer
Customer

Figure 9. Communication process

The figure indicates that in the beginning phase the communication should be a two-way process, in which both the customer and service provider should be equally active. However, it is important to notice, that in this context the communication refers to the extent in which customers talk and service providers mostly listen. When the development enters the middle phase, customers become more passive, whereas service providers should keep their customer in the loop, by proactively communicating about the progress and changes in the development. Moreover, finally, when the development hits the end phase with the last stages, the customer is once again actively communicating about the service and the service provider is mostly listening and hopefully acting on the knowledge created.

All in all, the findings from the empirical study completely support the fact, that communication during involvement should be frequent, bidirectional, face-to-face and active (Gustafsson et al. 2012). Moreover, when reflecting the empirical findings to the communication framework (Gustafsson et al. 2012), it should also be noted, that during the active, bidirectional phases of communication, the communication should be distributed evenly, in order to ensure that both parties have equal opportunities to impact on the service development.

6.1. Theoretical implications

The aim of this research was to fill in the theoretical gap in customer involvement in how customers perceive being involved and what is their motivation for such involvement. The previous literature had been focusing mostly on the organisational perspective while dismissing the customer viewpoint. Also, the literature regarding customer involvement has been noted to lean on new product development and consumers. The literature regarding new service development and customer involvement has been increasing over the years, but still there is little to nothing known about the organisational customers' background; what motivates them and how do they perceive being involved in the development. The researcher managed to find a couple of articles related to motivations of consumers, but this thesis targeted on giving insight from the business-to-business context of service business.

The major finding for the academic world from this thesis is that the research managed to identify eight different motivational factors for business-to-business customers. The study confirmed that some of the motivational factors are linked to motivations of consumers (Fernandes & Remelhe 2016; Füller 2006; Roberts et al. 2014; Wu et al. 2007), indicating, that consumers and customers might not be that different based on their motivations to engage in the development process. However, there were few new factors; the need for better communication and benefit in future usage, that had not been indicated directly as a motivational factor in previous studies. More importantly, this thesis emphasises that the win-win situation is the foundation for motivation and antecedent for all the other factors. This finding is related to the assumption, that if the proposal for co-development is not seen as a win-win, all the other factors are insignificant.

The study supported some of the criticism towards co-development (Korhonen & Kaarela 2015), in that the relationship in business-to-business environment was seen as being of great importance and that co-development is resource-intensive. However, at least from the customer perspective, the customer companies were not afraid of sharing their know-how, unlike stated in previous criticism (Korhonen & Kaarela 2015). Finally, even though it was found that customers create a service expectation when becoming involved, they also realise that the expectations of all individual customers of a service provider cannot be met. Thus, Korhonen and Kaarela's second critique should not be seen as a hindering factor.

The findings gave empirical evidence on how customers perceive involvement; what are their expectations and experiences. The research also gives evidence, on the customers' preferred mode of involvement, which highly supports the findings of Alam (2002). The findings are of great importance for managerial purposes, but also highlight the fact that Alam's (2002) research has also gotten a bit outdated, and thus proposes of leaving the use of electronic devices out of the practical involvement methods.

The customers' viewpoints give empirical evidence also on how co-creation should be handled. The co-creation does not necessarily require the close involvement of customer in every stage of the development process, but moreover, active participation in development in the beginning and end phases, which once again supports Alam (2002). The findings highlight the role of communication in the process, the basis of which the researcher created a process map for communication in the development process.

From the basis of these findings, the researcher proposes a new theoretical framework for this thesis, which takes into consideration the new empirical evidence:

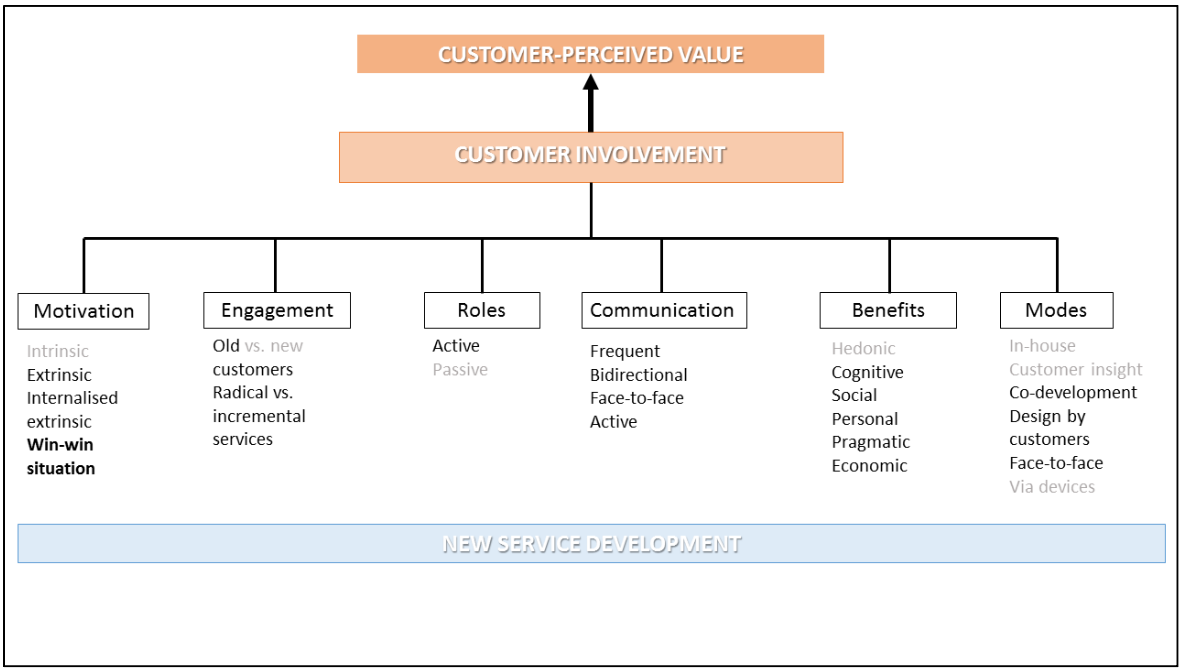
CUSTOMER-PERCEIVED VALUE
CUSTOMER INVOLVEMENT
Motivation
Intrinsic
Extrinsic
Internalised extrinsic
Win-win situation
Engagement
Old vs. new customers
Radical vs. incremental services
Roles
Active
Passive
Communication
Frequent
Bidirectional
Face-to-face
Active
Benefits
Hedonic
Cognitive
Social
Personal
Pragmatic
Economic
Modes
In-house
Customer insight
Co-development
Design by customers
Face-to-face
Via devices
NEW SERVICE DEVELOPMENT

Figure 10. New theoretical framework

The new framework does not include the motivational factors, which were not supported by the findings. Also, it came extremely clear, that customers themselves want to become involved in the process in an active role, rather than keeping passive. However, they are willing to be passive in the middle of the process, but to ensure the engagement and value-add, the service provider needs to proactively communicate with the customers. Thus, the reactive communication has been deleted. For the involvement modes, the researcher has taken away those modes, which cannot be seen as truly customer-driven (in-house and customer insight). To have customer-driven development, the service provider needs to go to the customers to get information directly from the source, without it getting distorted along the way. The new framework has also abandoned the use of devices as an involvement method.

6.2. Managerial implications

To manage customer involvement, service providers need to bring attention to five points that can be raised from this thesis. First of all, service providers need to figure out **how to create a win-win situation** for the customers. As the study indicates, the win-win situation is the basis for the decision whether to become involved or not. If the company is unable to prove that they have something to offer for the customer, they will not participate. For service providers, there is a possibility to draw attention to the other most influential motivational factors. First of all, if the company can somehow establish a learning opportunity for the customer, they are more willing to join. Secondly, the service provider can utilise its customer insight and refrain in proposing co-development in times, when they know that the customer is busy. For example, no one is going to attend a workshop in the middle of a holiday season. Thirdly, the service provider needs to convince the customers that their input is valid, which can be achieved by having a clear concept or idea for the involvement.

The second issue is that service organisations need to decide **when to involve customers in the development process.** In order to have a customer-driven service development, the customers should become involved in the development process early on. Even though the involvement is more intense in the beginning and end phases (Alam 2002), the service providers need to ensure, that they do not approach customers on a case-by-case basis but instead make certain that the customer is heard, and the knowledge is acted on, throughout the process.

Thirdly, the organisation needs to figure out **what is the role of the customer**. The empirical evidence indicates that in customer-driven new service development the customers prefer having an active role in the development. The previous literature gives several different roles for active involvement. It should also be noted, that the customer's role might differ depending on if the service provider is developing radical (new) or incremental (improvements for old) services. This means that customers may represent different roles regarding the service that is being developed or created.

This thesis does not single out any individual roles as being better than the other but does bring attention to the fact, that service companies – when following customer-driven approach and service-dominant logic – should utilise its customers in a co-developing role. The researcher also joins with previous findings, that customers may have multiple roles during the development process.

The fourth issue is **how to gather information from the customers and deploy it.** The service provider, when involving customers early on, needs to have an involvement method, in which it is able to ensure that it can gather enough customer information. The information should be used in an instrumental way, in which the use of information is direct and acts as a foundation for decisions. This is important, since the customers have created an expectation for the service, and also expect that the outcome meets those expectations. The service provider needs to use the customer information in its development if it wants to be certain, that the outcome fills the articulated needs. As the empirical evidence tells, customers are quite open with sharing information in the ideation phase, so the lack of information cannot be a reason behind not following customer needs. Moreover, it is important for customer relationship management, that the customer has a feeling that they are being heard, since, in a business-to-business environment, organisations cannot afford to lose their customers or disappoint them.

The fifth and final issue that the service providers need to tackle is **how to communicate internally and externally**. As in the proposed communication process map, service providers need to ensure proactive communication with the customers. Even if the development is not progressing, the customers need to be informed, since if the customer needs to contact the service provider regarding the matter, it can affect the trust for the company, and thus have an effect on the engagement. The communication with the customer also brings added value for the company, and may act even as a competitive advantage. This requires some internal work within the company to create and manage the communication process with the customers. However, it is not enough that the companies communicate with their customers throughout the development process. They also need to ensure knowledge flow within the company. The information gathered from the customers is useless, if it is not shared outside the development team.

To conclude, service providers need to assess these five issues when involving customers to the service development process. The whole involvement begins by identifying the motivational factors of the targeted customers, creating a suitable environment for the involvement and finally, ensuring that the company has well managed and maintained communication and knowledge flow processes.

6.3. Conclusions

The service field in business has long been growing and especially now with the service-dominant logic raising its head as the mainstream approach, research on the matter could be considered trendy. However, compared to new product development, the studies regarding new service development can be considered as being fairly understudied. The rise of SDL and co-creation cause that the customer is even more entwined to the creation of services. Despite this fact, the research regarding customer involvement in new service development has mainly been focusing on the organisational perspective. Moreover, there are not that many studies conducted regarding the underlying factors and benefits received for such involvement from the customers' perspective. Even the few studies that have been conducted in the recent years focus more on the consumer perspective, whereas organisational customers and the business-to-business environment have been ignored.

The aim of this study was to answer to the following main research problem: *"How to involve customers in the new service development process?"* This main research problem was supported with three sub-problems; *what is new service development process? How do customers experience being involved in new service development?* And *what are the factors underlying customers' motivation to become involved in the development process?*

New service development differs from new product development, mostly on the amount stages. NPD usually has seven to ten stages in its development process. Whereas previous literature has presented NSD models with stages differing from eight to 15. There is also the definition of new service design, which should not be mistaken as a new service development process. Instead, new service design is entwined in the new service development, since new service design determines how the service process works. In addition, new service design contains only four stages. However, this thesis follows the 10 stage model created by Alam and Perry (2002), which is also closer to the NPD models than traditional new service development models. Alam and Perry's model also got chosen due to the fact that it is the first model that takes customers into consideration. The stages of the chosen NSD model were presented in Figure 4 (page 30).

The main research problem was answered in chapter 6. The previous literature has stated lots of benefits and positive outcomes for organisations when they involve their customers in the development process, but this research gave insight from the customers' point of view. Through interviewing three customers and one case company employee, the findings reflect what are the customers' motivations, expectations, experiences, and opinions towards customer involvement in service development.

According to the findings, *customers prefer being involved, throughout the whole development process.* However, the customers are fine with being actively involved only in the beginning and end phases. During the middle phase, in which most of the development is related to service provider's internal processes, the customers did not see a need to be that actively involved. However, the customers want to be kept in the loop about the progress of the development. Thus, a new communication process map was created, which indicated active, two-way communication in the beginning and end phases, whereas in the middle phase, the communication is one-way, from the service provider to the customer, but it needs to be proactive. Moreover, the findings indicate, that customers prefer face-to-face meetings over the usage of electronic devices. The service provider also needs to take care of proper knowledge flow in the company, for the development to be successful. A more comprehensive listing of how to involve customer to the development process can be found from Chapter 6.2.

The largest new finding in this thesis were the motivational factors underlying customers' decision to become involved in the development process. The study indicated that organisational customers are not that different from consumers when compared to the previous literature regarding motivations and customer-perceived value. For business-to-business customers, the antecedent for the other motivational factors is a win-win situation. In other words, customers need to get the expression of being in a win-win situation to get involved or even consider getting involved in the development process. The motivations for organisational customers were mainly internal extrinsic or entirely extrinsic, in which the cognitive and pragmatic benefits were the two most influential factors of decision-making.

Overall, customers experience being involved in new service development mainly positively; they enjoy the customer-driven approach and the chance to get their opinions heard and voice their concerns. The customers also feel that if the service provider proactively communicates with them, it will bring added value to the process, which enhances engagement. The largest stepping stone for service providers comes from the service expectation that customers create when they become involved in the process. However, the study states, that the customer acknowledges the need for compromising, which in turn decreases service providers' fear of unreachable customer expectations.

This thesis introduced the motivations of organisational customers towards involvement, a communication process map as well as a new framework better matching the context of the business-to-business environment. Moreover, the study listed five themes which need to be taken into consideration by service providers, when conducting customer-driven service development in a business-to-business environment.

Since this study is conducted as a case research, it is important to notice that the results are bound to certain time frame and situation. Thus, further research is strongly advised regarding the subject, to widen the knowledge on organisational customers.

6.4. Recommendations and suggestions for future research

The topic around customer involvement in service business context is always important to study, especially due to the rising service-dominant logic, which emphasises the role of the customer in service creation. Also, new service development should be studied more on the point of view of customers, if the industries and academia want to fully understand the customers.

From the point of view of this thesis, certain limitations cause the need for future research. First of all, the number of interviewees is fairly small, which is why this study should be replicated with a higher number of interviewees, to create a more comprehensive picture of the motivational factors of organisational customers. Also, this research focuses solely on one company's method of involvement, and the customer experiences based on that. By involving customers from a larger spectre, it would be possible to get a better understanding of the customer-perceived value of customer involvement. Moreover, all the companies are operating in Finland – although being involved in international markets. This factor may have had an effect on the results of this thesis. Thus, the study should be replicated in an international environment to delimit the possibility of culture having an impact on the results. Also, the narratives from the interviews have been conducted by the researcher, which is why there might be some interpretational errors due to transmitting results from Finnish to English.

Other interesting research topics that were not directly discussed in this thesis, but would require more studies on them are for example how to engage customers to the development process. This thesis found that continuing communication might be one method for engagement, but this is a topic that has been understudied. Also, it would be interesting to study, that based on these findings, if a company would utilise this knowledge, would it have an effect on the new service success.

REFERENCES

ABB (2015) Annual Report 2015. Zürich, ABB Ltd.

Adams, M.E., Day, G.S. and Doughert, D. (1998) Enhancing new product development performance: an organizational learning perspective. *Journal of Product Innovation Management,* Vol. 15, Iss: 5, pp. 403-422

Alam, I. (2002) An Exploratory Investigation of User Involvement in New Service Development. *Journal of the Academy of Marketing Science*, Vol. 30, Iss: 3, pp. 250-261

Alam, I. (2006) Removing the Fuzziness from the Fuzzy-End of Service Innovations through Customer Interactions. *Industrial Marketing Management*, Vol. 35, Iss: 4, pp. 468-480

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

Anderson, W.L. and Crocca, W.T. (1993) Engineering practice and codevelopment of product prototypes. *Communications of the ACM*, Vol. 36, Iss: 6, pp. 49-56

Baldwin, C. and von Hippel, E. (2011) Modeling a paradigm shift: from producer innovation touser and open collaborative innovation. *Organization Science*, Vol. 22, Iss: 6, pp. 1399–1417

Berchicci, L. and Tucci, C.L. (2010) There is more to market learning than gathering good information: the role of shared team values in radical product definition. *The Journal of Product Innovation Management*, Vol. 27, Iss: 7, pp. 972-990

Berry, L.L. and Yadav, M.S. (1996) Capture and communicate value in the pricing of services. *Sloan Management Review*, Summer, pp. 41-51

Bitner, M. J., Faranda, W. T., Hubbert, A. R. and Zeithaml, V. A. (1997) Customer contributions and roles in service delivery. *International Journal of Service Industry Management*, Vol. 8, pp. 193–205

Bitner, M.J., Brown, S.W. and Meuter, M.L. (2000) Technology infusion in service encounters. *Journal of the Academy of marketing Science*, Vol. 28, Iss: 1, pp.138-149

Blau, P.M. (2004) *Exchange and Power in Social Life*. New York: NY, Wiley

Blazevic, V. and Lievens, A. (2008) Managing innovation through customer coproduced knowledge in electronics services: An exploratory study. *Journal of the Academic Marketing Science*, Vol. 36, Iss: 1, pp. 138-151

Bogers, M. and Horst, W. (2014) Collaborative prototyping: crossfertilization of knowledge in prototype-driven problem solving. *Journal of Product Innovation Management*, Vol. 31, Iss: 4, pp. 744–764

Bogers, M., Afuah, A. and Bastian, B. (2010) Users as innovators: a review, critique, and future research directions. *Journal of Management*, Vol. 36, Iss: 4, pp. 857–875

Bonoma, T. (1985) Case research in marketing: opportunities, problems and processes. *Journal of Marketing research*, Vol. 12, pp. 199-208

Bowers, M.R. (1987) Developing new services for hospitals: A suggested model. *Journal of Health Care Marketing*, Vol. 7, Iss: 2, June, pp. 35-44

Bowers, M.R. (1989) Developing new services: improving the process makes it better. *Journal of Services Marketing*, Vol. 3, Iss: 1, Winter, pp. 15-20

Brodie, R.J., Hollebeek, L.D., Juric, B, and Ilic, A. (2011a) Customer engagement: Conceptual Domain, Fundamental Propositions, and Implications for Research. *Journal of Service Research,* Vol. 14, Iss: 3, pp. 252-271

Brodie, R.J., Ilic, A., Juric, B., & Hollebeek, L. (2013) Consumer engagement in a virtual brand community: An exploratory analysis. *Journal of Business Research*, Vol. 66, Iss: 1, pp. 105-114

Buur, J. & Matthews, B. (2008) Participatory innovation. *International Journal of Innovation Management*, Vol. 12 Iss: 3, pp. 255-273

Campbell A. and Cooper, R.G. (1999) Do Customer Partnerships Improve New Product Success Rates? *Industrial Marketing Management*, Vol. 28, Iss: 5, pp. 507-519

Carbonell, P. and Rodriguez-Escudero, A-I. (2014) Antecedents and consequences of using information from customers involved in new service development. *Journal of Business and Industrial Marketing*, Vol. 29, Iss: 2, pp. 112-122

Carbonell, P., Rodriguez-Escudero, A.I. and Pujari, D. (2009) Customer Involvement in New Service Development: An Examination of Antecedents and Outcomes. *Journal of Product Innovation Management*, Vol. 26, pp. 536-550

Carbonell, P., Rodriguez-Escudero, A.I. and Pujari, D. (2012) Performance effects of involving lead users and close customers in new service development. *Journal of Services Marketing*, Vol. 26, Iss: 7, pp. 497 - 509

Central Intelligence Agency (2016) CIA World Factbook [web document]. [Referred 19.01.2016] Available: https://www.cia.gov/library/publications/resources/the-world-factbook/fields/2012.html#xx

Chesbrough, H.W. (2003) *Open innovation: The New Imperative for Creating and Profiting from Technology*. Boston: MA, Harvard Business School Press

Chesbrough, H.W. and Appleyard, M.M. (2007) Open Innovation and Strategy. *California Management Review,* Vol. 50, pp. 57-76

Chew, E.K. (2014) An Integrative Design Framework for New Service Development. In Davis, J.G. et al. (Eds.): ASSRI 2013, LNBIP 177, pp. 44–58

Christensen, C.M. and Bower, J. (1996) Customer power, strategic investment and the failure of leading firms. *Strategic Management Journal*, Vol. 17, pp. 197-218

Ciccantelli, S. and Magidson, J. (1993) From experience: consumer idealized design: involving consumers in the product development process. *Journal of Product Innovation Management*, Vol. 10, Iss: 4, pp. 341-347

Coviello, N., and Joseph, R. (2012) Creating major innovations with customers: insights from small and young technology firms. *Journal of Marketing*, Vol. 76, pp. 87–104

Cui, A.S. and Wu, F. (2015) Utilizing customer knowledge in innovation: antecedents and impact of customer involvement on new product performance. *Journal of the Academy of Marketing Science*, pp. 1-23

Dahlsten, F. (2003) Avoiding the customer satisfaction rut. *Sloan Management Review*, Vol. 44, Iss: 4, pp. 73-77

Day, G.S. (1990) *Market Driven Strategy: Processes for Creating Value*. New York: NY, The Free Press

Desouza, K.C., Awazu, Y., Jha, S., Dombrowski, C., Papagari, S., Baloh, P. and Kim, J.Y. (2008) Customer-driven innovation. *Research-Technology Management*, Vol. 51, Iss: 3, pp. 35-44

Donaldson, B. and O'Toole, T. (2003) *Strategic market relationships: from strategy to implementation*. New York: NY, Wiley

Durgee, J.F., Colarelli O'Connor, G. and Veryzer, R.W. (1998) Using mini-concepts to identify opportunities for really new product functions. *Journal of Consumer Marketing*, Vol. 16, Iss: 6, pp. 525-543

Edvardsson, B., Gustafsson, A., Kristensson, P., Magnusson, P. and Matthing, J. (2006) *Involving Customers in New Service Development*. London, Imperial College Press

Edvardsson, B., Kristensson, P., Magnusson, P. and Sundström, E. (2012) Customer Integration Within Service Development – A Review of Methods and An Analysis of Insitu and Exsitu Contributions. *Technovation*, Vol. 32, pp. 419-429

Edvardsson, B., Ng G., Min C.Z., Firth R. and Yi, D. (2011) Does service-dominant design result in a better service system? *Journal of Service Management*, Vol. 22, Iss: 4, pp. 540 – 556

Erlhoff, M., Mager, B. and Manzini, E. (1997) Dienstleistung braucht design. Design for social responsibility. Luchterhand

Eskola, J. and Suoranta, J. (2008) *Johdatus laadulliseen tutkimukseen*. 8th edition. Helsinki, Vastapaino

Etgar, M. (2008) A descriptive model of the customer co-production process. *Journal of the Academy Marketing Science*, Vol. 36, pp. 97–108

Fang, E. (2008) Customer participation and the trade-off between new product innovativeness and speed to market. *Journal of Marketing*, Vol. 72, Iss: 4, pp. 90-104

Feldmann, N. and Cardoso, J. (2015) Service Design. In Cardoso, J., Fromm, H., Nickel, S., Satzger, G., Studer, R. and Weinhardt, C. (Eds.): *Fundamentals of Service Systems*. Service Science: Research and Innovations in the Service Economy. Switzerland, Springer International Publishing

Fernandes, T. and Remelhe, P. (2016) How to engage customers in co-creation: customers' motivations for collaborative innovation. *Journal of Strategic Marketing,* Vol. 24, Iss: 3-4, pp. 311-326

Flint, D.J. (2002) Compressing new product success-to-success cycle time: deep customer value understanding and idea generation. *Industrial Marketing Management*, Vol. 31, Iss: 4, pp. 305-316

Fournier, S. (1998) Consumers and their brands: Developing relationship theory in consumer research. *Journal of Consumer Research*, Vol. 24, Iss: 4, pp. 343–353

Füller, J. (2006) Why consumers engage in virtual new product developments initiated by producers. *Advances in Consumer Research*, Vol. 33, pp. 639–646

Füller, J. (2010) Refining virtual co-creation from a consumer perspective. *California Management Review*, Vol. 52, Iss: 2, pp. 98–122

Gales, L. and Mansour-Cole, D. (1995) User involvement in innovation projects. *Journal of Engineering and Technology Management,* Vol. 12, Iss: ½, pp. 77-109

Gambetti, R. C. and Graffigna, G. (2010) The concept of engagement: A systematic analysis of the ongoing marketing debate. *International Journal of Market Research,* Vol. 52, Iss: 6, pp. 801-826

Gebauer, H., Krempl, R., Fleisch, E. and Friedli, T. (2008) Innovation in product-related services. *Managing Service Quality*, Vol. 18, Iss: 4, pp. 387-404

Grönroos, C. and Voima, P. (2013) Critical service logic: making sense of value creation and co-creation. *Journal of the Academy of Marketing Science*, Vol. 41, Iss: 2, pp. 133–150

Grönroos, C., Hyötyläinen, R., Apilo, T., Korhonen, H., Malinen, P., Piispa, T., Ryynänen, T., Salkari, I., Tinnilä, M. and Helle P. (2007) Teollisuuden palveluksista palveluliiketoimntaan: Haasteena kannattava kasvu. Teknologiateollisuuden julkaisuja 9/2007

Gruen, T.W., and Hofstetter, J.S. (2010) The Relationship Marketing View of the Customer and the Service Dominant Logic Perspective. *Journal of Business Market Management,* Vol. 4, Iss: 4, pp. 231-245

Gruner, K.E. and Homburg, C. (2000) Does customer interaction enhance new product success? *Journal of Business Research*, Vol. 49, Iss: 1, pp. 1-14

Gupta, A.K. and Wilemon, D.L. (1990) Accelerating the development of technology-based new products. *Californian Management Review*, Vol. 32, Iss: 2, pp. 24-44

Gustafsson, A. and Johnson, M.D. (1997) Bridging the quality-satisfaction gap. *Quality Management Journal*, Vol. 4, Iss: 1, pp. 27-43

Gustafsson, A., Ekdahl, F. and Edvardsson, B. (1999) Customer focused service development in practice: a case study at Scandinavian Airlines System. *International Journal of Service Industry Management*, Vol. 10, Iss: 4, pp. 344-358

Gustafsson, A., Kristensson, P. and Witell, L (2012) Customer co-creation in service innovation: a matter of communication? *Journal of Service Management*, Vol. 23, Iss: 3, pp. 311 – 327

Haas, R.W. (1995) *Business Marketing*. Cincinnati: OH, South-Western College Publishing

Hämäri, P. (2015) Customer-driven new service product development. Bachelor’s Thesis. Lappeenranta University of Technology, School of Business and Management.

Hirsjärvi, S. Remes, P. and Sajavaara, P. (2003) *Tutki ja kirjoita*. 6-9th edition. Helsinki, Tammi.

Hollebeek, L. (2011a) Exploring customer brand engagement: Definition and themes. *Journal of Strategic Marketing*, Vol. 19, Iss: 7, pp. 555–573

Hollebeek, L.D. (2011b) Demystifying customer brand engagement: Exploring the loyalty nexus. *Journal of Marketing Management*, Vol. 27, Iss: 7–8, pp. 785–807

Hollebeek, L.D. (2013) The customer engagement/value interface: An exploratory investigation. *Australasian Marketing Journal (AMJ),* Vol. 21, Iss: 1, pp. 17-24

Hoyer, W. D., Chandy, R., Dorotic, M., Krafft, M., & Singh, S. S. (2010) Consumer cocreation in new product development. *Journal of Service Research*, Vol. 13, Iss: 3, pp. 283–296

Iansiti, M. and MacCormack, A. (1997) Developing products on Internet time. *Harvard Business Review*, Vol. 75, Iss: 5, pp. 108-17

Janssen, K. L. & Dankbaar, B. (2008) Proactive involvement of consumers in innovation: Selecting appropriate techniques. *Journal of Innovation Management*, Vol. 12, Iss: 3, pp. 511-541

Jeppesen, L.B. (2005) User toolkits for innovation: consumers support each other. *Journal of Product Innovation Management*, Vol. 22, pp. 347– 362

Johnson, M.D. (1998) *Customer Orientation and Market Action*. Upper Saddle River: NJ, Prentice-Hall

Joshi, A.W. and Sharma, S. (2004) Customer knowledge development: antecedents and impact on new product performance. *Journal of Marketing*, Vol. 68, Iss: 1, pp. 47-59

Kaulio, M.A. (1998) Customer, consumer and user involvement in product development: a framework and a review of selected methods. *Total Quality Management,* Vol. 9, Iss: 1, pp. 141-149

Kindström, D. and Kowalkowski, C. (2009) Development of industrial service offerings – a process framework. *Journal of Service Management*, Vol. 20, Iss: 2, pp. 156-172

Kindström, D., Kowalkowski C. and Sandberg, E. (2013) Enabling service innovation: A dynamic capabilities approach. *Journal of Business Research*, Vol. 66, Iss: 8, pp. 1063-1073

Kohler, M., Schmitz, B. and Neus, A. (2015) Service Innovation. In Cardoso, J., Fromm, H., Nickel, S., Satzger, G., Studer, R. and Weinhardt, C. (Eds.): *Fundamentals of Service Systems*. Service Science: Research and Innovations in the Service Economy. Switzerland, Springer International Publishing, pp. 75-103

Korhonen, H.M.E and Kaarela, I. (2015) Practices for Involving Organizational Customers in Service Innovation. In R. Agarwal et al. (eds.), *The Handbook of Service Innovation*, London, Springer-Verlag

Kothandaraman, P. and Wilson, D.T. (2001) The Future of Competition: Value-Creating Networks. *Industrial Marketing Management*, Vol. 30, Iss: 4, pp. 379-389

Kowalkowski, C., Witell, L. and Gustafsson, A. (2013) Any way goes: identifying value constellations for service infusion in SMEs. *Industrial Marketing Management*, Vol. 42, Iss: 1, pp. 18-30

Kristensson P., Matthing J., Johansson N. (2008) Key strategies for the successful involvement of customers in the co-creation of new technology-based services. *International Journal of Service Industry Management*, Vol. 19, Iss; 4, pp. 474 – 491

Kristensson, P, Gustafsson, A. and Archer, T. (2004) Harnessing the creative potential among users. *Journal of Product Innovation Management*, Vol. 21, pp. 4-14

Kunze von Bischhoffshausen, J., Hottum, P. and Straub T. (2015) Service co-creation. In Cardoso, J., Fromm, H., Nickel, S., Satzger, G., Studer, R. and Weinhardt, C. (Eds.): *Fundamentals of Service Systems*. Service Science: Research and Innovations in the Service Economy. Switzerland, Springer International Publishing, pp. 261-296

Kuusisto, A. and Päällysaho, S. (2008) Customer roles in service production and innovation - looking for directions for future research. Lappeenranta, Lappeenranta University of Technology

Lagrosen, S. (2005) Customer involvement in new product development: A relationship marketing perspective. *European Journal of Innovation Management*, Vol. 8, Iss: 4, pp. 424-436

Langeard, E., Reffait, P., and Eiglier, P. (1986) Developing New Services. In Venkatesan, M., Schmalensee, D.M., Marshall, C.: *Creativity in Services Marketing: What’s New, What Works, What’s Developing*. AMA Proceeding Series, Chicago, pp. 6-8

Lapierre, J. (2000) Customer-perceived value in industrial contexts. *Journal of Business & Industrial Marketing*, Vol. 15, Iss: 2/3, pp. 122-145

Larbig, C., Storey, C. and Wiertz, C. (2012) The role of concept evolution and visceral understanding in explaining the impact of customer involvement on new service success. *In Proceedings of the 19th International Product Development Management Conference*, June, Manchester Business School.

Lau, A.K.W. (2011) Supplier and customer involvement on new product performance: Contextual factors and an empirical test from manufacturer perspective. *Industrial Management & Data Systems*, Vol. 111, Iss: 6, pp. 910-942

Lehtimäki, T., Pääkkönen, K., Oinonen, M., Ojansivu, I. and Salo, J. (2012) Industrial co-innovation process: Relational approach. The XXIII ISPIM Conference – Action for Innovation: Innovating from Experience – in Barcelona, Spain on 17-20 June

Leonard, D. and Rayport, J.F. (1997) Spark innovation through empathic design. *Harvard Business Review*, Vol. 75, Iss: 6, pp. 102-113

Leonard-Barton, D. (1995) *Wellsprings of Knowledge*. Boston: MA, Harvard Business School Press

Lichtenhaler, U. (2008) Open Innovation in Practice: an analysis of strategic approaches to technology transactions. *IEEE Transactions of Engineering Management*, Vol. 55, pp. 148-157

Lilien, G. L., Morrison, P. D., Searls, K., Sonnack, M. and von Hippel, E. (2002) Performance assessment of the lead user idea-generation process for new product development. *Management Science*, Vol. 48, Iss: 8, pp. 1042–1059

Lilja, J. and Wiklund, H. (2007) A two-dimensional perspective on attractive quality. *Total Quality Management and Business Excellence*, Vol. 18, Iss: 6, pp. 667-679

Lundkvist, A. and Yakhlef, A. (2004) Customer involvement in new service development: a conversational approach. *Managing service quality*, Vol. 14, Iss: 2/3, pp. 249-257

Lusch, R.F. and Vargo, S.L. (2008) The service-dominant mindset. In Hefley, B. and Murphy, W. (Eds): *Service Science, Management and Engineering Education for the 21st Century*. New York: NY, Springer, pp. 89-96

Mager, B. and Gais, M. (2009) *Service design*. Stuttgart, Wilhelm Fink GmbH und Co, Verlags-KG

Magnusson, P.R. (2003) Benefits of involving users in service innovation. *European Journal of Innovation Management*, Vol. 6, Iss: 4, pp. 228-238

Mahr, D., Lievens, A. and Blazevic, V. (2014) The value of customer cocreated knowledge during the innovation process. *Journal of Product Innovation Management*, Vol. 31, Iss: 3, pp. 599–615

Mannervik, U. and Ramirez, R. (2006) Customers as co-innovators: an initial exploration of its strategic importance, in Edvardsson, B., Gustafsson, A., Kristensson, P., Magnusson, P. and Matthings, J. (Eds), *Involving Customers in New Service Development*, Vol. 11, London, Imperial College Press

Marshall, C. and Rossman, G.B. (1999) *Designing Qualitative Research*. 3rd ed. Thousand Oaks, CA: Sage

Martin, C.R. and Horne, D.A. (1995) Level of success inputs for service innovations in the same firm. *International Journal of Service Industry Management*, Vol. 6, Iss: 4, pp. 40-56

Martin, C.R., Horne, D.A. and Schultz, A.M. (1999) The business-to-business customer in the service innovation process. *European Journal of Innovation Management*, Vol. 2, Iss: 2, pp. 55 – 62

Matthing J., Sandén B., Edvardsson B. (2004) New service development: learning from and with customers. *International Journal of Service Industry Management*, Vol. 15, Iss: 5, pp. 479 - 498

Mazumdar, T. (1993) A value-based orientation to new product planning! *Journal of Consumer Marketing*, Vol. 10, Iss: 1, pp. 28-41

McColl-Kennedy, J.R., Vargo, S.L., Dagger, T.S., Sweeney, J.C. and Kasteren, Y.V. (2012) Health care customer value cocreation practice styles. *Journal of Service Research*, Vol. 15, Iss: 4, pp. 370–389

McQuarrie, E.F. and McIntyre, S.H. (1986) Focus groups and the development of new products by technologically driven companies: some guidelines. *Journal of Product Innovation Management,* Vol. 3, Iss: 1, pp. 40-47

Meadows, L. and Morse, J.M. (2001) Constructing evidence within the qualitative project. In Morse, J.M., Swanson, J. and Kuzel, A. (Eds.). *The nature of evidence in qualitative inquiry*. (pp. 187-202) Thousand oaks, CA: Sage

Mele, C., Colurcio, M. and Russo-Spena T. (2014) Research Traditions of Innovation. *Managing Service Quality*, Vol. 24, Iss: 6, pp. 612-642

Melton, H. L. and Hartline, M. D. (2010) Customer and frontline employee influence on new service development performance. *Journal of Service Research*, Vol. 13, Iss: 4, pp. 411–425

Melton, H.L. and Hartline, M.D. (2013) Employee Collaboration, Learning Orientation and New Service Development Performance. *Journal of Service Research*, Vol. 16, Iss: 1, pp. 67-81

Melton, H.L. and Hartline, M.D. (2015) Co-creation of radical service innovations. *Journal of Services Marketing,* Vol. 29, Iss: 2, pp. 112-123

Menguc, B., Auh, S., and Yannopoulos, P. (2014) Customer and supplier involvement in design: the moderating role of incremental and radical innovation capability. *Journal of Product Innovation Management*, Vol. 31, Iss: 2, pp. 313–328

Menon, A. and Varadarajan, P.R. (1992) A model of marketing knowledge use within firms. *Journal of Marketing*, Vol. 56, Iss: 4, pp. 53-71

Meroni, A. and Sangiorgi, D. (2011) *Design for Services (Design for Social Responsibility).* Farnham, Gower Publishing Ltd

Meuter, M. L. and Bitner, M. J. (1998) Self-service technologies: extending service frameworks and identifying issues for research. In American Marketing Association (Ed.), *Marketing theory and applications*. Chicago: American Marketing Association, pp. 12-19

Meuter, M. L., Bitner, M. J., Ostrom, A. L. and Brown, S. W. (2005) Choosing among alternative service delivery modes: an investigation of customer trial of self-service technologies. *Journal of Marketing*, Vol. 69, Iss: 2, pp. 61–83

Miles, I. (2005) Knowledge intensive business services: prospects and policies. *Foresight*, Vol. 7, Iss: 6, pp. 39-63

Miller, C. and Swaddling, D.C. (2002) Focusing NPD research on customer perceived value. In: Belliveau, P., Griffin, A. and Somermeyer, S.M. (eds.) *PDMA toolbook for new product development*, Chichester, John Wiley & Sons Inc., pp. 87–114

Moeller, S., Ciuchita, R., Mahr, D., Odekerken-Schroder, G. and Fassnacht, M. (2013) Uncovering collaborative value creation patterns and establishing corresponding customer roles. *Journal of Service Research*, Vol. 16, Iss: 4, pp. 471–487

Mohr, J. and Sarin, S. (2009) Drucker’s insights on market orientation and innovation: implications for emerging areas in high-technology marketing. *Journal of the Academy of Marketing Science*, Vol. 37, Spring, pp. 85-96

Mollen, A. and Wilson, H. (2010) Engagement, Telepresence, and Interactivity in Online Consumer Experience: Reconciling Scholastic and Managerial Perspectives. *Journal of Business Research*, Vol. 63, Iss: 9/10, pp. 919-925

Moorman, C. (1995) Organizational market information processes: cultural antecedents and new product outcomes. *Journal of Marketing Research*, Vol. 32, Iss: 3, pp. 318-335

Mullern, M.J., Wildman, D.M. and White, E.A. (1993) Taxonomy of PD practices: a brief practitioner's guide. *Communications of the ACM*, Vol. 36, Iss: 4, pp. 26-27

Nambisan, S. (2002) Designing virtual customer environments for new product development: toward a theory. *Academy of Management Review*, Vol. 27, pp. 392-413

Nambisan, S. and Baron, R.A. (2009) Virtual customer environments: testing a model of voluntary participation in value co-creation activities. *Journal of Product Innovation Management*, Vol. 26, Iss: 4, pp. 388-406

Nambisan, S. and Nambisan, P. (2008) How to Profit from a Better Virtual Customer Environment. *MIT Sloan Management Review*, Vol. 49, Iss: 3, pp. 53-61

Narver, J.C. and Slater, S.F. (1990) The effect of a market orientation on business profitability. *Journal of Marketing*, Vol. 54, Iss: 4, October, pp. 20-35

Neale, M.R. and Corkindale, D.R. (1998) Co-developing products: involving customers earlier and more deeply. *Long Range Planning*, Vol. 31, Iss: 3, pp. 418-425

Nishikawa, H., Schreier, M. and Ogawa, S. (2013) User-generated versus designer-generated products: a performance assessment at Muji. *International Journal of Research in Marketing*, Vol. 30, Iss: 2, pp. 160–167

Norling, P. (1993) Tjänstekonstruktion (Service design). Ph.D. thesis, the University of Stockholm, Stockholm

Normann, R. (1991) *Service management: Strategy and Leadership in Service Business*. New York: NY, John Wiley & Sons

O'Hern M.S. and Rindfleisch A. (2010) Customer Co-Creation. *Review of Marketing Research*, Vol. 6 pp. 84-106

Ojasalo, J. and Ojasalo, K. (2008) *Kehitä teollisuuspalveluja*. Helsinki, Talentum

Ojasalo, K. (2009) Designing industrial services - What is the role of customer? *The Business Review*, Cambridge, Vol. 14, Iss: 1, pp. 125-131

Olson, E.L. and Bakke, G. (2001) Implementing the lead user method in a high technology firm: a longitudinal study of intentions versus actions. *Journal of Product Innovation Management*, Vol. 18, Iss: 6, pp. 388-395

Palmatier, R. W., Dant, R. P., Grewal, D. and Evans, K. R. (2006) Factors influencing the effectiveness of relationship marketing: A meta-analysis. *Journal of Marketing*, Vol. 70, Iss: 4, pp. 136–153

Parkhe, A. (1993) Messy research, methodological pre-dispositions and theory development in international joint ventures. *Academy of Management Review*, Vol. 18, Iss: 2, pp. 227-268

Perks, H., Gruber, T. and Edvardsson B. (2012) Co-creation in radical service innovation: A Systematic Analysis of Microlevel Processes. *Journal of Product Innovation Management,* Vol. 29, Iss: 6, pp. 935-951

Piller, F., Ihl, C. and Vossen A. (2010) A typology of customer co-creation in the innovation process. [online document] [Accessed 07.03.2016] Available http://ssrn.com/abstract=1732127

Pitta, D. and Franzak, F. (1996) Boundary spanning product development in consumer markets: learning organization insights. *Journal of Consumer Marketing*, Vol. 13, Iss: 5, pp. 66-81

Poetz, M. K. and Schreier, M. (2012) The value of crowdsourcing: Can users really compete with professionals in generating new product ideas? *Journal of Product Innovation Management*, Vol. 29, Iss: 2, pp. 245–256

Prahalad, C.K. and Ramaswamy, V. (2000) Co-opting customer competence. *Harvard Business Review*, Vol. 78, Iss: 1, pp. 79-87

Prahalad, C.K., Ramaswamy, V. (2004) Co-creating unique value with customers. *Strategy & Leadership*, Vol. 32, Iss; 3, pp. 4-9

Prandelli, E., Verona, G. and Raccagni, D. (2006) Diffusion of web-based product innovation. *California Management Review*, Vol. 48, pp. 109-135

Raasch, C., Herstatt, C. and Lock, P. (2008) The dynamics of user innovation: Drivers of impediments of innovation activities. *International Journal of Innovation Management*, Vol. 12, Iss: 3, pp. 377-398

Ramaswamy, V. (2011) It’s about human experiences… and beyond, to co-creation. *Industrial Marketing Management*, Vol. 40, Iss: 2, 195–196

Ravald, A. and Grönroos, C. (1996) The value concept and relationship marketing. *European Journal of Marketing*, Vol. 30, Iss: 2, pp. 19-30

Roberts, D., Hughes, M. and Kertbo, K. (2014) Exploring consumer’s motivation to engage in innovation through co-creation activities. *European Journal of Marketing*, Vol. 28, Iss: ½, pp. 147-169

Ryzhkova, N. (2015) Does online collaboration with customers drive innovation performance? *Journal of Service Theory and Practice*, Vol. 25, Iss: 3, pp.327-347

Salter, A. and Tether, B.S. (2006) Innovation in Services - Through the Looking Glass of Innovation Studies. Background paper for *Advanced Institute of Management (AIM)* Research’s Grand Challenge on Service Science, pp. 1-38

Sandén, B. (2007) The Customer’s Role in New Service Development. Doctoral Thesis. Karlstad, Karlstad University, Faculty of Economic Sciences, Communication and IT Business Administration

Sashi, C. (2012) Customer engagement, buyer-seller relationships, and social media. *Management Decision*, Vol. 50, Iss: 2, pp. 253–272

Saunders, M., Lewis, P. and Thornhill, A. (2009) *Research methods for business students*. 5th edition. Essex, Pearson Education Limited

Scheuing, E.E. and Johnson, E.M. (1989) A proposed model for new service development. *Journal of Services Marketing*, Vol. 3, Iss: 2, pp. 25-35

Shaw, B. (1985) The role of the interaction between the user and the manufacturer in medical equipment innovation. *R&D Management*, Vol. 15, Iss: 4, pp. 283-292

Slater, S.F. (1996) The challenge of sustaining competitive advantage. *Industrial Marketing Management*, Vol. 25, pp. 79-86

Slater, S.F. (1997) Developing a customer value-based theory of the firm. *Journal of the Academy of Marketing Science*, Vol. 25, Iss: 2, pp. 162-167

Slater, S.F. (2001) Market orientation at the beginning of a new millennium. *Managing Service Quality*, Vol. 11, Iss: 4, pp. 230-232

Slater, S.F. and Narver, J.C. (1992) Superior customer value and business performance: the strong evidence for a market-driven culture. Report, *Marketing Science Institute*, Cambridge, MA, pp. 92-125

Smets, L.P.M., Langerak, F. and Rijsdijk, S.A. (2013) Shouldn't customers control customized product development? *Journal of Product Innovation Management*, Vol. 30, Iss: 6, pp. 1242–1253

Söderlund, M. (2002) Customer Familiarity and Its Effects on Satisfaction and Behavioral Intentions. *Psychology & Marketing*, Vol. 19, Iss: 10, 861–880

Spring, M. and Araujo, L. (2013) Beyond the service factory: service innovation in manufacturing supply networks. *Industrial Marketing Management*, Vol. 42, Iss: 1, pp. 59-70

Stickdorn, M. and Schneider, J. (2012) *This is service design thinking: basics, tools, cases*. New York: NY, Wiley

Straub, T., Kohler, M., Hottum, P., Arrass, V. and Welter, D. (2013) Customer Integration in Service Innovation: An Exploratory Study. *Journal of Technology Management and Innovation*, Vol. 8, Iss: 3, pp. 25-33

Thomke, S. (2003) R&D comes to services: Bank of America's path breaking experiments. *Harvard Business Review*, Vol. 81, Iss: 4, pp. 71-79

Tidd, J. and Hull, F.M. (2006) Managing service innovation: the need for selectivity rather than 'best practice'. *New Technology Work and Employment,* Vol. 21, Iss: 2, pp. 139–161

Ulwick, A.W. (2002) Turn customer input into innovation. *Harvard Business Review*, Vol. 80, Iss: 1, pp. 91-97

Vargo, S.L. (2009) Towards a Transcending Conceptualization of a Relationship: A Service-Dominant Perspective. *Journal of Business and Industrial Marketing*, Vol. 26, Iss: 5/6, pp. 373-379

Vargo, S.L. and Lusch, R.F. (2004) Evolving to a new dominant logic for marketing. *Journal of Marketing*, Vol. 68, pp. 1–17

Vargo, S.L. and Lusch, R.F. (2008) Service-Dominant Logic: Continuing the Evolution. *Journal of the Academy of Marketing Science*, Vol. 36, Iss: 1, pp. 1-10

Verleye, K. (2015) The co-creation experience from the customer perspective: its measurement and determinants. *Journal of Service Management,* Vol. 26, Iss: 2, pp. 321-342

Vermillion, M.R. (1999) Product development in service industries. Report on 1998 PDMA International Conference, *PDMA Visions*, Vol. XXIII, Iss: 1, January, pp. 16

Vivek, S., Beatty, S. and Morgan, R. (2012) Customer engagement: Exploring customer relationships beyond purchase. *Journal of Marketing Theory and Practice*, Vol. 20, pp. 127-145

von Hippel, E. (1986) Lead users: A source of novel product concepts. *Management Science,* Vol. 32, Iss: 7, pp. 791-805

von Hippel, E. (1994) “Sticky Information” and the Locus of Problem Solving: Implications for Innovation. *Management Science*, Vol. 40, Iss: 4, pp. 429-439

von Hippel, E. (2001) User toolkits for innovation. *Journal of Product Innovation Management*, Vol. 18 ,Iss: 3, pp. 247-57

von Hippel, E. (2005) *Democratizing Innovation*. Cambridge: MA, MIT Press

von Hippel, E. and Katz, R. (2002) Shifting innovation to users via toolkits. *Management Science*, Vol. 48, Iss: 7, pp. 821–833

Voss, C.A. (1985) The role of users in the development of applications software. *Journal of Product Innovation Management*, Vol. 2, Iss: 2, pp. 113-21

Wagner, S. M. (2013) Partners for business-to-business service innovation. *IEEE Transactions on Engineering Management*, Vol. 60, Iss: 1, pp. 113– 123

Westerlund, M. and Leminen, S. (2011) Managing the challenges of becoming an open innovation company: experiences from living labs. *Technology Innovation Management Review,* October, pp. 19–25

Wikström, S. (1996) The customer as co-producer. *European Journal of Marketing*, Vol. 3, Iss: 4, pp. 6-19

Wilson, E.J. and Vlosky, R.P. (1997) Partnering relationship activities: building theory from case study research. *Journal of Business Research,* Vol. 39, pp. 59-70

Witell, L., Gustafsson, A. and Johnson, M.D. (2014) The effect of customer information during new product development on profits from goods and services. *European Journal of Marketing*, Vol. 48, Iss: 9/10, pp. 1709 - 1730

Witell, L., Kristensson, P., Gustafsson, A. and Löfgren, M. (2010) Idea generation: co-creation versus traditional market research techniques. *Journal of Service Management*, Vol. 22, Iss: 2, pp. 140-159

Wu, C., Gerlach, J. and Young, C. (2007) An empirical analysis of open source software developers' motivations and continuance intentions. *Information & Management*, Vol. 44, Iss: 3, pp. 253–262

Yin, R. (1983) Case research. Design and methods. *Applied Social Research Methods series*, Vol. 5. London, Sage.

Yin, R. (2003) Case study research: design and methods. 3rd edition. *Applied social research methods series*, Vol. 5. Thousand Oaks: CA, Sage publications.

Yin, R. (2009) Case study research: design and methods. 4th edition. *Applied social research methods,* Vol. 5. Los Angeles: CA, Sage.

Zeithaml, V.A. (1988) Consumer perceptions of price, quality and value: a means-end model and synthesis of evidence. *Journal of Marketing*, Vol. 52, Iss: 3, July, pp. 2-22

Zeithaml, V.A., Parasuraman, A. and Berry L. (1985) "Problem and strategies in services marketing. *Journal of Marketing*, Vol. 49, Spring, pp. 33-46

Öberg, C. (2010) Customer Roles in Innovations. *International Journal of Innovation Management*, Vol. 14, Iss: 6, pp. 989-1011

APPENDICES

Appendix I: Interview questions for customers (translation from Finnish)

Customer Focus Group related:

1. Mikä sai teidät osallistumaan Customer Focus Groupiin? *What made you attend Customer Focus Group?*
    a. aihe - *topic*
    b. yleinen mielenkiinto - *general interest*
    c. uusi tapa tehdä asioita - *new approach*
    d. kokemuksia muista vastaavista - *previous experiences*
2. Miten hyvin koette saaneenne mielipiteenne kerrottua kyseisen kanavan kautta? *How well, in your experience, were you able to tell your opinion through this particular channel?*
    a. onnistunut/toimiva à miksi - *functional à why?*
    b. epäonnistunut/ei toimiva à miksi? - *dysfunctional à why?*
3. Minkälaisia odotuksia teillä oli tapahtumaa kohtaan? - *What types of expectations did you have towards the event?*
4. Miten koette hyötyneenne osallistumisestanne tapahtumaan? *How do you perceive the possible benefits for attending the event;*
    a. henkilökohtaisesti - *personally*
    b. organisaatio - *organisationally*
    c. jos ei hyödyllistä à miksi? – *if no benefits à why?*
5. Minkä tyyppistä tietoa olitte valmiina antamaan? *What type of information were you willing to share?*
    a. aktiivinen/passiivinen osallistuminen - *active/passive participation*
    b. tiedonvaihdon taso - *the level of knowledge transfer*

Customer involvement related:

1. Millä muilla tavoilla haluaisitte osallistua palveluiden kehittämisprosessiin? – *In what other ways would you like to get involved to service development process?*
    a. tavat - *modes*
    b. miten sitoutua – *how to get engaged*
    c. syvyys (aktiivinen/passiivinen) – *depth (active/passive)*
2. Minkä verran yrityksellänne on yhteiskehitystä toimittajien kanssa? – *How much does you company do collaborative development with service providers?*
    a. määrittävät tekijät toimintaan – *Determining factors*
3. Kuinka syvällisellä tasolla olisitte valmis osallistumaan prosessiin? – *How deeply would you be willing to be involved in the process?*
    a. tietojen vaihto – *exchange of information*
    b. vaiheisiin sitoutuminen – *engagement in phases*
4. Mitkä; - *Which;*
    a. sisäiset tekijät - *internal factors*
        i. edistävät - *encourage*
        ii. rajoittavat osallistumista - *restrict involvement*
    b. ulkoiset tekijät - *external factors*
        i. edistävät - *encourage*
        ii. rajoittavat osallistumista - *restrict involvement*
5. Mikä kanava/tapa olisi teille hyödyllinen/helppo antaa palautetta/kehitysideoita palveluihin liittyen? – *What channel/mode would be beneficial/easy for you to give feedback/development ideas regarding services?*

Appendix II: Questions for ABB employee – parallel interview

1. Miten Customer Focus Groupit ovat mielestäsi toimineet? – *How do you think the Customer Focus Groups have been working?*
    a. hyvä/huono tapa – *a good/bad way*
    b. saako kerättyä tietoa – *can one gather information*
2. Millä muilla tavoilla ABB on osallistanut asiakasta palveluiden kehitysprosessiin? – *In what other ways has ABB involved customer to the service development process?*
    a. tavat – *modes*
    b. missä vaiheessa kehitysprosessia – *in which stage of the development process*
3. Miten paljon ABB on valmis jakamaan tietoa asiakkaan kanssa? – *How much is ABB willing to share information with the customer?*
4. Kertoisitko lisää palvelukonsepti X:n kehittämisestä? – *Could you tell me more about the development of service concept X?*
5. Mitkä; *Which;*
    a. sisäiset tekijät – *internal factors*
        i. edistävät – *encourage*
        ii. rajoittavat osallistamista – *restrict involvement*
    b. ulkoiset tekijät – *external factors*
        i. edistävät – *encourage*
        ii. rajoittavat osallistumista – *restrict involvement*
6. Miten olet hyötynyt Customer Focus Groupiin osallistumisesta? *How have you benefited for involving in Customer Focus Group?*
    a. henkilökohtaisesti – *personally*
    b. organisaatio – *organisation*