

THE RELATIONSHIP BETWEEN CUSTOMER PARTICIPATION IN THE
SERVICE INNOVATION PROCESS AND CUSTOMER SATISFACTION

ENİS ALTIÖK

BOĞAZIÇI UNIVERSITY

2016

THE RELATIONSHIP BETWEEN CUSTOMER PARTICIPATION IN THE
SERVICE INNOVATION PROCESS AND CUSTOMER SATISFACTION

Thesis submitted to the
Institute for Graduate Studies in Social Sciences
in partial fulfillment of the requirements for the degree of

Master of Arts
in
International Trade Management

by
Enis Altrok

Boğaziçi University

2016

DECLARATION OF ORIGINALITY

I, Enis Altıok, certify that

- I am the sole author of this thesis and that I have fully acknowledged and documented in my thesis all sources of ideas and words, including digital resources, which have been produced or published by another person or institution;
- this thesis contains no material that has been submitted or accepted for a degree or diploma in any other educational institution;
- this is a true copy of the thesis approved by my advisor and thesis committee at Boğaziçi University, including revisions required by them.

Signature



Date

16.12.2016

ABSTRACT

The Relationship Between Customer Participation in the Service Innovation Process and Customer Satisfaction

As active co-creators of services rather than passive buyers, customers can act as a crucial source of innovation for service providers. Thus, the latter are willing to involve the former in their service innovation process (SIP). Past studies indicate that one of the ultimate consequences of customer participation in the SIP is customer satisfaction. Against this background, this study investigates the impact of customer participation in the SIP on their satisfaction with service providers and their services in the context of business-to-business relationships.

Customer participation in the SIP is analyzed along five dimensions, namely, customer motivation, stages of participation, intensity of participation, channels of participation and relationship quality. Theories of motivation and a resource-based view of the firm are used to shed light on impact of customer participation in the SIP on customer satisfaction. Data was collected from the Turkish Courier, Express and Parcel (CEP) industry through a survey. In order to examine the effects of these dimensions on customer satisfaction, nonparametric statistical techniques were used on a sample of 91 corporate customers of a leading CEP company.

The findings of the study demonstrate that the quality of relationship between the customer and service provider and the use of a larger number of channels of participation have a positive influence on customer satisfaction. On the other hand, although customer motivation, stages of participation and intensity of participation have statistically significant positive correlations with customer satisfaction, they do not emerge as its significant predictors.

ÖZET

Hizmet İnovasyon Süreçlerine Müşteri Katılımı ve Memnuniyeti Arasındaki İlişki

Servis sektöründe sadece pasif alıcı değil aktif eş-yaratıcı olan müşteriler, hizmet sağlayıcılar için önemli bir inovasyon kaynağı oluşturmaktadır. Bu nedenle, hizmet sağlayıcılar hizmet inovasyon sürecine müşterilerininide dahil etme arzusunda. Geçmiş çalışmaların müşterinin inovasyon sürecine katılımının nihai çıktılarında birinin müşteri memnuniyeti olduğuna işaret etmektedir. Bu doğrultuda, bu çalışma, hizmet inovasyon sürecine müşteri katılımının, müşterinin hizmet sağlayıcı ve hizmet ile ilgili memnuniyeti üzerindeki etkisini, firmadan firmaya iş modeli kapsamında araştırmaktadır.

Müşterinin hizmet inovasyon sürecine katılımı, 5 boyutta incelenmiştir: müşteri motivasyonu, katılım aşamaları, katılım yoğunluğu, katılım kanalları ve ilişki kalitesi. Müşterilerin hizmet inovasyon süreçlerine katılımının müşteri memnuniyeti üzerindeki etkisini aydınlatmak için motivasyon teorileri ve kaynak temelli görüş kullanılmıştır. Veri, Türkiye kargo sektöründen bir anket çalışması ile toplanmıştır. Bu boyutların müşteri memnuniyeti üzerindeki etkisini incelemek için, kargo sektöründeki öncü bir kuruluşun 91 kurumsal müşterisini içeren örneklem üzerinde parametrik olmayan istatistiksel teknikler uygulanmıştır.

Çalışmanın bulguları müşteri ve hizmet sağlayıcısı arasındaki ilişki kalitesinin ve daha fazla sayıda katılım kanalının kullanılmasının müşteri memnuniyeti üzerinde pozitif bir etkiye sahip olduğunu göstermektedir. Diğer taraftan müşteri motivasyonu, katılım aşamaları ve katılım yoğunluğu müşteri memnuniyeti ile pozitif ilişki gösterebilir de istatistiksel olarak anlamlı belirleyicileri değildir.

ACKNOWLEDGEMENTS

I would like to thank all the people who supported me through this long and challenging period of time.

This thesis would not have been possible if my thesis advisor, Assoc. Prof. Dr. Nisan Selekler-Gökşen, had not supported me. I would like to express my profound gratitude to her for her trust, support, supervision and patience. I also would like to thank my dissertation committee members, Assist. Prof. Dr. Zeynep Ata and Assoc. Prof. Dr. Serap Atakan for their valuable opinions and suggestions.

I wish to express my sincere thanks to Esra Şahan for her support, trust and understanding during the entire period of my master's program and thesis research. I also would like to thank my current manager, Aliye Altın, and my colleagues, İlksen Ağanca and Ferhat Özdemir, for their support and patience.

I have special thanks for my dear friends, Murat Parlakgöl, Kerem Dülger, Tuğçe Olkun, Berna Gülbaş, Merve Uğraş, Gülçin Yılmaz, Özcan Kaya and Okan Şahin for their friendship and valuable suggestions during this period.

Finally, I dedicate this study to my family, Müjgen, Selman, Samet and Semra Altıok, for their love, understanding, patience, and support not only during this process but throughout my life.

TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION.....	1
CHAPTER 2: THEORETICAL FRAMEWORK.....	6
2.1 Customer participation in the SIP.....	6
2.2 Customer satisfaction.....	16
2.3 The relationship between customer participation in the SIP and customer satisfaction.....	17
2.4 Theoretical model.....	24
CHAPTER 3: THE COURIER, EXPRESS AND PARCEL (CEP) SECTOR.....	25
3.1. The CEP sector in the global market.....	25
3.2. The CEP sector in Turkey.....	26
3.3. The product and service portfolio of CEP companies in Turkey.....	29
3.4. The operational structure of the CEP market.....	31
3.5. Regulations and the future of the Turkish CEP sector	33
CHAPTER 4: METHODOLOGY.....	35
4.1 Research objective.....	35
4.2 Sample selection.....	35
4.3 Data collection method and survey.....	36
4.4 Variables and the design of the questionnaire.....	38
4.5 Data analysis.....	41
CHAPTER 5: FINDINGS OF THE STUDY.....	43
5.1 Descriptive findings.....	43
5.2 Correlations among variables.....	50

5.3 Regression analysis.....	51
5.4 Analysis of the research model.....	54
CHAPTER 6: CONCLUSION AND IMPLICATIONS.....	56
6.1 Managerial implications for the sector.....	59
6.2 Limitations and recommendations for future studies.....	60
APPENDIX: SURVEY.....	61
REFERENCES.....	65

LIST OF TABLES

Table 1. Normality Tests of Variables.....	42
Table 2. Area of Operation of Companies.....	43
Table 3. Industrial Affiliation of Firms.....	44
Table 4. Number of CEP Companies.....	45
Table 5. Working Duration with Company A.....	45
Table 6. Decision Process of Working With Company A.....	46
Table 7. Monthly Expenditure of Companies for CEP Services.....	46
Table 8. Customer Motivation.....	47
Table 9. Stages of Participation.....	48
Table 10. Intensity of Participation	48
Table 11. Channels.....	49
Table 12. Channels of Participation.....	49
Table 13. Relationship Quality.....	49
Table 14. Customer Satisfaction.....	50
Table 15. Correlation Analysis.....	51
Table 16. Bivariate Logistic Regression.....	53
Table 17. Multivariate Logistic Regression.....	54
Table 18. The Hypothesis.....	55

CHAPTER 1

INTRODUCTION

Innovation is not a new phenomenon. It is as old as humankind itself. There seems to be something inherently “human” about a tendency to think about new and better ways of doing things and try them out in practice (Fagerberg, 2003). During the industrial revolution, a series of innovations led to an increase in productivity with less human energy and effected a transition period from small enterprises to large companies. Even though innovation has existed throughout human history, the term “innovation” was used for the first time by Schumpeter in 1911 (Hana, 2013), and its significance has increased tremendously, especially in the recent decades, making it a priority for almost every company.

There are many reasons behind the rise of innovation in the eyes of companies. Surviving is the first and the most fundamental purpose of the companies in the markets where they operate. The current business environment is rapidly changing and competition is inevitably becoming intense and destructive. Competitors continually create threats to each other in different ways. For survival, companies must be able to adapt to the rapidly changing environment and overcome the threats of their competitors by increasing the innovation capabilities of the company because innovation contributes to their ability to shorten their production process and speed up new product development in relation to that of their competitors (Martin-de Castro et al., 2013). While innovation is a crucial condition for company survival, it is also vital for achieving higher market share or profitability. Organizations generally try to reach their business targets, increase their profitability, increase the market share, and improve the conditions of humanity or to make the world a better place for the

coming generation. In order to achieve those targets and to do more than survive, companies need to strengthen their abilities to innovate and use innovation as a strategic, systematic and technological lever; by doing so, they produce new business opportunities, make technological revolutions and shape the future of the market and the world in which they exist. As a result, today, innovation is at the heart of many companies' activities (Trott, 2008).

Parallel to the increasing significance of innovation in companies, studies on product and service innovation have dramatically accelerated in early 2000s (Hana, 2013). Early research on innovation focused primarily on product innovation (Alam, 2002), paying comparatively little attention to the service innovation. This scarcity of attention was at least partially due to the fact that innovation has traditionally been associated only with tangible products (de Brentani, 1995). However, reflecting fast-changing economic conditions in modern economies, the service sector became an increasingly important employment and development area. Most developed countries transformed into post-industrialized societies, becoming more reliant on services than products (Borgqvist and Lindberg, 2011). As a result, innovation in services has been drawing more attention from academicians and practitioners alike.

In the last two decades, research on service innovation has both broadened and deepened, with studies addressing many distinctive facets of innovation in the service industry (Neumann and Holz Müller, 2007). Various issues, such as innovation culture in the service industry, characteristics of innovative service providers or innovation types in services, have been discussed in the literature (Vos, 2010). The goals of these studies have mainly been to define clearly service innovation in the service industry, to recognize best methods of managing service innovation or to develop a better understanding of service providers (Schilling,

2011). Thereby, based on these studies, companies in the service industry can find opportunities to increase their capabilities of service innovation in order to become more competitive.

Customer participation is among the topics discussed in service innovation in the service industry. It has drawn a great deal of attention because customer participation is a crucial issue in the service innovation process (SIP) for almost all firms in service industries (Thanasopon et al. 2011; Vos, 2010). In service industries, the output of service is predominantly accomplished through the cooperation of customer and employee, and thus the service quality depends at least partly on the degree of the interaction between customer and employee (Hongqi and Ruoyu, 2012). Customers are seen as the active co-creators instead of passive buyers (Prahalad and Ramaswamy, 2004) and thus serve as a crucial innovation source for service companies. As Borgqvist and Lindberg (2011) emphasize, in general there are no special departments in service firms that focus on service innovation; they point out that service innovation is something that happens frequently during interaction with customers. Therefore, customer participation in the innovation process is pivotal, leading to increasing theoretical and empirical attention to the role of customers (Blazevic and Lievens, 2007).

On the other hand, customer participation in the SIP has various outcomes, one of the most significant of which is customer satisfaction (Iqbal, 2016). Customers share their creative ideas and solution suggestions by participating in the SIP. This interaction and knowledge from this process comes back to customers as better services, solutions for problems and the creation of new services based on their suggestions and expectations. This, in turn, makes customers feel more satisfied with the services of the provider (Wallenburg and Lukassen, 2011). Although the

relationship between customers' participation in the SIP and their satisfaction has been variously studied (Hongqi and Ruoyu, 2012), there is not a consensus on the strength of the relationship (Bendapudi and Leone, 2003). Some investigators found a strong association between customer participation and customer satisfaction (Bendapudi and Leone, 2003; Prahalad and Ramaswamy, 2004; Urban, 2004; Kumar and Ramani, 2006; Hongqi and Ruoyu, 2012) while others found weak relationships (Claycomb et al., 2001).

Until now, studies have been conducted mainly in the banking and telecommunication sectors and mainly in the context of Business to Consumer (B2C) (Iqbal, 2016, Borqvist and Lindberg, 2011). This thesis will focus on the context of Business to Business (B2B), as the proactive role of the customer has seemed to be largely confined to B2B environments (Flohr et al., 2008). The courier, express and parcel (CEP) sector was selected as target sector because it is one of the most suitable sectors to make a study in the B2B context. In addition, the impact of customer participation on customer satisfaction has not been researched in the CEP sector in Turkey. A study on this sector may help academicians and companies. Consequently, this thesis will analyze the relationship between customer participation in the SIP and customer satisfaction in the context of B2B in the Turkish CEP sector.

Based on the background above, the research question of this thesis is "What will be the impact of various dimensions of customer participation in the SIP on customer satisfaction?" The rest of the thesis is organized as follows: The second chapter presents the theoretical background of the study and the model on which the study is based. Chapters 3 and 4 describe the context and research methodology, respectively. While the fifth chapter presents the findings, the sixth chapter outlines the conclusion of the thesis.

CHAPTER 2

THEORETICAL FRAMEWORK

In order to establish the theoretical framework of the study, this chapter begins with a general literature review on customer participation in the SIP and definitions of key concepts. It continues with a literature review on customer satisfaction, and then, with a theoretical analysis on the relationship between customer participation in the SIP and customer satisfaction. Finally, the model of the study is presented.

2.1 Customer participation in the SIP

2.1.1 What is service innovation in the service industry?

Services progressively influence the global economy, providing over 70% of employment in OECD countries (Baltacioglu et al. 2007) and almost 71% of the worldwide GDP (World Trade Organization, 2014). The service industry includes many different competitive markets, such as consumer services (e.g. hotels and restaurants), financial services (e.g. banks), personal services (e.g. hairdressing), public services (e.g. health and education) and logistic services (e.g. postal, courier). In these large, challenging, and fast growing markets, service providers try to use innovation as an engine for the economic growth (Morrar, 2014) and a source of sustainable competitive advantage (Meer, 2008).

Innovation is not the same in manufacturing and service industries, and service organizations do not have the same nature as manufacturing organizations (Randhawa and Scerri, 2015). The characteristics of service firms differ widely from those of manufacturing. The main features of a service which distinguish it from tangible goods in manufacturing are intangibility, heterogeneity, and inseparability of production and consumption (Gupta, 2012). Therefore, innovation in services

involves transformation in a variety of features ranging from how the service is designed and developed to how it is delivered and managed (Trott 2008).

Innovation in the service industry is not only about `what` is being offered but also about `how` it is being offered (Oke and Goffin, 2001). Services are simultaneously produced, delivered and consumed, and this makes it harder to differentiate between service product innovation (what is produced, delivered and consumed) and service process innovation (how it is produced, delivered and consumed) (Randhawa and Scerri, 2015). In this way, service innovation can refer to a combination of product innovations, that is, “the introduction of a new product, or a significant qualitative change in an existing product,” and process innovation, that is, “the introduction of a new process for making or delivering goods and services” (Greenhalgh and Rogers 2007, p. 4). Therefore, service innovation can be defined as creation of new or improved service offerings by creating or developing service products and processes (Schilling, 2011). In other respects, service innovation can be conceptualized as an “elevated service offering” that is made up of “offering better services in terms of speed, cost and quality; new ways in which customers use the service; new client interface/customer encounter; new service delivery system; new organizational architecture or marketing strategies” (Agarwal and Selen, 2011, p. 1172).

As a result of the simultaneity of production, delivery and consumption, the SIP requires a high degree of interaction between the service provider and customers (Miles, 2001). This interaction creates a sphere for customers to participate in and provide valuable input to the SIP as knowledge providers (Magnusson et al. 2003). This, in turn, is a great opportunity for service providers to increase service quality and offer better services to their customers. Customers also get different kinds of

advantages by participation in the SIP such as new services and solutions based on their suggestions and needs, lower costs, time savings and higher performance.

2.1.2 What is customer participation?

Customer inclusion in various organizational processes has been alternatively called customer participation (Hongqi and Ruoyu, 2012, Blazevic and Lievens, 2007, Bendapudi and Leone 2003, Martin and Horne, 1995), customer collaboration (Bascavusoglu and Tether, 2012), customer involvement (Alam, 2002), consumer value co-creation (Roberts et al., 2014), user involvement (Mangusson et al., 2003), and knowledge co-creation (Prandelli et al., 2008). In this thesis, the term customer participation is preferred due to its relatively higher popularity.

Despite the large number of studies on the issue, a consensus has also not been reached on the definition of customer participation. Looking at this concept from different perspectives, scholars attribute different meanings to customer participation (Solomon, 2002). According to Good (1990), customer participation is the involvement of customers in a particular activity or service of a company. Hongqi and Ruoyu (2011) define customer participation as a value-creating process during which a customer participates in an activity or process dominated by a company. As Matthing et al. (2004, p.487) highlight, customer participation is “process, deeds, and interactions where a service provider collaborates with current (or potential) customers to learn about the market and take necessary actions”. According to Dadfar et al. (2013), meaningful participation of target consumers can be defined as a crucial way of bringing new market intelligence and competitive energy to the players, constituting a value chain as well as the processes, systems and subsystems. By taking into consideration the above stated definitions, customer participation is

defined in this thesis as participation (involvement) of customers in company activities, processes and systems to create value.

In general, customers can participate in every aspect of the service process in varying degrees (Straus et al., 2016). Customers may partake, for example, in the production process by physically combining parts of the service, in the negotiation stage by bargaining for service price and details, in the evaluation stage by providing feedback on service, and in the marketing process by engaging in word-of-mouth (Atakan et al., 2014; Bascavusoglu and Tether, 2012). In addition, customers may also contribute to the SIP by sharing service experiences, providing creative ideas for the development of new services and suggesting solutions for existing problems (Kale and Singh, 2007). Customers may support companies during creation of new service products or improving existing service processes with their fresh ideas and needs. Therefore, they represent a crucial source of innovation (Prahalad and Ramaswamy, 2004). Users may even provide more inspiring and profitable ideas than professional developers, making customer participation a vital gain for service providers (Magnusson, 2003). Thus, they may be perceived as a hidden resource for enterprises to increase their innovativeness (Kristensson et al., 2002).

2.1.3 Customer participation in the SIP as a field of study

Studies in various research disciplines reveal a range of business processes in which customers may participate (Dadfar et al., 2013). Customer participation has been studied in diverse disciplines such as public care, total quality management, management information systems and citizen participation in public policy. It has also been researched in the context of business processes such as production, transportation or consumption. Even though customer participation has been studied

in multiple disciplines, customer participation in the innovation processes, particularly the SIP, is a comparatively new and rising area of research (Alam, 2002).

The innovation processes is seen as a catalyst for enhancing a firm's ability to acquire and maintain a competitive edge (Meer, 2008), and thus the amount of attention paid to the innovation processes in the academic sphere has increased (Arikan, 2008). User participation was initially studied in the product innovation literature. Von Hippel (1976, 1978), as a pioneer in product innovation research, emphasized the broadening role of customers in innovation processes through their participation in product development and process improvement. Veryzer (1998) and Hennestad (1999) recognized that collaboration between producers and consumers can advance a common understanding of the consumers' needs and product development opportunities. Furthermore, several empirical studies on new product innovation have examined the role of customer participation in the development of new products such as medical equipment, machine tools, computer software and other industries (Gruner and Homburg, 2000).

With the increasing importance of the service sector in the global economy, investigations on customer participation in product innovation processes have been followed by studies on customer participation in the SIP. Customer involvement in service innovation is considered even more important than its role in product innovation, given the role of the customer in service co-creation (Menor et al., 2002, Masiello et al. 2011). Various studies indicate that customer participation in the SIP is a key factor to better service offerings (Carbonell et al., 2009; Strandvik et al., 2012). Analyses from different research streams, including new service development, relationship marketing and open innovation, recommend that service providers should involve their customers as co-innovators (e.g. Alam, 2002; Chesbrough,

2003). By doing so, service providers can find opportunities to create superior and differentiated new services, reduce development cycle time, costs and uncertainty, improve the service provider–customer relationship, and ensure higher growth and profitability. This growing body of research tends to focus on key dimensions of customer participation in the SIP, which will be discussed in the next section.

2.1.4 Dimensions of customer participation in the SIP

Past studies have identified various dimensions of customer participation in the SIP. The most widely used group of dimensions comes from Alam (2002), who established a structure which included four distinct dimensions to describe different types of customer participation in the SIP (Magnusson et al, 2003). These four key dimensions are the purposes of the customers who participate in the SIP, the stages in which customers partake, the intensity of participation in the SIP and the channels through which they engage in the SIP. These dimensions constitute a well-founded and generally accepted framework (e.g. Sanden et al., 2006; Borgqvist and Lindberg, 2011; Masiello et al., 2011), and thus, this thesis conceptualizes and operationalizes customer participation in the SIP in accordance using these four key dimensions.

2.1.4.1 Motivation to participate

Alam's first dimension, the purpose of involvement in the SIP, relates to why customers are willing to participate in the SIP of their service provider (Borgqvist and Lindberg, 2011). The purpose may vary depending on the kinds of benefits customers want to get and the types of innovations companies want to create (Lettl, 2007). Therefore, this dimension includes the interests of the two entities; one side of the coin is related to the customers' motivations to participate and the other side is about the company's objectives.

In terms of customer motivation for participating in the SIP, it is significant for service providers to identify what motivates their customers to participate in the SIP because customer motivation directly affects the output of interaction between the two parties during their collaboration in the SIP (Namibisan, 2002). Customers motivated for a benefit or purpose show more effort during their participation in the SIP and have more positive effects on the outcomes of collaboration with service provider. Therefore, only customer's perspective will be taken into consideration in this study under the heading of "customer motivation".

2.1.4.2 Stages of participation

The second fundamental dimension relates to the stage or stages of the SIP the customer is involved in (Alam, 2002). On the basis of the new service development structure of Bowers (1989) and Scheuing-Johnson (1989b), Alam (2002) has developed 10 stages in which customers may participate: strategic planning, idea generation, idea screening, business analysis, formation of the functional team, service and process design, personal training, service testing and piloting, test marketing, and commercialization. Lettl (2007) states that successful innovation activities and processes build on market-related capabilities, and most of the market capabilities are based on interaction with customers in the right stages.

Alam (2002) emphasizes that although all 10 stages support the SIP, different approaches exist to the relative importance and effects of each of these stages on the SIP. Various studies indicate that the first three steps are more crucial because innovative service ideas are more likely to be generated through them. On the other hand, Nambisian (2002) underlines importance of the later stages in terms of customer evaluation and feedback opportunities for the company. Under the different

approaches, according to Borgqvist and Lindber (2011), Alam's 10 stages can be categorized into three main groups: They refer to the three first stages (strategic planning, idea generation, and idea screening) as idea generation, the second four stages (business analysis, formation of the functional team, service and process design, personnel training) as the development process, and the last three stages (service testing and service run, test marketing, and commercialization) as the evaluation and feedback process. In this thesis, stages of participation will be analyzed on the basis of this three-group classification (idea generation, developing process, and evaluation and feedback).

2.1.4.3 Intensity of participation

Intensity emphasizes how broad and deep customer's involvement in the SIP is (Alam, 2002). Alam (2002) conceptualizes intensity as the level of involvement ranging from least intense for passive customers who very rarely participate, to extremely intense for representatives who participate very frequently in the SIP. According to Claycomb (2001), in different organizations and under different conditions, customer participation level varies in terms of participation intensity, interaction and shared time; and intensity can be classified as low, moderate or high. Borgqvist and Lindber (2011), on the other hand, classify participation intensity into two groups: passive and active participation. Passive customers do not spare time to contribute to the service development process and they do not come together with service providers, while active customers spend considerable time with their service providers to create value.

Increased intensity of customer participation in the SIP positively affects the level of value creation and the outputs of the interaction (Dong et al., 2015). During

more intense participation, customers share a larger number of innovative ideas, provide many solution suggestions, and spend more time with the service provider. Thus, in cases of intense participation, the outcome of the interaction and knowledge exchange is better than the outcome of non-interaction. In this thesis, intensity of participation will be ranged from least intense to most intense, in line with Alam's approach.

2.1.4.4 Channels of participation

Channels reflect how the contributions or knowledge of customers are obtained during the SIP. Diverse channels such as face-to-face communication, phone communication, e-mailing, web and mobile applications, social media and mailing can be used to gather information from customers. Even though every communication channel has different advantages for effective communication, face-to-face communication is regarded as creating a wider variety of beneficial effects such as sincerity or emotional commitment on customers compared to other channels (Magnusson et al, 2003). On the other hand, Alam (2002) highlights phone communication and e-mail communication as strong channels for customer participation. Another view regarding the best channel of customer participation in the SIP is offered by Andreassen & Streukens (2009) who draw attention to online interaction due to high technological developments. Web and mobile applications are among the online interaction channels Andreassen & Streukens (2009) name. Even though social media is a successful communication channel, especially in the context of B2C, it is still under-researched in the B2B context (Weinberg and Pehlivan, 2011). In addition, mailing via post offices is not as fast as needed for the business environment.

2.1.4.5 Relationship quality as an additional dimension

Apart from the dimensions in Alam's framework, in order to comprehensively analyze and measure all aspects of customer participation in the SIP, this study adds another dimension: "Relationship quality". Even though Alam does not specifically discuss relationship quality in his study, he opens a gate for future studies and suggests that further empirical studies are necessary to examine the relationship between users and service provider during participation period of customers in the SIP (Alam, 2002). While customers are involved in the SIP to share their experiences and knowledge, a relationship is naturally established between company and customer (Gustafsson et al., 2012). In terms of the services marketing theory and relationship marketing, the interaction and communication may establish an opportunity for service companies to attract and maintain customers, and enhance the quality of their relationships with customers (Morgan and Hunt, 1994). The development and growth of a relationship between a company and a customer is a significant part of their interaction during innovation process (Martin et al, 1999); This interaction process and communication flow, in turn, shape the relationship quality of the company and customer. A high-quality relationship, on the other hand, is central to the establishment of strong relationship (Auha et al., 2007) and is fundamental to getting long-term and coordinated innovative outputs or results (Strandvik et al.,2012). During the interaction period, customers share not only their innovative ideas but also their frustrations, problems, requirements, and expectations (Prahalad and Ramaswany, 2004). Open communication, information sharing, strong relationships and a clear understanding of expectations may lead to more effective outcomes in the innovation process. Therefore, in order to conceptualize customer

participation in the SIP and investigate its impact on customer satisfaction, relationship quality will be analyzed as a fifth dimension.

In order to evaluate customer participation in the SIP, five dimensions (customer motivation, stages of participation, intensity of participation, channels of participation, and relationship quality) will be used in this study.

2.2 Customer satisfaction

Customer satisfaction is a critical study area of services marketing (Hongqi and Ruoyu, 2011). It points out a view or assessment established by customers on the basis of their comparison of pre-purchase expectations of what they would get from the product or service to their personal experiences of the performance they actually did obtain (Pishgar et al. 2013). The concept of customer satisfaction was first introduced by Howard and Jadesh in consumer theory (Hongqi and Ruoyu, 2011) to refer to the balance between the compensation provided by the product or service and the customer's losses after buying that product or service. Westbrook (1981) emphasized that satisfaction is an emotional mode and it usually appears in a customer's evaluation after interaction between customer and company. In the B2B context, customer satisfaction is usually described as a positive feeling developing from the evaluation of entire facets of a buyer's business relations with a supplier (Geyskens et al. 1999). In a similar manner, customer satisfaction can also be defined as an emotional reaction to an experience or a sequence of experiences with a supplier (Homburg and Stock (2004).

In the literature, there are two accepted conceptualizations of customer satisfaction: cumulative satisfaction, and transaction-specific satisfaction (Bolton and Drew 1991; Cronin and Taylor 1994; Shankar et al. 2003). Cumulative satisfaction is

defined as the overall evaluation based on the total purchase and consumption experience with a good or service over time (Anderson et al. 1994). Transaction-specific satisfaction, on the other hand, is described as a function of pre-purchase expectations and post purchase perceived performance of the respective product/service (Fornell, 1992). While transaction-specific satisfaction may give unique knowledge about a particular product or service encounter, cumulative satisfaction is a more basic and important indicator of the supplying company's past, current, and future performance (Lam et al., 2004).

Past literature discusses several different indicators of customer satisfaction. Various studies reveal repurchasing rates (Schneider and Bowen, 1995; Homburg and Stock, 2004; Wallenberg and Lukassen, 2011), recommendation to others (Kumar and Ramani, 2006; Söderlund, 2006) and receptivity level to offers of other suppliers (Kumar and Ramani, 2006) as the most prominent indicators of customer satisfaction. Customer satisfaction level is directly proportionate to future consumer purchases (Pishgar et al., 2013) because satisfied consumers have a higher probability of repeating an order in time (Schneider and Bowen, 1995). Furthermore, Kumar and Ramani (2006) emphasize in their studies that highly satisfied customers make recommendations to others and become less open to the attempts of other suppliers to attract.

2.3 The relationship between customer participation in the SIP and customer satisfaction

In the previous sections, two issues, customer participation in the SIP and customer satisfaction, are discussed separately. In the first section, after defining service innovation and customer participation, key dimensions of the customer participation

in the SIP are determined, based on the literature review: customer motivation, stages of participation, intensity of participation, channels of participation, and relationship quality. In the second section, customer satisfaction is defined and its indicators are examined. And in this section, the hypotheses of the study will be discussed.

2.3.1 Customer motivation and customer satisfaction

Theories of motivation can shed light on customers' willingness to participate in the SIP. Expectancy theory of motivation claims that behavior is energized by the expectation of accomplishing certain outcomes. Therefore, on the basis of the expectancy theory: if customers believe that participation in the SIP will result in improvements of the products or services they receive from the supplier, they will be willing to collaborate. In a similar manner, the goal-based theory of motivation states that behavior is driven by the potential to achieve goals, which may be defined as desired future states that individuals would like to actualize. Because an improved product or a service can be seen as a desirable outcome for the customers, they may be motivated by the potential of reaching this outcome by partaking in the SIP.

Therefore, in the context of the customer-supplier relationship, a customer will be motivated to cooperate with the supplier in the latter's SIP to the extent that it expects to obtain tangibles and intangible outcomes, which will help it to actualize its own goals. The more motivated customers, on the other hand, will be more willing to spare time for the SIP, share their innovative ideas and make suggestions for ways to solve the problems they face. This, in turn, will provide a larger room for the supplier to improve its services and ultimately result in a higher degree of customer satisfaction. Therefore, the following hypothesis is extended.

H1: Customers' motivation to participate in the service innovation process will be positively associated with customer satisfaction.

2.3.2 Stages of participation and customer satisfaction

According to the resource-based view of the firm (Barney, 1991), interaction with customers can provide valuable resources to a firm such as knowledge that is otherwise not accessible to the company. Customers can be a distinguished source of information on new product or service development, highlighting areas where the offerings can be made better or advising on activities that are not currently served by the company (Kogut and Zander, 1992). In addition, past studies indicate that earlier participation in the SIP leads to more effective outputs than participation in latter stages (Alam, 2002, Borgqvist and Lindberg, 2011). If customers participate in the SIP beginning from the initial stages, they find more opportunities to offer their best ideas, share their own solutions and shape new services in compliance with their needs and complaints; thereby, service efficiency is radically improved in line with the interests of the partaking customers (Hongqi and Ruoyu, 2011). Thus, as longer participation in the SIP enables customers to access outcomes more in line with their needs and demands, satisfaction levels of customers joining the SIP in earlier stages are expected to be higher than those joining later.

From a different perspective, earlier participants receive more information about the service possibilities and company abilities, and start to adapt the service offering to their needs right from the beginning (Haas and Kenning, 2014). At the end of the SIP, the output is more compatible with expectations for earlier participants because they have more comprehensive knowledge on all developments and become more agreeable to the new service offering. This, in turn, will enhance

perceived quality and thus customer satisfaction (Chan et al., 2010). This perspective is also valid for the decision-making process. Participating in decision-making from the beginning of innovation process has a positive effect on satisfaction (Straus et al., 2016). In addition, the earliest participators find opportunities to spend more time together and to socialize with representatives of their suppliers and other customers like themselves. They may also experience fun or enjoyment while participating in service specification, creating more positive feelings (Yim et al., 2012).

On the other hand, the possibility for the customers to customize new services or influence the performance of services based on their needs decreases if they join the process in the later stages (Borgqvist and Lindberg, 2011) because service may have been already designed or developed before their involvement. Thus, customers' effect on the outcome of the SIP may become minimized, decreasing their satisfaction levels. In this direction, the second hypothesis is developed as follows:

H2: Customers' earlier involvement in the service innovation process will be positively associated with customer satisfaction.

2.3.3 The intensity of participation and customer satisfaction

The resource based view of the firm classified resources into two types as tangible and intangible. Intangible resources such as information, knowledge and know-how are more likely to fulfill the requirements for a resource to generate sustainable competitive advantages for companies (Rodriguez & Rodriguez, 2005). Opinions, suggestions or complaints that customer share during participation in the SIP are valuable intangible resources. In order to increase the competitive advantage, service providers should acquire these resources by involving customers in the SIP. In cases of more intense participation, customers find opportunities and enough time to give

support to the development and improvement of service quality by sharing their innovative ideas and solution suggestions, and as a result, the possibility of satisfactory outputs and customer satisfaction increases (Lundkvist & Yakhlef, 2004).

In addition, in most cases, past findings are favorable of increased coproduction of innovation activities by the companies and their customers (e.g., Prahalad and Ramaswamy 2004). Intense co-working in innovation activities becomes a means for companies to improve customers' perception of value (Auha et al., 2007). According to Bowen and Jones (1986), when customers participate in innovation activities more and more, the companies catch a chance to refine the understanding and judgment of their customers about services and service delivery systems. If clients take role in innovation process of services seriously and interact with teams of employees, they get better knowledge on the content of new services (Hongqi and Ruoyu, 2011). This, in turn, narrows the gap between customers' service quality expectation and their perception of the actual service quality enjoyed (Dadfar et al., 2013). Consequently, studies imply that satisfaction level of customers who participate intensely in the SIP will be higher than the customers who participate less intensely or do not participate at all.

H3: The intensity of customer participation in the service innovation process will be positively associated with customer satisfaction.

2.3.4 Channels of participation and customer satisfaction

The resource-based view suggests that, in order to compete successfully against competitors, the best way for a company is to acquire valuable, rare, inimitable and non-substitutable resources (Rodriguez & Rodriguez, 2005; Amit & Schoemaker,

1993); and during customer participation in the SIP, customers' innovative ideas and solution recommendations are productive resources for companies. Therefore, in order to effectively access such resources from customers, using different channels such as face-to-face communication, phone communication, e-mailing, web and mobile applications is advantageous for the service provider. Developing technologies in particular offer alternative channel opportunities which are faster, easier and cheaper. As customers become more demanding of taking a role in company processes, marketers feel the need to open up a larger number of their processes and systems to customers' active involvement (Firat et al., 1995). Therefore, companies create and use different ways or channels for guaranteeing effective participation of customers into the innovation processes.

The information flow between service provider and customers increases as the number of channels increases. Different channel opportunities to establish clear communication between customers and companies represents a critical component of the SIP through which the customer has fast and direct input into the creation of the final service (Auha et al. 2007). Effective communication increases the probability that the wishes or needs of customers are fulfilled and thereby increases the possibility of ultimate satisfaction. In addition, customers who experience the comfort of reaching service providers whenever they like from different channels feel more satisfaction. Thus, the fourth hypothesis is as follows:

H4: The number of channels through which customers participate in the SIP will be positively associated with customer satisfaction.

2.3.5 Relationship quality and customer satisfaction

Barney (1991) categorizes firm resources into three groups: physical capital resources, organizational capital resources and human capital resources.

Relationships with customers are qualified as human capital (Morgan et al., 2004). In this regard, to the extent that the relationship quality between customer and service provider during customer participation in the SIP is valuable, rare and non-substitutable, it can help improve the level of customer satisfaction.

The relationship marketing approach puts forward that the quality of the relational exchange and partnership period between the company and customers may positively or negatively affect the level of commitment and trust of the customers. A high relationship quality during customer involvement in the innovation process may increase positive word of mouth (Straus et al., 2016) and the loyalty of customers and may help companies to maintain relationships for a long time (Alam and Perry, 2002). Therefore, relationship quality that is established during the participation of customers in the innovation process affects the satisfaction level of customers. If customers work with service provider in a climate of honest, trustworthy and open communication during participation in the SIP (Rahmani et al., 2014; Rauyruen et al., 2007; Auha et al, 2007) and if the service provider is receptive to the suggestions of customers about how to improve (McAdam and McClelland, 2006), the relationship quality will increase and finally customer satisfaction will increase as well. In this direction, the fifth hypothesis is developed:

H5: Relationship quality during customer participation in the service innovation process will be positively associated with customer satisfaction.

2.1.4 Theoretical Model

Figure 1 represents the theoretical model of the study.

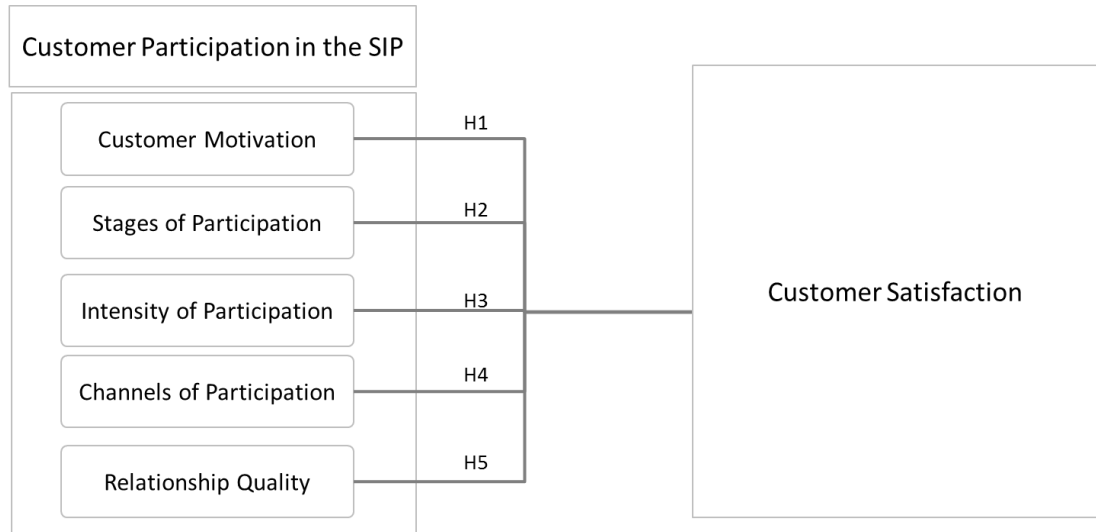


Fig. 1 The model of the study

H1: Customers' motivation to participate in the service innovation process will be positively associated with customer satisfaction.

H2: Customers' earlier involvement in the service innovation process will be positively associated with customer satisfaction.

H3: The intensity of customer participation in the service innovation process will be positively associated with customer satisfaction.

H4: The number of channels through which customers participate in the SIP will be positively associated with customer satisfaction.

H5: Relationship quality during customer participation in the service innovation process will be positively associated with customer satisfaction.

CHAPTER 3

THE COURIER, EXPRESS AND PARCEL (CEP) SECTOR

3.1 The CEP sector in the global market

Global logistics and trade are two old concepts. They date as far back as the Silk Road, which is one of the leading symbols of the innumerable connections among different cities (Jervis et al., 2005). Throughout the history of global logistics and trade, traditional postal services and infrastructure had one of the most important roles as a facilitator for material transportation. In the present day, postal services are going through an immense transformation. On World Postal Day, UN Secretary General Ban Ki-Moon emphasized that “Postal services all over the world are developing based on the 21st century communication needs. They help us to create peaceful, sustainable and equitable future for all” (2013, <http://news.upu.int/>). One of the indicators of this changing period is the rise of the courier, express and parcel sector (CEP). The CEP sector has become one of the most powerful developing industries of global trade and logistics among emerging markets, especially in Turkey (Salehi et al., 2015).

CEP services commonly differ from traditional postal services in terms of speed and reliability level. The main tasks of service providers are the seamless and efficient coordination of collection, transportation and delivery of items (Lin, 2010). Thus, the sector developed as a response to a niche for urgent exchange of things, flourishing into global business of billions of dollars and becoming a part of people's daily lives (Bateman et al., 2015).

In the CEP industry, competition among industry players is considerably intense not only at the global level, but also in national markets. For the last three

decades, various issues have pushed CEP companies to reconsider their role in the transportation of goods. Factors such as direct and indirect competition, the privatization of postal services combined with the separation of operator and regulator roles, especially in industrialized countries, customer demand for better and more reliable products have forced the CEP sector to change their strategic approach on operation and finance for staying powerful (Pac, 2012). Furthermore, the emergence of new communication technologies such as high-speed internet and several kinds of smartphones has accelerated intense competition in the global market.

In addition, various regional or inter-continental developments helped the CEP sector to become a more effective and strategic player in global business. A fast growing population in Africa, high growth rates in trade and capital flows between developing and producing Asian countries and high-tech Western countries, the rise of the express market in the Asia-Pacific region are among important drivers of the rise of the CEP sector (TNT Express Report, 2010). Another crucial driver behind growth of the CEP sector is tremendous growth of e-commerce.

3.2 The CEP sector in Turkey

As is the case in global markets, the Turkish CEP sector has been strengthening its position in logistic market. The rapid developments in information and communication technologies have affected the Turkish business environment and postal services. While one of the fundamental public monopolies of Turkey, the PTT, witnessed a decrease in its postage volume and started to operate in the CEP market in 1990s, private express delivery and cargo companies gained momentum (Kut, 2011). Growing demand in the CEP sector drew the attention of the global players

as well. Many global companies have been operating in the Turkish CEP market since the 1980s. For example, DHL Express entered the market in 1981 while TNT Express and UPS started their operations in 1988. As a result, within three decades, the Turkish CEP sector with various effective market players became a crucial business partner and a service provider for many companies from different sectors.

The Turkish logistic market is a quite big market, with a size of 30 billion Turkish Liras and consists of several pieces (Universal Postal Union, 2013). This grand market can be divided into six categories: mail, third party logistics (3PL), road freight forwarding, airfreight forwarding, sea freight forwarding and CEP. Each category has different dynamics, business models and added value for the Turkish economy.

In the mail sector, mail collection and delivery services are provided. Letters or documents are collected in a pillar or wall box, taken to the post offices and delivered to the addresses. The mail sector constitutes five percent of the Turkish logistics sector with a turnover of 1.5 billion Turkish Liras (Universal Postal Union, 2013). 3PL refers to a company's use of a third party to outsource storing and shipping services and involves a wide system of services capable of managing the entire supply chain system (Rouse, 2014). 3PL accounts for 10 percent of the Turkish logistics sector, with 3.2 billion Turkish Liras (Universal Postal Union, 2013). Freight forwarding involves the coordination and shipment of goods from one place to another through single or multiple carriers via air, sea, rail and overland highways. Freight forwarding offers solutions based on efficiency and cost effectiveness for the transfer of goods. Road freight forwarding is the largest and the most developed sector with 58 percent of share in Turkish logistics sector, and a turnover of 18 billion Turkish Liras. Sea Freight Forwarding is the second largest sector with

12 percent of share and a turnover of 3,7 billion Turkish Liras while Air Freight Forwarding has 6 percent of share and 1,8 billion Turkish Liras of revenue (Universal Postal Union, 2013).

The sixth sector in the logistics market is CEP (Courier, Parcel and Express). The main reason behind the rise of the CEP sector is customers' need for fast and reliable service with goods delivered undamaged. The CEP sector grew as a result of these customer needs and service providers' willingness to concentrate on a more standardized separate market for parcel shipment. Nowadays, all meanings of Courier, Express and Parcel are interlaced and the difference between them is very slight; all of them emphasize one thing: fast and reliable delivery (Kumar, 2015). Clients all over the world can use the services of the CEP sector and send their goods anywhere in a very short time.

Parcel shipments are non-palletized goods up to 30 kg (Information and Communication Technologies Authority- ICTA). They are generally delivered by road, while express shipments are delivered by air because of time restrictions imposed by deliveries within no more than one or two days. Courier refers to people or companies who deliver messages, documents or small packages over a short distance. With a turnover of around 3 billion Turkish Liras, the CEP sector accounts for approximately 10 percent of the Turkish logistics market. This share and CEP's role in the Turkish business environment is likely to increase in the coming years because of different opportunities such as the development of the e-commerce sector, the strengthening internal market and an increase in international shipments throughout Turkey (Kut, 2011).

Turkey has high potential to become a logistics center because of its increasing trade and unique location. In parallel with changing trends at the global level, the

Turkish CEP sector has gone through a great transformation (Kut, 2011). Turkish CEP companies provide employment opportunities for around 80,000 people and offer service with 25,000 vehicles and 10,000 center/branches all over Turkey (Kut, 2011). Thus, the Turkish CEP sector makes an important contribution to and creates a huge value for the Turkish economy.

Turkey's CEP sector is growing more rapidly than most of those in European countries. Salehi et al. (2015) indicate that modest growth trends continue in the European CEP market, while prices and shipment weights rise and pre-shipment revenue has dropped. According to the growth rates mentioned in the report, developing markets such as Turkey (a growth rate of 19 percent in revenues and 5 percent in volume) and Russia (a growth rate of 11 percent in revenues and 9 percent in volume) display rapid growth, while developed markets such as Germany (a growth rate of 6 percent in both revenues and volume), the UK (a growth rate of 4 percent in revenues and 6 percent in volume), and France (a growth rate of 4 percent in revenues and 5 percent in volume) are growing more slowly. The figures are a strong indicator that the Turkish CEP sector closes the gap with developed EU markets in terms of sectoral maturity.

3.3 The product and service portfolio of CEP companies in Turkey

In the CEP sector, there are various products and services such as “pick-up from door”, “delivery to door”, “dispatch to branch”, “notification via SMS/phone”, “international services”, “track and trace”, “packing services”, “e-commerce specific products and services”. According to Akbulut (2016), even though service and product variety seems to be very high, Turkish logistics companies base their competitiveness on low cost, neglecting services quality to a significant extent. This

approach, in turn, not only decreases their ability to sustain their competitiveness but is also likely to hurt the industry in the future.

E-commerce, which refers to the process of buying and selling products or services over internet, is the most rapidly growing sector of today (Wang and Chen, 2010). The main reasons for its popularity among customers are speed and ease of purchase and the price advantages it provides. Companies prefer to use e-commerce to benefit from the advantages of selling online such as entering new markets more rapidly, increasing revenues, decreasing costs and eliminating intermediaries.

Indicators show that the e-commerce sector in Turkey is growing very fast.

According to TUBISAD (Informatics Industry Association, 2015), the Turkish e-commerce market reached 24.7 billion Turkish Liras. Because of the incredible growth of e-commerce, traditional logistics services could not adequately help e-commerce companies to keep their promises to their customers (Kumar, 2015).

Therefore, e-commerce companies established their business model on those of CEP providers and emerged as a major customer group for the latter, creating a great opportunity for the growth of CEP companies focusing on e-commerce. In order to utilize this opportunity, many Turkish CEP companies try to create the most innovative delivery solutions for e-commerce companies and their customers.

International products and services such as worldwide express shipments are dominated by foreign CEP firms. The Turkish textile and clothing industry already relies heavily on international CEP services. Samples of ready-to-wear items and new designs can be delivered quickly to potential customers in Europe, avoiding high costs and delays through these international companies (Akbulut, 2016). Local CEP companies are active in the international arena only through the support of international players, for example, Aras Kargo is partnered with DHL, and MNG

Kargo partners with FEDex in different service areas. As a result, international shipments are dominated by global market players such as DHL, UPS and TNT (Kut, 2011).

3.4 The operational structure of the CEP market

The operational structural model of CEP companies in Turkey is shown in Figure 2. As can be seen in the Figure, companies establish branches in target cities. Each branch collects the shipments from its customers and shipments are transported to the closest hubs. Shipments collected in the hubs are carried to the target city hub; and in the final step, they are delivered to the consignees through branches.

The most commonly used model in branch administration is the agency model, which is similar to the franchising system of restaurants. All standards for agency branches are defined by the headquarters of the CEP company, and an agency owner needs to make a payment to open a branch. Based on the sales and operation performance of the agency, payments are made to agency owners. Contracts between agencies and parent companies are periodically revised. In terms of branch structure, many companies employ the agency model such that while some branches work as independently-owned agencies, some belong to the parent company. In terms of operation and sales structure, there is no difference between branches with different ownership structures.

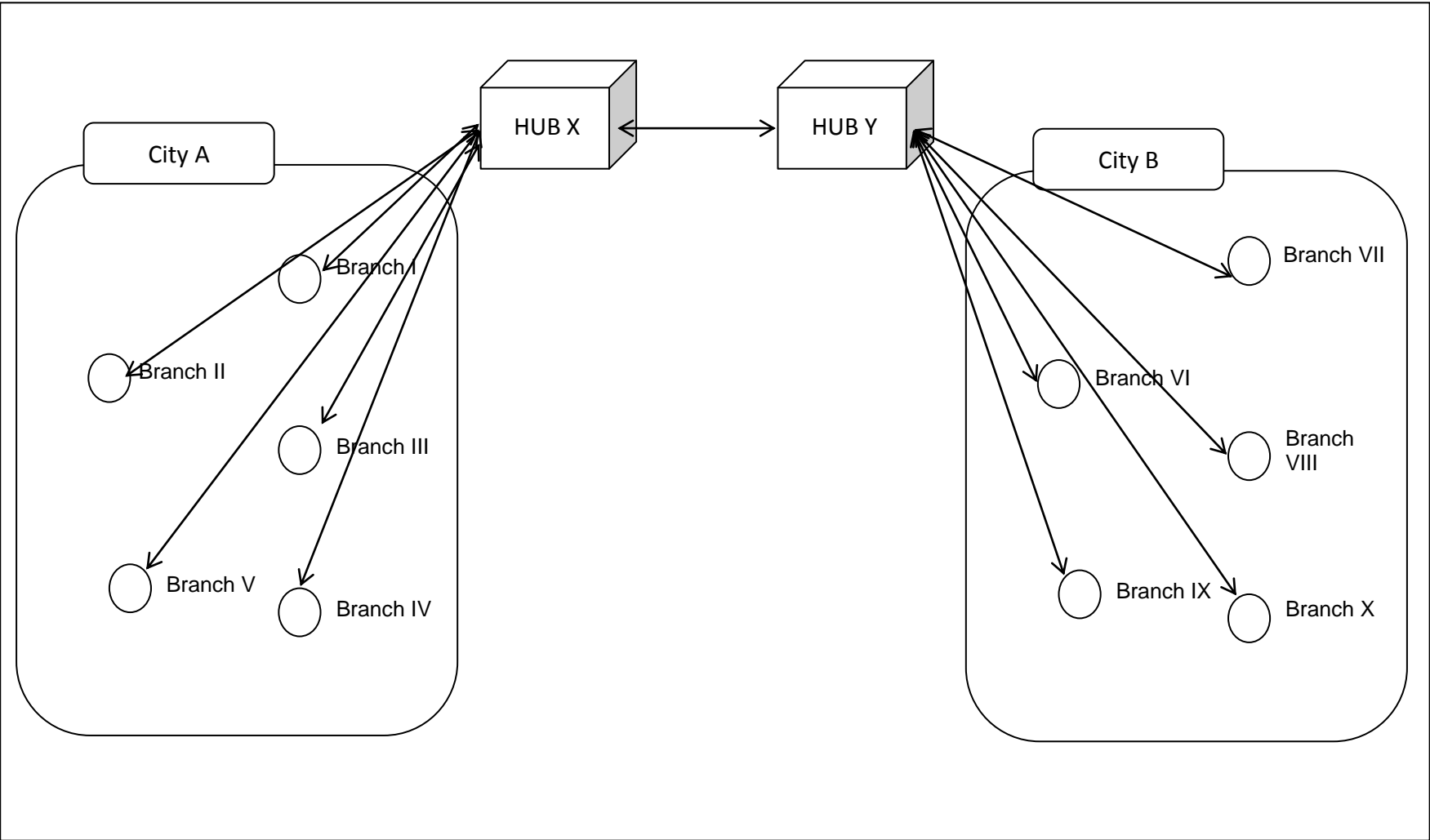


Fig. 2 Operational structural model of CEP companies

3.5 Regulations and the future of the Turkish CEP sector

The Turkish CEP sector is regulated by the Information and Communication Technologies Authority (ICTA) in Turkey. The ICTA was established in 2000 as the first sectoral regulatory body of Turkey (<http://www.btk.gov.tr/en-US/Pages/Establishment>). The ICTA has been charged with the regulation, supervision and monitoring of postal sector by Law on Postal Services numbered 6475 (<http://www.btk.gov.tr/>). In order to represent CEP companies, on the other hand, Turkiye Cargo, Courier and Logistics Enterprises Association (Turkiye KARID) was established by the leading CEP companies in 2004. Currently, Turkiye KARID has 21 CEP member companies (<http://www.karid.org.tr/>).

Especially with the Postal Services Law that passed in 2013, important and deep sectoral changes were enacted by the ICTA. A 2 percent tax increase on CEP companies, restrictions on shipment weights, the strengthening of the PTT's monopoly and licensing obligations for CEP companies were prominent regulations in the law (Official Gazette, 2013). Even though CEP companies and Turkiye KARID opposed these regulations due to the severe sanctions and costs they created for CEP companies, the objections were not enough to change regulations of the ICTA. Such regulations are likely to decrease the profitability of CEP companies and decrease its attractiveness for potential entrants.

The Turkish CEP sector has many advantages. One of the biggest advantages is the rise of e-commerce. Turkish customers are shopping online more and more; and this trend is likely to continue in the future. Despite all negative regulations, global players of the CEP sector are eager to make investments in the Turkish CEP sector due to the growth potential of the Turkish economy and Turkey's proximity to Europe and Asia (Daşkan, 2016). Since many industries need or rely on the CEP

sector, their growth would indirectly stimulate growth in the CEP sector. In addition, Turkey has one of the largest and youngest labor pools in Europe, with more than 65 percent of the population aged between 24 and 54 (Deloitte, 2013). The strength of Turkey's labor force is reflected in CEP companies' ability to easily hire a talented workforce at competitive costs to address the complex demands of the sector (Deloitte, 2013).

In addition to the ICTA regulations, there are several factors that restrain the development of the sector and slow down its growth rate. According to results of a survey (Akbulut,2016), an inefficient infrastructure, customs enforcements, political uncertainty, low pricing policies of CEP companies and high penalties for CEP companies are among these factors. For example, CEP companies offer very low prices to corporate customers in order to become competitive in the market, and this cutthroat competition decreases theirprofitability. In addition, the technological infrastructure in hubs is not well developed and this situation negatively affects delivery performance.EU CEP companies are more advantageous than Turkish companies because the former have stronger electronics infrastructures and automation technologies, and they therefore benefit from more effective use ofthe postal coding system and easier door-to-door delivery standards than Turkish CEP companies (Akbulut, 2016).

CHAPTER 4

METHODOLOGY

4.1 Research objective

This study aims to make a contribution to the understanding of the relationship between customer participation in the SIP and customer satisfaction, both conceptually and empirically. A theoretical model explaining elements of customer participation in the SIP, customer satisfaction; and their relationship with each other in the context of B2B will be presented and tested in this study. In order to improve the understanding of the issue, a survey study has been designed, the details of which are presented in the forthcoming sections.

4.2 Sample selection

The CEP sector has been chosen for the empirical study because it is characterized by very general features significant for B2B services such as reliability and customization (Guonaris, 2005). Concentrating on a specific industry enables customization of the data collection instrument to the characteristics of the studied sector and the collection of more accurate answers (Lam et al. 2004). For instance, survey questions can refer to all service features deemed significant in the eyes of players in a specific sector. Focusing on a single industry also helps to improve the internal validity of a study and offers the potential to reduce the error variance, increasing the power of hypothesis testing (Lam et al., 2004).

Data was collected from the Turkish CEP industry with the support of a leading company in the sector (it will be called Company A). Company A was established by a Turkish family at the end of the 1970s as a marketing company, but it was transformed to a CEP company in 1989. Therefore, its CEP sector experience is more

than 25 years. In its history, Company A went through two changes in its ownership structure. In 2011, a local bank acquired 20 percent of its shares. In 2013, however, the bank was fully acquired by a foreign investor, which later bought an additional 5 percent of Company A's shares from the founding family. Company A is now an international joint venture with 25 percent of the shares held by the foreign shareholder. Today, Company A is a major player in the national and international shipments in the Turkish CEP sector, with 19 regional directorates, 29 hubs and more than 10,000 employees. The company has a widespread branch network with more than 800 branches in all geographical areas of Turkey.

The sample universe consists of 120 corporate customers of Company A. These customers were chosen from the corporate customer lists of Company A, which has 460 customers. In order to eliminate too large and too small customers and to narrow down the sample pool, medium- and large-sized corporate customers with monthly spending levels ranging between 20,000 – 100,000 Turkish Liras were selected. After the elimination, there were 145 customers on the list. Customers working with Company A for less than one year were also eliminated, as their experience with Company A could be very limited, leading to the elimination of 25 companies. In addition, firms in the sample are geographically dispersed all over Turkey, increasing the generalizability of the findings for the Turkish context.

4.3 Data collection method and survey

In this thesis, a questionnaire was chosen as the data collection method. Behind this choice lies the idea that questionnaires are a relatively easier and faster way of reaching a large number of firms and establishing a data set large enough for healthy statistical analyses. They are also suitable for those working with a small budget.

Company A's support in reaching firms enabled the collection of data from a heterogeneous sample of corporate customers of cargo services. The questionnaire was delivered via e-mail to the identified corporate customers by the Customer Relationship Management (CRM) department of Company A. The e-mail conveyed the aim of the research and requested that the attached questionnaire be completed by the process owner of cargo shipment. After one week, a reminder e-mail was sent to non-responders. In the second week, non-respondents were called as a reminder. At the end, a total of 91 completed questionnaires were returned for data analysis, resulting in a response rate of about 75.83 percent.

Respondents were working mainly in departments of administrative affairs (26.4 percent), logistics (17.6 percent), accounting (12.1 percent), delivery (9.9 percent), sales (7.7 percent) and production (4.4 percent). They were officers (41.8 percent), managers (26.4 percent) or specialists (14.3 percent). Analysis in terms of total working years in business life indicated that via e-mail seniority of respondents was very high. Almost 63 percent of respondents had work experience of more than 10 years, and 18.7 percent working between 6 and 10 years, while 13.2 percent working between 1 and 5 years. However, the seniority of respondents in their current company was not high: 47.3 percent of respondents had been working for 1-5 years, 23.1 percent had been working for 6-10 years, 19.8 percent had been working for 11-20 years, 7.7 percent had been working for 21-30 years, and 1.1 percent had been working for 31-36 years. The age of respondents ranged between 25 and 60 years old, with average of about 37 years. In addition, 29.7 percent of respondents were female and 69.2 percent were male.

4.4 Variables and the design of the questionnaire

The questionnaire was divided into three major parts: general information about the company and respondent, customer participation in the SIP, and customer satisfaction (see Appendix A). The first part of the questionnaire aimed to gather information about the company and the institutional informant to create a profile of the companies and respondents. The second section included the independent variables, which aimed to gather information about customer participation in the SIP. The third section of the questionnaire focused on the dependent variable, the level of customer satisfaction.

4.4.1 The independent variables of the study

The independent variables, which aimed to evaluate customer participation in the SIP, were customer motivation, stages of participation, intensity of participation, channels of participation (e.g. Iqbal, 2016; Borqvist and Lindberg, 2011; Magnusson et al., 2003; Alam, 2002) and relationship quality (e.g. Rahmani et al., 2014; Rauyrueen et al., 2007; McAdam and McClelland, 2006).

4.4.1.1 Customer motivation

Customer motivation aims to identify reasons a customer would like to be involved in the SIP. Based on the past studies (e.g. Borqvist and Lindberg, 2011; Cahill, 2007, Alam 2002) seven items were offered as possible motivations and the respondents were expected to evaluate each item on a five-point Likert scale, where 5 indicated “strongly agree”, to 1 “strongly disagree” in each item. Motivation score was calculated by taking an average of the scores assigned to these seven items. In addition, in order to assure internal consistency of the scale, a reliability analysis was conducted. Cronbach’s alpha value for the group of seven items used to assess

customer motivation was 0.901, which is quite high, considering the acceptable level of 0.70 (Nunnally, 1978).

4.4.1.2 Stages of participation

As emphasized in theoretical framework, the innovation process is divided into three stages: idea generation, development and feedback, and testing (Magnusson et al., 2003). The stages of participation were defined by the existence or absence of customers' participation in each of the stages. For each stage, the respondent was expected to choose from two options: participation or not participation. Participation in each stage provided one point such that if a respondent reported that his/her company participated in all three stages, the company was given 3 for this variable. Partaking in two stages was evaluated with a score of 2, and one stage with a score of 1. If the company did not participate in any stages, a score of 0 was given.

4.4.1.3 Intensity of participation

The third independent variable, intensity of participation, aimed to identify the frequency of customer participation in the SIP. In order to evaluate intensity, a 5-point Likert scale was adopted from Borqvist and Lindberg (2011) and Alam (2002) where 5 referred to "several times a week", 4 "once a week", 3 "once a month", 2 "several times a year", and 1 "once per year".

4.4.1.4 Channels of participation

The fourth independent variable, channels of participation, was designed to identify the number of different channels used during a customer's participation in the SIP. Five different channels, as proposed by Borqvist and Lindberg (2011), were included in the questionnaire: face-to-face, phone, web programs, mobile applications and e-

mail. In order to measure number of participation channels of respondents, 1 point was given for each channel, and points were added.

4.4.1.5 Relationship quality

The fifth question aimed to assess the relationship quality between the customer and service provider during the former's participation in the SIP. In order to assess relationship quality, five items are adopted from Cahill (2007). In each item a 5-point Likert scale ranging from 5 "strongly agree", to 1 "strongly disagree" was used. The score for relationship quality was calculated by taking an average of the scores given to these items. The Cronbach's alpha value of 0.825 shows that the internal consistency of the group is acceptable.

4.4.2 The dependent variable: Customer satisfaction

The dependent variable of the study, customer satisfaction, aimed to measure the extent to which the customer was content with the services of the service provider. The question about customer satisfaction was composed of five sub-questions borrowed from Cahill (2007). In each item, a 5-point Likert scale ranging from 5 "strongly agree", to 1 "strongly disagree" was used. Furthermore, at the end of the measurement, customer satisfaction level was divided into two groups around the median, with satisfaction above the median and satisfaction below the median. In accordance with this grouping, those customers whose satisfaction levels were above the median are referred to as satisfied customers, whereas those customers whose satisfaction levels were below the median are referred to as unsatisfied customers. In addition, the Cronbach's alpha value of 0.860 points to the internal consistency of the scale used.

4.5 Data analysis

The data collected via questionnaires was analyzed by the Statistical Package for the Social Science (SPSS). In order to control whether the data was normally distributed, the simplest diagnostic test was a visual analysis of the histogram, and a comparison of observed results and a sample of normal distribution (Hair et al., 2006). Another helpful graph is probability – probability plot (P-P plot), which plots the cumulative probability of variable against cumulative probability of a normal distribution; and the data are ranked and sorted (Field, 2009). Results of kurtosis and skewness are also crucial indicators, so they were checked as well. There are also statistical tests to detect deviations from normality. The two most widely used tests are the Shapiro-Wilks and Kolmogorov-Smirnov tests.

Table 1 shows the results of Shapiro-Wilks and Kolmogorov-Smirnov tests. Shapiro-Wilks and Kolmogorov-Smirnov compute the significance level of the differences from a normal distribution (Hair et al. 2006). As can be seen from the results, the distribution of all variables is significantly different from the normal distribution. In order to correct the non-normality, various transformation methods (log transformation, square root transformation, reciprocal transformation and reverse score transformations) were used, based on the positivity or negativity of skewness. As transformation methods could not help to cure normality, non-parametric tests were used to analyze the data with the original data set.

In the analysis of the data, frequency, correlation and regression analyses were calculated. Because the data was not normally distributed, Spearman's correlation and multiple logistic regressions were conducted.

Table 1. Normality Tests of Variables

Tests of Normality						
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Customer Motivation	.383	86	.000	.658	86	.000
Stages of Participation	.234	88	.000	.802	88	.000
Intensity of Participation	.212	91	.000	.881	91	.000
Channels of Participation	.214	88	.000	.864	88	.000
Relationship Quality	.234	90	.000	.873	90	.000
Customer Satisfaction	.144	86	.000	.943	86	.001

* Lilliefors Significance Correction

CHAPTER 5

FINDINGS OF THE STUDY

In this chapter, findings of the study are presented and discussed. It starts with descriptive statistics, continues with the correlation analyses and ends with results of the regression analysis. Finally, an overview of the research model is presented.

5.1. Descriptive findings

According to the descriptive findings, companies in the sample operate predominantly in Turkey and in manufacturing industries. In general, they take CEP service from one or two service providers. They have been working with Company A for about 6 years on average. The decision process of working with Company A is based largely on standard supplier selection and executive decision. Finally, the mean monthly expenditure for CEP service is 41,280 TL.

Table 2 indicates the areas of operation of companies in the sample. As seen in the results, 47.3 percent of companies do business all over Turkey. 29.7 percent of companies operate on an international area making exports and/or imports. Finally, 23.1 percent of companies do not operate all over Turkey but focus only on certain regions.

Table 2. Area of Operation of Companies

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Regional	21	23.1	23.1	23.1
	National	43	47.2	47.2	70.3
	International	27	29.7	29.7	100.0
	Total	91	100.0	100.0	

Table 3 shows the industrial affiliation of firms in the sample. The majority of the firms in the sample are in manufacturing industries and the automotive sector takes the lead with 15 firms (16.5 percent). The textile/leather and IT/telecommunication sectors follow the automotive sector with 9.9 percent each. The machinery, furniture and medicine sectors each have a 7.7 percent share in the distribution.

Table 3. Industrial Affiliation of Firms

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Food/Beverages/Tobacco	6	6.6	6.6	6.6
	Insurance/Assistance Services	1	1.1	1.1	7.7
	Automotive	15	16.5	16.5	24.2
	Banking/Finance	4	4.4	4.4	28.6
	Textile/Leather	9	9.9	9.9	38.5
	Machinery	7	7.7	7.7	46.2
	Furniture	7	7.7	7.7	53.8
	Medicine	7	7.7	7.7	61.5
	Base Metal	3	3.3	3.3	64.8
	IT/Telecommunication	9	9.9	9.9	74.7
	Others	23	25.3	25.3	100.0
	Total	91	100.0	100.0	

As presented in Table 4, 63.7 percent of companies take service from a single CEP company, which is Company A. This finding indicates the tendency of CEP customers to take service from a single company. Only 5.5 percent of the companies take service from four or more CEP companies.

Table 4. Number of CEP Companies

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	58	63.7	63.7	63.7
	2.00	19	20.9	20.9	84.6
	3.00	9	9.9	9.9	94.5
	4.00 or more	5	5.5	5.5	100.0
	Total	91	100.0	100.0	

Table 5 shows how long the firms in the sample had been working with Company A. According to the results, almost 90 percent of the firms in the sample had been working with Company A for ten years or less. The number of years companies in the sample has been working with Company A ranges between 1 and 25 years, with an average of slightly more than 6 years.

Table 5. Working Duration with Company A

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 – 5 Years	50	55.0	56.2	56.2
	6 – 10 Years	28	31.4	31.4	87.6
	11 – 20 Years	9	9.9	9.9	97.8
	21 – 25 Years	2	2.2	2.2	100.00
	Total	89	97.8	100.0	
Missing	999.00	2	2.2		
Total		91	100.0		

A company's decision to work with Company A is made through various processes. Among these, standard supplier selection process and executive decision are the most prominent. As indicated in Table 6, 39.6 percent of the companies decided to take service from Company A after following their standard supplier selection process. In 28.6 percent of the companies, the decision to work with Company A was made by top management. 8.8 percent of companies, had been working with Company A because of a contract with the holding company they are

affiliated with. Finally, in 6.6 percent of the companies, a favorable reference has played a role in making this choice.

Table 6. Decision Process of Working With Company A

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Holding Contract	8	8.8	8.9	8.9
	Customer Demand	1	1.1	1.1	10.0
	Standard Supplier Selection Process	36	39.6	40.0	50.0
	Positive References	6	6.6	6.7	56.7
	Executive Decision	26	28.6	28.9	85.6
	Other	13	14.3	14.4	100.0
	Total	90	98.9	100.0	
Missing	999.00	1	1.1		
Total		91	100.0		

Monthly expenditures of companies in the sample for CEP service can be seen in Table 7. According to analysis results, monthly expenditures range between 20,000 TL and 100,000 TL with a mean of 41,280 TL. The median of the values is 39,000 TL. The monthly expenditures of about 50 percent of companies is under 39,999 TL, whereas the same number for about 10 percent of companies is over 80,000 TL.

Table 7. Monthly Expenditure of Companies for CEP Services

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20,000 TL – 29,999 TL	27	29.7	29.7	29.7
	30,000 TL – 39,999 TL	19	20.9	20.9	50.6
	40,000 TL – 49,999 TL	12	13.2	13.2	63.8
	50,000 TL – 59,999 TL	7	7.7	7.7	71.5
	60,000 TL – 69,999 TL	10	11.0	11.0	82.5
	70,000 TL – 79,999 TL	6	6.6	6.6	89.1
	80,000 TL – 89,999 TL	7	7.7	7.7	96.8
	90,000 TL – 100,000 TL	3	3.2	3.2	100.00
	Total	91	100.0	100.0	

As shown in Table 8, customer motivation to participate in the SIP is high, with an average of these seven items at 3.93. The increasing customer satisfaction rate has the highest mean, with 3.98. However, the analysis shows that improving delivery performance of service provider has the lowest mean, with 3.81. In other words, respondents participated in the SIP to increase their own customer satisfaction levels rather than improving the performance of their service provider.

Table 8. Customer Motivation

Items	Minimum	Maximum	Mean
Increasing customer satisfaction rate	2.00	5.00	3.98
Increasing target actualization rate in company balanced scorecard	2.00	5.00	3.97
Decreasing shipment cost	2.00	5.00	3.95
Taking CEP service in a better quality	2.00	5.00	3.94
Decreasing damaged and mis-delivery rate	2.00	5.00	3.94
Increasing shipment delivery speed	2.00	5.00	3.91
Improving delivery performance of service provider	1.00	5.00	3.81

Table 9 shows the analysis of the stages of participation. According to results, almost 50 percent participate in two or more stages. Feedback and testing emerges as the most commonly participated stage, with a 65 percent rate. Idea generation is the second-most contributed stage, with 56 percent and finally, 37 percent of the companies in the sample partake in the stage of process development. It can be said that customers in the sample generally prefer to share their innovative ideas at the beginning and their feedback at the end of the innovation process, but almost half of them do not participate in the development process.

Table 9. Stages of Participation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Don't participate in any stage	26	28.6	29.5	29.5
	Participation in one stage	17	18.7	19.3	48.9
	Participation in two stages	13	14.3	14.8	63.6
	Participation in three stages	32	35.2	36.4	100.0
	Total	88	96.7	100.0	
Missing	999.00	3	3.3		
Total		91	100.0		

Table 10 indicates intensity of participation. Frequency analysis reveals that almost 85 percent of respondents participate in the SIP once or more in a month, while more than 45 percent of respondents participate in the SIP once or more in a week.

Table 10. Intensity of Participation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Once a Year	5	5.5	5.5	5.5
	Many Times in a Year	9	9.9	9.9	15.4
	Once a Month	35	38.5	38.5	53.8
	Once a Week	18	19.8	19.8	73.6
	Many Times in a Week	24	26.4	26.4	100.0
	Total	91	100.0	100.0	

Tables 11 and 12 represent the channels that are used to participate in the SIP. The results show that the most commonly used channel is phone communication, at 89.8 percent. The least commonly used channel is mobile applications, at 29.5 percent. In addition, almost 60 percent of the sample use three or more channels to participate in the SIP.

Table 11. Channels

	Using	Not Using
Face-to-face	47	41
Phone	79	9
Web Programs	30	58
Mobile Applications	26	62
E-mail	63	15

Table 12. Channels of Participation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Only one channel	18	19.8	20.5	20.5
	Two channels	19	20.9	21.6	42.0
	Three channels	23	25.3	26.1	68.2
	Four channels	20	22.0	22.7	90.9
	Five channel	8	8.8	91	100.0
	Total	88	96.7	100.0	
Missing	999.00	3	3.3		
Total		91	100.0		

As shown in Table 13, the lowest rate in relationship quality is 1.80, and the highest is 5.00. Almost 90 percent of responses are higher than neutral.

Table 13. Relationship Quality

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.80 – 1.99	1	1.1	1,1	1,1
	2.00 – 2.99	9	10.0	10.0	11.1
	3.00 – 3.99	36	40.0	40.0	51.1
	4.00 – 4.99	42	46.2	46.2	97.8
	5.00	2	2.2	2.2	100.0
	Total	90	98.9	100.0	
Missing	System	1	1.1		
Total		91	100.0		

Table 14 shows the analysis of customer satisfaction. Customer satisfaction scores vary between 1.20 and 5.00 with a mean of 3.37. Sample firms are most

satisfied with a good price-performance rate; the mean for this item was 3.57. On the other hand, they are least happy with the service quality of the service provider.

Table 14. Customer Satisfaction

Items	Min.	Max.	Mean
Our service provider offers a good price-performance rate.	2.00	5.00	3.57
Our service provider has a high service performance.	1.00	5.00	3.42
We take service from our service provider on time.	1.00	5.00	3.36
Our service provider has a lower damage and mis-delivery rate than other service providers in the CEP sector.	1.00	5.00	3.30
Our service provider offers high quality service.	1.00	5.00	3.19

5.2 Correlations among variables

Correlation analysis helps researchers to understand the strength and direction of bivariate relationships between variables (Erkman, 2013). Table 15 displays the correlation matrix for the variables in this study.

The dependent variable, customer satisfaction, displays a statistically significant positive relationship with all independent variables ($p < 0.01$ for all). Among the independent variables, the number of channels of participation has the highest correlation with customer satisfaction ($p < 0.000$), followed by relationship quality ($p < 0.000$). While the number of stages in which the customer was involved and intensity of participation show very similar levels of correlation, customer motivation displays the weakest correlation with the dependent variable.

In addition to the positive correlation between the independent variables and the dependent variable, the correlation analysis showed that there are positive correlations among independent variables as well. For instance, the correlation between the number of channels and the stages of participation was .645, while the correlation between intensity and stages of participation was .643. Strong

correlations may create multicollinearity among independent variables and negatively affect the regression model, so it was tested by regression analysis.

Table 15. Correlation Analysis

Variables		1	2	3	4	5	6
(1) Customer Motivation	Correlation Coefficient	1.000					
	Sig. (2-tailed)	.					
	N	91					
(2) Stages of Participation	Correlation Coefficient	.289**	1.000				
	Sig. (2-tailed)	.006	.				
	N	88	88				
(3) Intensity of Participation	Correlation Coefficient	.427**	.643**	1.000			
	Sig. (2-tailed)	.000	.000	.			
	N	91	88	91			
(4) Channel of Participation	Correlation Coefficient	.345**	.645**	.546**	1.000		
	Sig. (2-tailed)	.001	.000	.000	.		
	N	88	88	88	88		
(5) Relationship Quality	Correlation Coefficient	.355**	.488**	.553**	.475**	1.000	
	Sig. (2-tailed)	.001	.000	.000	.000	.	
	N	90	88	90	88	90	
(6) Customer Satisfaction	Correlation Coefficient	.421**	.498**	.499**	.661**	.641**	1.000
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.
	N	86	86	86	86	86	86

5.3 Regression analysis

One of the most commonly used and powerful tools of contemporary social science is regression analysis, which is conducted to determine cause-and-effect relationships between dependent and independent variables. It is used to describe the relationship precisely by means of an equation that has predictive values (Anderson et al., 2004).

Before setting a healthy regression model, the multicollinearity level among independent variables needs be controlled for. Multicollinearity exists when there is a strong correlation or association between two or more predictors in a regression model, and it negatively affects the regression analysis in terms of estimation of partial regression coefficients and reliability of values (Field, 2009).

One way of identifying multicollinearity is to scan the correlation matrix of all of the predictor variables to see if any correlate very highly (correlations of above .80 or .90) (Field, 2009). As seen in Table 14, there are no correlation coefficients above .70 among independent variables. However, in order to prevent missing the more subtle forms of multicollinearity, the value of the variance inflation factor (VIF), which indicates whether a predictor has a strong linear relationship with other predictor(s) is analyzed (Field, 2009). When the value of VIF is greater than 10 and tolerance statistic, which is equal to $1/VIF$, is under 0.2, there emerges a concern regarding the regression analysis (Field, 2009). For the regression model, the VIF values and tolerance statistics in the data are analyzed. The VIF values were all well below 10 and the tolerance statistics all well above 0.2; therefore, it can be safely concluded that multicollinearity was not a problem.

In this study, a logistic regression analysis was conducted in order to determine the effects of the dimensions of customer participation in the SIP on customer satisfaction level. Before making a multivariate logistic regression, the results of which are presented in Table 16, bivariate logistic regression analyses are conducted in order to identify the independent variables which do not have a statistically significant relationship with the dependent variable and thus need not be included in the multivariate regression. However, as all independent variables were found to be significantly associated with the dependent variable, all were entered to the analysis of multivariate logistic regression.

The chi-square test of the final model (all covariates included) was significant ($p < .001$ for all) and indicates that a significant relationship exists between the entire set of independent variables and the dependent variables. The Hosmer and Lemeshow measure, which assesses the correspondence of the actual and predicted

value of the dependent variable, was also non-significant (.639). This is another indicator of a good model fit. In addition, the model correctly classifies 83.7%, which represents an improvement (33.7% fewer errors) relative to the classification based on chance alone.

Table 16. Bivariate Logistic Regression

Variables in the Equation						
	B	S.E.	Wald	df	Sig.	Exp(B)
Customer Motivation	1.636	.751	4.747	1	.029	5.134
Stages of Participation	1.001	.221	20.524	1	.000	2.720
Intensity of Participation	1.020	.262	15.171	1	.000	2.773
Channels of Participation	1.610	.327	24.188	1	.000	5.002
Relationship Quality	2.658	.631	17.744	1	.000	14.269

In order to examine whether each independent variable was significant or not, significance statistics were analyzed. Based on the results (see Table 17), two independent variables, relationship quality and channels of participation were found to be significant predictors of customer satisfaction ($p < 0.01$ for all). The positive regression coefficients (Bs) indicate that these variables are positively associated with customer satisfaction. In addition, Exp(B)s, that is, the odd ratios, had to be analyzed to understand the isolated impact of each independent variable in the multivariate logistic regression. An Exp (B) of 9.269 for relationship quality shows that, when other independent variables are controlled for, an increase in relationship quality level increases the likelihood of being satisfied 9.269 times. Likewise, an increase in channels of participation increases the likelihood of being

satisfied 4.254 times. On the other hand, as presented in Table 17, customer motivation, the stages of participation and intensity of participation are not significant ($p > 0.01$).

Table 17. Multivariate Logistic Regression

Variables in the Equation						
	B	S.E.	Wald	df	Sig.	Exp(B)
Customer Motivation	-.844	.911	.858	1	.354	.430
Stages of Participation	.304	.362	.704	1	.401	1.355
Intensity of Participation	-.191	.425	.202	1	.653	.826
Channels of Participation	1.446	.406	12.699	1	.000	4.248
Relationship Quality	2.227	.789	7.965	1	.005	9.269
Constant	-8.523	3.772	5.106	1	.024	.000

5.4 Analysis of the research model

A multivariate analysis indicated that two independent variables — channels of participation and relationship quality — have a positive relationship with the dependent variable, customer satisfaction. Therefore, Hypotheses 4 and 5 are supported by the statistical analysis. In other words, customer satisfaction increases as relationship quality increases; and customer satisfaction increases as channels of participation increase. Additionally, in the Spearman's non-parametric correlation test, these two independent variables had highest positive correlation with the dependent variable, so the correlation results support the significant relationship between these independent variables and the dependent variable.

The expectations of the study with regard to customer motivation, stages of participation and intensity of participation were partially supported by statistical analyses. Each of these independent variables has a significant relationship with customer satisfaction in the bivariate logistic regression. The correlation coefficients of these independent variables with customer satisfaction are also positive, but smaller than those for relationship quality and channels of participation. Despite a significant relation in bivariate logistic regression, these three-independent variables lose their significance in multivariate analysis. Therefore, the related hypotheses — Hypotheses 1, 2 and 3 — are defined as “not supported” in Table 17.

Based on the results, the hypotheses for the research objective that were supported and not supported are presented in Table 18.

Table 18. The Hypothesis

Hypotheses	Results
H1: Customers’ motivation to participate in the service innovation process will be positively associated with customer satisfaction.	Not Supported
H2: Customers’ earlier involvement in the service innovation process will be positively associated with customer satisfaction.	Not Supported
H3: The intensity of customer participation in the service innovation process will be positively associated with customer satisfaction.	Not Supported
H4: The number of channels through which customers participate in the SIP will be positively associated with customer satisfaction.	Supported

H5: Relationship quality during customer participation in the service innovation process will be positively associated with customer satisfaction.	Supported
--	-----------

CHAPTER 6

CONCLUSION AND IMPLICATIONS

This study aimed to investigate the impact of customer participation in the SIP on their satisfaction with the service provider and its services in the context of B2B in CEP sector. In order to examine the relationship, a survey using a questionnaire was conducted. Past studies have drawn attention to five factors as crucial indicators of customer participation in the SIP, namely, customer's level of motivation to participate, the number of stages in which the customer was involved throughout the SIP, intensity of participation, the number of channels through which the customer's participation was sought, and the quality of relationship between the two parties. In addition, various theories in the literature such as the expectancy theory, the goal-based theory and the resource-based theory support customer participation in the SIP. Customer satisfaction was identified as the dependent variable of the study because it is the ultimate output of customer participation in the SIP.

In order to analyze the data, frequency, correlation and logistic regression analyses were utilized. The results of the logistic regression revealed that two of five independent variables — the number of participation modes and relationship quality — are positively and significantly related to customer satisfaction, while the other three variables — customer motivation, number of stages and intensity of participation — are not.

The findings of the study demonstrate that relationship quality has the highest positive influence on customer satisfaction, that is, customer satisfaction increases as the relationship quality increases. Even though relationship quality is not in the framework of Alam (2002), it was added to this study and its positive impact demonstrated. The concept of relationship quality has arisen from theory and research in the field of relationship marketing (e.g. Rauyruen et al., 2007, Crosby et al., 1990, Dwyer et al., 1987). In addition, according to the resource-based view of the firm, relationships with customers is a human capital resource and to the extent that it is valuable, scarce, inimitable and non-substitutable, it can create a sustainable competitive advantage for the firm (Morgan et al., 2004). In this regard, to the extent that the relationship quality between customer and service provider during customer participation in the SIP is valuable, rare and non-substitutable, it can help improve the level of customer satisfaction. The results show that activities that improve relationship quality during customer participation in the SIP such as being receptive to customer suggestions about how to improve (McAdam and McClelland, 2006), helpful treatment during the interaction (Rashidi and Nabavi, 2014), discussing in a climate of honesty, trust, and open communication (Rahmani et al., 2014; Rauyruen et al., 2007) affect customer satisfaction level.

In addition, analyses reveal that channels of participation have a positive impact on customer satisfaction. In this study, five different channels, namely face-to-face communication, phone communication, e-mailing, web and mobile applications, which could elicit customer participation were identified. Analyses point to the existence of a larger number of alternative channels for customers to participate in the SIP makes them more satisfied at the end of the process. Providing different channel opportunities for customers encourage more effective and easier

participation in the SIP and increases the probability of fulfilling customer wishes and needs. Customers who find answers to their wishes and needs are more satisfied.

On the other hand, according to the multivariate regression analysis, there is no relationship between the number of stages in which a customer is involved and customer satisfaction. However, the results of the correlation test revealed a positive association between the number of stages and customer satisfaction. Bivariate logistic regression analysis also showed a significantly positive relationship between the number of stages in which the customer was involved and customer satisfaction. However, the variable loses its significance in the multivariate regression analysis, contrary to expectations. The reason for losing its significance may be derived from the level of interest of customers. As results of the analyses indicate, customers in the sample attached importance to relationship quality and channels of participation. They may not have been interested in which stage of the SIP they participated. In other words, the stages of participation-idea generation, process development, feedback and testing- may not make any difference in the eyes of the customers, who focus only on relationship quality and the number of channels.

Furthermore, statistical analysis results did not support the hypotheses regarding customer motivation and intensity of participation. First of all, the main reason behind the insignificant effect of customer motivation on customer satisfaction may be related to the participation period of customers in the SIP. Analyses showed that almost all corporate customers in sample were very motivated to participate in the SIP, but after participating, another dimension or dimensions may be more important in the eyes of customers such as good relationships or alternative communication channels, and these dimensions take the place of high customer motivation. Therefore, at the end of the participation process, customers' motivation

becomes an insignificant factor in their satisfaction. Secondly, intensity of participation does not have a significant relationship with customer satisfaction. This is a meaningful result, given that it has the strongest effect on relationship quality on customer satisfaction. In other words, analyses proved that customers feel satisfied when their relationship quality is high, rather than when there is an intense interaction between the two parties.

6.1. Managerial implications for the sector

This study can shed light on strategic decisions and applications of service providers in the CEP sector.

First of all, service providers should ensure that customer participation in the SIP involves an interaction between customers and the service provider. This interaction period is an opportunity for service providers to increase customer satisfaction because, as indicated in the results, customer satisfaction can be increased by increasing relationship quality. Therefore, in order to increase the quality of this interaction period, service providers have to listen to customers more carefully, increase cooperation in the direction of customer needs, establish an open and honest communication atmosphere, respond to customer's suggestions about how to improve, provide helpful suggestions during the interaction, and discuss in a climate of honesty, trust, and openness (Rahmani et al., 2014; Rashidi and Nabavi, 2014; Rauyruen et al., 2007).

As technological breakthroughs facilitate communication, customers expect to reach information and share expectations easily and continuously by using different channels. The results showed that customers feel more satisfied if they find more opportunities to use different channels in order to participate in the SIP. Therefore,

service providers should invest more to create different channels to involve customers in the SIP. These alternative channels may be differentiated according to customer profile. For instance, while different social media tools, such as call center applications, blogs, forums, focus groups can be alternatives for involving individual customers in the SIP (Gruen et al., 2006), technology integrations, alternative web and mobile systems, conferences, fairs are other alternatives which may prove particularly relevant for corporate customers (Jerman and Završnik, 2012).

6.2 Limitations and recommendations for future studies

Various limitations exist in this study. First of all, the study was conducted in a single country and in an industry with corporate customers of a single company. This limits the generalizability of findings. It does not offer an opportunity to make a comparison across different cultures, sectors and customers of different companies. Future studies focusing on a number of countries, industries and companies may test the findings of this study and identify the impact of cultural, sectoral and company-based differences. In addition, this study focuses on the context of B2B, not B2C. As there may be differences between corporate and individual customers, similar studies can be conducted for individual customers in the future studies.

The second limitation of the study is the elimination from the sample of small-sized customers of Company A. Firms of different sizes may display variances in terms of the facets of the SIP analyzed in the study. What they value may be different from firms of a larger size. Thus, the antecedents of customer satisfaction may be different for them.

Finally, five independent variables as dimensions of customer participation in the SIP were used in this study. Future studies may discover different dimensions which may be relevant to customer participation in the SIP.

APPENDIX

SURVEY

Dear Respondent,

This questionnaire is designed for a thesis study in Boğaziçi University International Trade Management Master's Program. The study has academic purposes only, and the survey forms the empirical part of the study.

We want to underline that, in the questionnaire, service innovation process means “creating innovative service solutions”, “developing innovative service products and processes” and “improving existing service products and processes in an innovative way”. Company A is a leading CEP company and supporter of the study. Please answer these questions based on this knowledge!

All your answers will be kept confidential. In order to ensure an efficient study and correct evaluation, answering questions objectively and completely is crucial.

We thank you in advance for your attention and wish you luck in your business life.

PART 1: General information about the company and the respondent

Information about the company
Company Name:
Geographic Dispersion: <input type="checkbox"/> Regional <input type="checkbox"/> National <input type="checkbox"/> International
<p>Industrial Affiliation:</p> <p><input type="checkbox"/> Food/Beverages/Tobacco <input type="checkbox"/> Insurance/Assistance Services <input type="checkbox"/> Automotive</p> <p><input type="checkbox"/> Banking/Finance <input type="checkbox"/> Dress/Textile/Leather <input type="checkbox"/> Machine/Metal</p> <p><input type="checkbox"/> Furniture <input type="checkbox"/> Medicine <input type="checkbox"/> Base Metal</p> <p><input type="checkbox"/> IT/Telecommunication <input type="checkbox"/> Other :</p>
What is number of CEP companies you are working with?
What is working duration with Company A?
<p>What kind of decision process did you follow to start working with Company A?</p> <p><input type="checkbox"/> Holding Contract <input type="checkbox"/> Customer Demand</p> <p><input type="checkbox"/> Standard Supplier Choosing <input type="checkbox"/> Positive Reference</p> <p><input type="checkbox"/> Executive Decision <input type="checkbox"/> Other:</p>

Information about the respondent
What is your department?
What is your company position?
How old are you?
What is your gender? <input type="checkbox"/> Female <input type="checkbox"/> Male
What is your total working duration in business life?
What is your working duration in current company?

PART 2: Customer Participation in the Service Innovation Process

1) Please indicate the degree to which you agree with the factors below, considering your motivation to participate in the service innovation process:

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Taking a better quality CEP service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increasing shipment delivery speed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Decreasing the damage and mis-delivery rate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increasing target actualization rate in company balanced scorecard	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increasing customer satisfaction rates	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Decreasing shipment costs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Improving the delivery performance of the service provider	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2) Which stages of service innovation process do you participate in?

	Participation	Not Participation
Stages of generating new ideas to improve service processes or to develop new service products	<input type="checkbox"/>	<input type="checkbox"/>
Stages of project development process with generated ideas	<input type="checkbox"/>	<input type="checkbox"/>
Stages of testing, evaluating and giving feedback about new development	<input type="checkbox"/>	<input type="checkbox"/>

3) How frequently do you interact with service provider for the service innovation process on average?

<input type="checkbox"/> Several times a week	<input type="checkbox"/> Once a week	<input type="checkbox"/> Once a month	<input type="checkbox"/> Several times a year	<input type="checkbox"/> Once a year
---	--------------------------------------	---------------------------------------	---	--------------------------------------

4) Which communication channel/channels do you use during participation in the service innovation process?

<input type="checkbox"/> Face-to-face	<input type="checkbox"/> Phone	<input type="checkbox"/> Web programs	<input type="checkbox"/> Mobile applications	<input type="checkbox"/> E-mail
---------------------------------------	--------------------------------	---------------------------------------	--	---------------------------------

5) Please indicate the degree to which you agree with the statements below considering your relationship with the service provider during participation in the service innovation process:

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
We have an open relationship with our service provider.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Our service provider is receptive to our suggestions about how to improve.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
We immediately and clearly share our complaints without concern.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
During the development of new solutions to our problems, our relationship and communication with our service provider is successful.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
We believe in that any disagreement or opinion differences with our service provider is just a part of doing business and is helpful to improve the business.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

PART 3: Customer Satisfaction

6) Please indicate the degree to which you agree with the statements below, considering your satisfaction:

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Our service provider offers high quality service.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Our service provider has a high service performance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
We take service from our service provider on time.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Our service provider has a lower damage and mis-delivery rate than other service providers in the CEP sector.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Our service provider offers a good price-performance rate.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

REFERENCES

- Agarwal, R., & Selen, W. (2011). Multi-dimensional nature of service innovation- operationalization of the elevated service offerings construct in collaborative service organizations. *International Journal of Production Management*, 31(11), 1164–1192.
- Akbulut, D. (2016). *The structure of road cargo transportation in Turkey and sectoral assessments*. Ministry of Transport, Maritime Affairs and Communications. Retrieved from:
<http://www.udhb.gov.tr/images/hizlierisim/d18831b8055dd1d.pdf>
- Alam, I. (2002). An exploratory investigation of user involvement in new service development. *Journal of the Academy of Marketing Science*, 30 (3), 250-61.
- Alam, I., & Perry, C., (2002). A customer-oriented new service development process. *Journal of Services Marketing*, 16(6), 515-53.
- Amit, R., & Schoemaker, P. (1993). Strategic assets and organizational rent. *Strategic Management Journal*, 14, 33–46.
- Anderson, E. W., Claes, F., & Donald R. L. (1994). Customer satisfaction, market share, and profitability: Findings from Sweden. *Journal of Marketing*, 58 (July), 53-66.
- Anderson, E. W., Claes, F., & Sanal, K. M. (2004). Customer satisfaction and shareholder value. *Journal of Marketing*, 68 (4), 172-185.
- Andreassen, T. W. & Streukens, S. (2009). Service innovation and electronic word-of mouth: Is it worth listening to? *Managing Service Quality*, 19(3), 249-265.

- Arikan, C. L. (2008). *Evaluating the dynamics of innovation in turkey: the impact of innovation on business performance*. Istanbul: Boğaziçi University Business Administration.
- Atakan, S. S., Bagozzi, R. P., & Yoon, C. (2014). Consumer participation in the design and realization stages of production: How self-production shapes consumer evaluations and relationships to products. *International Journal of Research in Marketing*, 31(4), 395-408.
- Auha, S., Bell S.J., Mcleod C.S., & Shih, E. (2007). Co-production and customer loyalty in financial services. *Journal of Retailing*, 83, 359-370.
- Baltacıoğlu, T., Ada, E., Kaplan, D., Yurt, O., & Kaplan, Y.C. (2007). A new framework for service supply chains. *Service Industries Journal*, 7(2), 105–124.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17, 99-120.
- Bascavusoglu, E. M., & Tether, B. (2012). *Does collaborating with customers enhance the benefits of R&D and marketing investments for innovation performance?* Retrieved from paper to be presented at the DRUID 2012: http://druid8.sit.aau.dk/acc_papers/v8k8up0yxjpvt1u7k04571okaf7h.pdf
- Bateman, T., Buhler B., & Pharand, A. (2015). *Adding value to parcel delivery*. Retrieved from Accenture website: https://www.accenture.com/_acnmedia/Accenture/Conversion-Assets/DotCom/Documents/Global/PDF/Dualpub_23/Accenture-Adding-Value-to-Parcel-Delivery.pdf
- Bendapudi, N., & Leone, R. P. (2003). Psychological implications of customer participation in co-production. *Journal of Marketing*, 67, 14-28.

- Blazevic, V., & Lievens, A. (2007). Managing innovation through customer coproduced knowledge in electronic services: An explanatory study. *Journal of Academy of Marketing Science*, 36, 138-151.
- Bolton, R. N., & Drew, J. H. (1991). A multistage model of customer's assessments of service quality and value. *Journal of Consumer Research*, 17 (4), 375-384.
- Borgqvist, J., & Linderberg, D. (2011). *Customer involvement in service innovation – a study of the bank industry*. Linnaeus University, School of Business and Economics. Retrieved from <http://www.diva-portal.org/smash/get/diva2:428172/FULLTEXT01.pdf>
- Bowen, D. E., & Jones, G. R. (1986). Transaction cost analysis of service organization-customer exchange. *Academy of Management Review*, 11 (2), 428-441.
- Bowers, M. R. (1989). Developing new services: improving the process makes it better. *Journal of Services Marketing*, 3 (1), 15-20.
- Brentani, U. (1995). New industrial service development: scenarios for success and failure. *Journal of Business Research*, 32, 93-103.
- Cahill, D. L. (2007). *Customer loyalty in third party logistics relationships: Findings from studies in Germany and the USA*. Contributions to Management Science. Heidelberg: Physica-Verlag Heidelberg, Online-Resource. Retrieved from: <http://www.springer.com/us/book/9783790819038>
- Carbonell, P., Rodríguez-Escudero, A. & Pujari, D. (2009). Customer involvement in new service development: an examination of antecedents and outcomes. *Journal of Product Innovation Management*, 26(5), 536-550.

- Chan, K. W., Yim, C. K. B., & Lam, S. S. K. (2010). Is customer participation in value creation a double-edged sword? Evidence from professional financial services across cultures. *Journal of marketing*, 74(3), 48-64.
- Chesbrough, H. (2003). *Open innovation: the new imperative for creating and profiting from technology*. Boston: Harvard Business School Press.
- Claycomb, C., Cynthia, A. & Lengnick, H. (2001). The customer as a productive resource: A pilot study and strategic implications. *Journal of Business Strategy*, 18(1), 47-68.
- Cronin, J. J. & Taylor, S. A. (1994). Servperfversus servqual: Reconciling performance-based and perceptions-minus-expectations measurement of service quality. *Journal of Marketing*, 58 (i), 125- 131.
- Crosby, L. A., Kenneth R. E., & Cowles, D. (1990). Relationship quality in services selling: An Interpersonal Influence perspective. *Journal of Marketing*, 54 (July), 68-81.
- Dadfar, H., Brege, S. & Semnani, S.S.E. (2013). Customer involvement in service production, delivery and quality: the challenges and opportunities. *International Journal of Quality and Service Sciences*, 5 (1), 46-65.
- Daşkan, E. S. (2016). *Türkiye 'de lojistik sektörünün gelişi ve gelecek öngörülleri*. Istanbul Trade University: Foreign Trade Institute Working Paper Series (22).
- Deloitte. (2013). *The logistics industry in Turkey*. Retrieved from: <http://www.invest.gov.tr/en-US/infocenter/publications/Documents/transportation-logistics-industry.pdf>
- Dong, B., Sivakumar, K., Evans, K. R., & Zou, S. (2015). Effect of customer participation on service outcomes: The moderating role of participation readiness. *Journal of Service Research*, 18(2), 160-176.

- Dwyer, R. F., Schurr, P. H. & Oh, S. (1987). Developing buyer-seller relationship. *Journal of Marketing*, 51 (April), 11-27.
- Erkman, M. (2013). *External environment effects on product innovation performance: the food and beverage industry in Istanbul*. Boğaziçi University: Master of Arts in International Trade Management, 57-110.
- Fagerberg, J. (2003). *Innovation: A guide to the literature*. Centre for Technology, Innovation and Culture, University of Oslo. Retrieved from http://in3.dem.ist.utl.pt/mscdesign/03ed/files/lec_1_01.pdf
- Field, A. (2009). *Discovering statistics using SPSS: (and sex and drugs and rock 'n' roll) (third edition)*. London: Sage Publications.
- Firat, A. F., Dholakia, N., & Venkatesh, A. (1995). Marketing in a postmodern world. *European Journal of Marketing*, 29 (I), 40-56.
- Flohr, S., Ibert, O. & Grabher, G. (2008). The neglected king: the customer in the new knowledge ecology of innovation. *Economic Geography*, 84 (3), 253-274.
- Fornell, C. (1992). A national customer satisfaction barometer: The Swedish experience. *Journal of Marketing*, 56, 1-18.
- Geyskens, I., Jan-Benedict, E., Steenkamp, M. & Kumar, N. (1999). A meta-analysis of satisfaction in marketing channel relationships? *Journal of Marketing Research*, 36 (May), 223-238.
- Good, D. J. (1990). Utilizing consumer involvement to market services. *Review of Business*, 11 (4), 3-6.
- Greenhalgh, C., & Rogers, M. (2007). *Trade marks and performance in UK firms*. DIME working papers on intellectual property rights (unpublished).

- Gruen, T., Osmonbekov, T., & Czaplewski, A. (2006). Customer-to-customer exchange: Its MOA antecedents and its impact on value creation and loyalty. *Journal of Academy of Marketing Science*, 35(4), 537-549.
- Gruner, K., & Homburg, H. (2000). Does customer interaction enhance new product success? *Journal of Business Research*, 49(1), 1-14.
- Guonaris, S. (2005). Measuring service quality in B2B services: An evaluation of the servqual scale vis-à-vis the indserv scale. *Journal of Services Marketing*, 19(6), 421-435.
- Gupta, A. K. (2012). *Growth and challenges in service sector: Literature review, classification and directions for future research*. IJMBS, 2(2), Retrieved from <http://www.ijmbs.com/22/akgupta.pdf>
- Gustafsson, J., & Lundqvist, J. (2012). *Deeding a thirsty world: Challenges and opportunities for a water and food secure future*. Stockholm International Water Institute, Report 31. Retrieved from http://www.siw.org/wp-content/uploads/2015/09/Feeding_a_thirsty_world_2012worldwaterweek_report_31.pdf
- Haas, A., & Kenning, P. (2014). Utilitarian and hedonic motivators of shoppers' decision to consult with salespeople. *Journal of Retailing*, 90(3), 428-441.
- Hair, J. F., Sarstedt, M., Ringle, C. M., & Mena, J. A. (2012). An assessment of the use of partial least squares structural equation modeling in marketing research. *Journal of the Academy of Marketing Science*, 40 (3), 414-433.
- Hana, U. (2013). Competitive advantage achievement through innovation and knowledge. *Journal of Competitiveness*, 5(1), 82-96. Retrieved from <http://www.cjournal.cz/files/127.pdf>
- Hennestad, B.W. (1999). Infusing the organization with customer knowledge. *Scandinavian Journal of Management*, 15(1), 17-41.

- Homburg, C., & Stock, R.M. (2004). The link between salespeople's job satisfaction and customer satisfaction in a business-to-business context: a dyadic analysis. *Journal of the Academy of Marketing Science*, 32(2), 144-158.
- Hongqi, Z., & Ruoyu, L. (2012). Empirical research of the relationship between customer participation, customer satisfaction and service innovation performance in China. *African Journal of Business Management*, 6 (4), 1449-1454.
- Iqbal, M., Aziz, T., & Ibrahim, M. (2016). Customer involvement in service innovation in banking sector of Pakistan. *Industrial Engineering Letters*, 6(3), 1-8.
- Jerman, D., & Završnik, B. (2012). Model of marketing communications effectiveness in the business-to-business markets. *Economic Research*, 25(1), 365.
- Jervis, N., Rossabi, M., & Kassel M. (2005). *From silk to oil: Cross-cultural connections along the silk roads*. China Institute, International Research and Studies Program. Retrieved from <http://ncta.osu.edu/silk-to-oil.pdf>
- Kale, P., & Singh, H. (2007). Building firm capabilities through learning: The role of the alliance learning process in alliance capability and firm-level alliance success. *Strategy Management Journal*, 28, 981–1000.
- Kristensson, P., Magnusson, P.R. & Matthing, J. (2002). Users as a hidden resource for creativity: Findings from an experimental study on user involvement. *Creativity and Innovation Management*, 11(1), 55–61. Retrieved from <http://doi.wiley.com/10.1111/1467-8691.00236>
- Kogut, B., & Zander, U. (1992). Knowledge of the firm, combinative capabilities, and the replication of technology. *Organization Science*, 3(3), 383–397.

- Kumar, S.(2015).*Courier express parcel (CEP) industry and how e-commerce is helping the growth of CEP industry?*Retrieved from<https://www.linkedin.com/pulse/courier-express-parcel-cep-industry-how-e-commerce-helping-kumar>
- Kumar, V.,&Ramani, G. (2006). *Interaction orientation: The new measure of marketing capabilities*. The paper presented at AMA Winter Educators' Conference, St. Petersburg, FL.
- Kut, A.(2011). *CEP sector analysis and future of the sector*. MÜSİAD-Researches Reports. Retrieved from the Musiad website: http://www.musiad.org.tr/F/Root/Pdf/Araştırma%20Raporları/Araştırma%20Raporları/Turkiye'nin_2023_Yili_Hizmet_ihracati_Vizyonu.pdf
- Lam, S.Y., Shankar V., Erramilli M.K.,&Murthy, B. (2004). Customer value, satisfaction, loyalty, and switching costs: An illustration from a business to business service context.*Journal of the Academy of Marketing Science*, 32 (3), 293-311.
- Lettl, C. (2007). User involvement competence for radical innovation.*Journal of Engineering and Technology Management*, 24(1-2),53-75.
- Lin, C.Y. (2010). Influences of individual, organizational and environmental factors on technological innovation in Taiwan's logistics industry. Retrieved from <http://www.jgbm.org/page/8%20Dr.%20Chieh-Yu%20Lin.pdf>
- Lundqvist, A., & Yakhlef, A. (2004). Customer involvement in new service development: A conversational approach.*Managing Service Quality*,14(2/3), 249-257.
- Magnusson, P., Matthing, J., & Kristensson, P.(2003). Managing user involvement in service innovation. *Journal of Service Research*, 6(2), 111-124.

- Martin, C.R. & Horne, D.A. (1995). Level of success inputs for service innovations in the same firm. *International Journal of Service Industry Management*, 6(4), 40-56.
- Martin, C. R., Horne, D. A., & Schultz, A. M. (1999). The business to business customer in the service innovation process. *European Journal of Innovation Management*, 2(2), 55-62.
- Martín-de Castro, G., Delgado-Verde, M. Navas-López, J. E. & Cruz-González, J. (2013). The moderating role of innovation culture in the relationship between knowledge assets and product innovation. *Technological Forecasting and Social Change*, 80(2), 351-363. Retrieved from <http://dx.doi.org/10.1016/j.techfore.2012.08.012>
- Masiello, B., Marasco, A., & Izzo F. (2011). *Co-Innovation in creative-intensive business services: The role of clients in advertising agencies' innovation process*. 14th Toulon-Verona Conference "Organizational Excellence in Services". 773-790.
- Matthing, J., Sandén, B., & Edvardsson, B. (2004). New service development: Learning from and with customers. *International Journal of Service Industry Management*, 15(5), 479-498.
- McAdam, R., & McClelland, J. (2006). Individual and team-based idea generation within innovation management: Organizational and research agendas. *European Journal of Innovation Management*, 5(2), 86 - 97.
- Meer, R. D. (2008). Factors influencing an organization's ability to manage innovation: A structured literature review and conceptual model. *International Journal of Innovation Management*, 12(4), 655-676.

- Menor L.J., Tatikonda M.V., & Sampson S.E. (2002). New service development: Areas for exploitation and exploration. *Journal of Operations Management*, 20, 135–157.
- Miles, I. (2001). *Services innovation: Areconfiguration of innovation studies*. Manchester: University of Manchester.
- Morgan, A. A., Kaleka, A. & Katsikeas, C. S. (2004). Antecedents of Export Venture Performance: A theoretical model and empirical assessment. *Journal of Marketing*, 68 (1), 90-108.
- Morgan, R. M., & Hunt, S. D. (1994). The commitment-trust theory of relationship marketing. *Journal of Marketing*, 58, 20-38.
- Morrar, R. (2014). Innovation in services: A literature review. *Technology Innovation Management Review*. 4 (4), 6-14.
- Nambisan, S. (2002). Designing virtual customer environments for new product development: Towards a theory. *The Academy of Management Review*, 27(3), 392-413.
- Neumann, D., & Holz Müller, H.H. (2007). Service delivery encounters in business to business contexts as a source of innovation. *Journal of Business Management*, 1(2007/2), 105-134.
- Nunnally, J. C. (1978). *Psychometric theory*, (2nd. ed.). New York: McGraw-Hill.
- Official Gazette.(2013). *Postal services law*. Retrieved from <http://www.resmigazete.gov.tr/eskiler/2013/05/20130523.pdf>
- Oke, A., & Goffin, K., (2001). *Innovation management in the service sector*. Management Focus, Summer issue, 16, 8-10.
- Prahalad, C.K., & Ramaswamy, V. (2004). *The future of competition: Co-creating unique value with customers*. Boston: Harvard Business School Press.

- Pierre Audoin Consultants (PAC). (2012). *A Question of Survival: How Postal & Survival Courier Express Parcel Companies Are Transforming Their Business Models*. Retrieved from PAC Press: <http://bit.ly/xVHPO5>
- Pishgar, F., Dezhkan, S., Ghanbarpoos, F., Shabani, N., & Ashoori, M. (2013). The impact of product innovation on customer satisfaction and customer loyalty. *Arabian Journal of Business and Management Review*, 2(7), 135-142.
- Prandelli, E., Sawhney, M., & Verona, G. (2008). *Collaborating with customers to innovate: Conceiving and marketing products in the networking age*. Edward Elgar Publishing Ltd.
- Rahmani, L. N., Firoozbakht, Z., & Taghipoor, A. (2014). Service quality, relationship quality and customer loyalty (Case study: Banking industry in Iran). *Open Journal of Social Sciences*, 2, 262-268.
- Randhawa, K., & Scerri, M. (2015). *Service innovation: A review of the literature*. R. Agarwal et al. (eds.), *The Handbook of Service Innovation*.
- Rashidi, A., & Nabavi, S. A. (2014). The relationship between customers relationship quality and marketing activities in insurance company of Asia in Mazandaran province. *International Research Journal of Management Sciences*. 2 (12), 427-430.
- Rauyrue, P., Millet, K., & Barrett N. (2007). Relationship quality as a predictor of B2B customer loyalty. *Journal of Business Research*, 60, 21-31.
- Roberts, D., Hughes, M., & Kertbo, K. (2014). Exploring consumer's motivation to engage in innovation through co-creation activities. *European Journal of Marketing*, 48, 147-169.
- Rodriguez, J. L., & Rodriguez, R. M. (2005). Technology and export behavior: A resource-based view approach. *International Business Review*, 14, 539-557.

- Rouse, M. (2010). Supply chain management (SCM). *TechTarget*, Retrieved from <http://searchmanufacturingerp.techtarget.com/definition/supply-chain-management>
- Salehi, F., Matuska, J. & Ryssel, L. (2015). *Europe's CEP market: Steady growth begins to shift*. Retrieved from ATKearney: <https://www.atkearney.com/>
- Sandén, B., Gustafsson, A., & Witell, L. (2006). The role of the customer in the development process. In Edvardsson, B., Gustafsson, A., Kristensson, P., Magnusson, P., Matthing, J. editors. *Involving customers in new service development*. *Imperial College Press*, 33-56.
- Scheuing, E.E., & Johnson, E.M. (1989b). A proposed model for new service development. *Journal of Services Marketing*, 3 (2), 25-34.
- Schilling, A. (2011). *Competences supporting service innovation*. Vinnova Report. VR 2011:13.
- Schneider, B., & Bowen, D. E. (1995). *Winning the service game*. Boston: Business School Press.
- Shankar, V., Smith, A. K., & Rangaswamy, A. (2003). Customer satisfaction and loyalty in online and offline environments. *International Journal of Research in Marketing*, 20, 153-175.
- Solomon, M.R. (2002). *Customer behavior*. International Edition, 5th ed., Prentice-Hall, Upper Saddle River, NJ.
- Söderlund, M. (2006). Measuring customer loyalty with multi-item scales—a case for caution. *International Journal of Service Industry Management*, 17(1), 76–98.
- Strandvik, T., Holmlund, M., & Edvardsson, B. (2012). Customer Needing: A challenge for the seller offering. *Journal of Business & Industrial Marketing*, 27(2), 132-141.

- Straus, L., Robbert T., & Roth S. (2016). Customer participation in the customization of services — effects on satisfaction and behavioral intentions. *Journal of Business Marketing Management*, 1, 498 – 517.
- Thanasopon, B., Papadopoulos, T., & Vidgen, R. (2011). *Opening up the fuzzy front-end of service process innovation: Searching capability, co-development capacity, and IT competence*. Proceedings of the 21st European Conference on Information Systems, 1-7.
- TNT. (2010). *Market overview, trends, strategy and outlook*. Section A: General. Retrieved from TNT Express Report: https://www.tnt.com/content/dam/corporate/archive/Images/TNT-Express-Report-2010_tcm177-540070.pdf
- Trott, P. (2008). *Innovation management and new product development*. Edinburg: Pearson Education Limited.
- TUBISAT. (2015). *E-commerce in Turkey: 2.4 billion Turkish Liras*. Retrieved from <http://www.tubisad.org.tr/Tr/MediaCenter/Sayfalar/E-Ticaret-2015-bb.aspx>
- Universal Postal Union. (2013). *Global and Regional Estimates*. Retrieved from http://pls.upu.int/pls/ap/ssp_report.main?p_language=AN&p_choice=BROWSE
- Urban, G.L. (2004). The Emerging era of customer advocacy, *MIT Sloan Management Review*, 45 (2), 77-82.
- Veryzer, R.W.J. (1998). Key factors affecting customer evaluation of discontinuous new products. *Journal of Product Innovation Management*, 15 (2), 136-50.
- von Hippel, E. A. (1976). The dominant role of users in the scientific instrument innovation process. *Research Policy*, 5 (3), 212–239.
- von Hippel, E. A. (1978). Successful industrial products from customer ideas. *Journal of Marketing*, 42(1), 39–49.

- Vos, A.H. (2010). *Service innovation: Managing innovation from idea generation to innovative offer*. University Twente, Faculty of Management and Governance. Master's thesis, Business Administration, Service Management Track.
- Yim, C. K. B., Chan, K. W., & Lam, S. S. K. (2012). Do customers and employees enjoy service participation? Synergistic effects of self-and other-efficacy. *Journal of Marketing*, 76(6), 121-140.
- Wallenberg, C.M. & Lukassen, P. (2011). Proactive improvement of logistics service providers as driver of customer loyalty. *European Journal of Marketing*, 45 (3), 438-454.
- Wang, C. & Chen, C. (2010). Electronic commerce research in latest decade: A literature review. *International Journal of Electronic Commerce Studies*, 1 (1), 1-14.
- Weinberg, B. D. & Pehlivan, E. (2011). Social spending: Managing the social media mix. *Business Horizons*, 54 (3), 275-282.
- Westbrook, Robert A. (1981). Sources of satisfaction with retail outlets. *Journal of Retailing*, 57 (Fall), 68-85.
- World Trade Organization. (2014). *Global importance of services*. Retrieved from <http://unctad.org/en/conferences/publicsymposium/2014/Pages/importance-of-services.aspx>