



**THE ROLE OF OMNI-CHANNEL CAPABILITY
AND CONSUMER EMPOWERMENT ON CUSTOMER
SATISFACTION**

ÖZLEM ÜRGÜPLÜ

Master's Thesis

Graduate School

Izmir University of Economics

Izmir

2020

**THE ROLE OF OMNI-CHANNEL CAPABILITY
AND CONSUMER EMPOWERMENT ON CUSTOMER
SATISFACTION**

ÖZLEM ÜRGÜPLÜ

A Thesis Submitted to
The Graduate School of Izmir University of Economics
Master of Arts in Logistics Management


İzmir

2020

Approval of the Graduate School of Social Sciences


Prof. Dr. Mehmet Efe Biresselioğlu
Director

I certify that this thesis satisfies all the requirements as a thesis for the degree of Master of Arts.


Assoc. Prof. Dr. Muhittin Hakan Demir
Head of Department

This is to certify that we have read this thesis and that in our opinion it is fully adequate, in scope and quality, as a thesis for the degree of Master of Arts.


Assoc. Prof. Dr. Işık Özge Yumurtacı Hüseyinoğlu
Advisor

Examining Committee Members

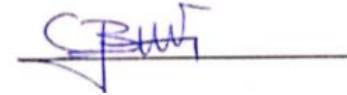
Assoc. Prof. Dr. Işık Özge Yumurtacı Hüseyinoğlu, Advisor



Assoc. Prof. Dr. Bengü Sevil Oflaç, Member



Asst. Prof. Dr. Gülmüş Börühan, Member



ABSTRACT

THE ROLE OF OMNI-CHANNEL CAPABILITY AND CONSUMER EMPOWERMENT ON CUSTOMER SATISFACTION

Ürgüplü, Özlem

Master of Arts in Logistics Management

Supervisor: Assoc. Prof. Dr. Işık Özge Yumurtacı Hüseyinoğlu

January, 2020

This thesis analyzes the role of the omni-channel capability and consumer empowerment on consumer behavior as to satisfaction. The Stimulus-Organism-Response (S-O-R) framework (Mehrabian and Russel, 1976) is used for constituting the measurement of the independent and dependent variables such as omni-channel capability, consumer empowerment and customer satisfaction, which is affected by digitalization in the retailing channels, channel service transparency as a moderator role. Theoretical guidelines and primary sources in the literature provide to construct the hypotheses of this thesis. The sample consists of 262 respondents from various schools, universities, and companies in Izmir. The structural equation modeling results show that consumer empowerment provides a mediator role as an organism and channel service transparency provides a moderator role between consumer

empowerment and customer satisfaction. Furthermore, consumer empowerment affects positively consumer behavior; because empowered consumers can decide on their needs themselves, so it increases customer satisfaction in the online retailing. Also, omni-channel capability influences on consumer empowerment and customer satisfaction positively; because consumers are empowered and satisfied via new capabilities about online retailing based on the technological developments which are used to integrate the channels. Especially, the consumer perception on omni-channel usage is increased by digitalization and consumers empower themselves on the decision-making process in online and in-store shopping processes simultaneously. The digital attempts help consumers to use omni-channel system efficiently and effectively. The result of the study provides significant insights into theoretical and practical implications.

Keywords: Stimulus Organism Response (S-O-R) Framework, Omni-channel Capability, Consumer Empowerment, Consumer Behavior, Customer Satisfaction

ÖZET

BÜTÜNCÜL KANAL KABİLİYETİ VE TÜKETİCİ GÜÇLENDİRMESİNİN MÜŞTERİ MEMNUNİYETİ ÜZERİNDEKİ ROLÜ

Ürgüplü, Özlem

Lojistik Yönetimi Yüksek Lisansı, Lojistik Yönetimi Bölümü

Tez Danışmanı: Doç. Dr. Işık Özge Yumurtacı Hüseyinoğlu

Ocak, 2020

Bu tez, bütüncül kanal kabiliyeti ve tüketici güçlendirmesinin müşteri memnuniyeti üzerindeki rolünü analiz etmektedir. Mehrabian ve Russel (1976) tarafından geliştirilen Uyarıcı-Organizma-Tepki (U-O-T) Modeli çerçevesinde bütüncül kanal kabiliyeti, tüketici güçlendirmesi, kanal hizmetlerinin şeffaflığı ve tüketici memnuniyeti gibi bağımlı ve bağımsız değişkenlerin oluşturulması için kullanılmıştır. Kuramsal kılavuzlar ve literatürdeki öncül çalışmalar, araştırma modelinin oluşturulmasını ve hipotezlerin geliştirilmesini sağlamıştır. Örnekleme, İzmir'deki çeşitli okul, üniversite öğrencileri ile farklı kurumlarda çalışan 262 katılımcıdan oluşmaktadır. Yapısal eşitlik modelleme sonuçları, U-O-T Modeli

çerçevesinde kanal hizmetleri şeffaflığının tüketici güçlendirmesi ile tüketici memnuniyeti arasında düzenleyici etkisi olduğunu göstermektedir. Ayrıca, tüketici güçlendirmesi tüketici davranışları üzerinde pozitif bir etkiye sahiptir çünkü güçlenmiş tüketiciler kendi ihtiyaçları hakkında kendileri karar verebilirler. Böylece internet üzerinden gerçekleştirilen alışveriş süresince müşteri memnuniyeti daha da artmaktadır. Bununla birlikte, bütüncül kanal kabiliyeti de tüketici güçlendirmesi ve müşteri memnuniyeti üzerinde olumlu bir etkiye sahiptir. Teknolojik gelişmeler ile ortaya çıkan bütüncül kanal sistemi müşterilerin alışveriş süresince daha güçlenmelerini ve tatmin olmalarını sağlamaktadır. Özellikle perakendecilik dünyasındaki dijitalleşme, tüketicilerin bütüncül kanal sistemi kullanımı ile ilgili oluşan algıları ve alışveriş süresince kendi kendilerine karar verebilmeleri güçlenmelerini sağlamaktadır. Dijitalleşme girişimleri, müşterilere bütüncül kanal sistemini etkin ve etkili bir şekilde kullanabilmeleri için yardımcı olmaktadır.

Anahtar Kelimeler: Uyarıcı-Organizma-Tepki (U-O-R) Modeli, Bütüncün Kanal Kabiliyeti, Tüketici Güçlendirmesi, Tüketici Davranışları, Müşteri Memnuniyeti



Dedicated to My Parents

ACKNOWLEDGEMENTS

Firstly, I would like to thank to my advisory Işık Özge Yumurtacı Hüseyinoğlu, who spared time and effort to encourage and support me during the entire period of writing up my Master's thesis and provided me the opportunity and information to gain experience and develop the topic which I have chosen. This thesis has been composed over a period of two years at Izmir University of Economics in Izmir.

I dedicate this thesis to my parents. I would like to thank my family, Metin and Ayşe Leyla Ürgüplü, and my elder brother Mehmet Ürgüplü for their support and inspiration throughout my whole education life. I would like to extend special thankfulness to my greatest sentimental supporter, my father Metin Ürgüplü, for giving determination to success during this difficult process.

I would also like to express my sincere thanks to all my teachers and friends from Izmir University of Economics; I would like to thank my friend and my study buddy Nur Telli, whom I met in the master's class and we have supported and inspired each other at each stage.

PREFACE

This thesis has been prepared as part of my undergraduate project, as part of a master's degree. The report is prepared with the view to include all the details regarding the study that I carried out.

The purpose of this thesis is to introduce and demonstrate a new approach and contribution to develop the related topic. This study evaluates the new terms which are emerged after the digitalization in retailing. There are new terms about the channel system in the retailing. Firstly, the concept of omni-channel is one of the new terms in the retailing and it results in a new term known as an omni-channel capability which is about the digital marketing system including the delivery and transportation options. Secondly, consumer empowerment shows how the digital attempts and improvements in the retailing affect consumer's decisions in the shopping process. Thirdly, there is a dependent variable which can be indicated as a consumer's behavioral response named as customer satisfaction. The omni-channel capability and consumer empowerment have a positive effect on the consumer's decision-making process with the moderation effect of channel service transparency.

The main contribution of this study is to show the positive effects of digital improvements in retailing on consumers. Thus, as you proceed the thesis will reveal details of the study that I have done in my master thesis.

IZMIR

20.01.2020

Özlem Ürgüplü

TABLE OF CONTENTS

ABSTRACT.....	iii
ÖZET.....	v
ACKNOWLEDGEMENTS	viii
PREFACE	ix
TABLE OF CONTENTS	x
LIST OF TABLES	xii
LIST OF FIGURES	xiii
LIST OF ABBREVIATIONS	xiv
CHAPTER 1: INTRODUCTION	1
1.1. <i>Problem Discussion</i>	1
1.2. <i>Research Aim and Objectives</i>	4
1.3. <i>Research Questions</i>	7
1.4. <i>Originality and Significance of the Study</i>	8
1.5. <i>Structure of the Thesis</i>	9
CHAPTER 2: LITERATURE REVIEW	10
2.1. <i>Omni-channel System</i>	10
2.1.1. <i>Omni-channel Retailing</i>	11
2.1.2. <i>Omni-channel Capability</i>	14
2.2. <i>Consumer Empowerment</i>	16
2.2.1. <i>Path to Purchase Journey of Consumer</i>	17
2.3. <i>Channel Service Transparency in Retailing</i>	19
CHAPTER 3: THEORETICAL BACKGRROUND	21
3.1. <i>Theoretical Background</i>	21
3.1.1. <i>The S-O-R Framework</i>	24
3.1.1.1. <i>Omni-channel Capability as Stimulus</i>	25
3.1.1.2. <i>Consumer Empowerment as an Organism</i>	26
3.1.1.3. <i>Consumer Behavior as a Response</i>	28
CHAPTER 4: RESEARCH MODEL & METHODOLOGY	31
4.1. <i>Survey Development</i>	31
4.2. <i>Pretest</i>	31
4.3. <i>Pilot Study</i>	32
4.4. <i>Research Model</i>	33
4.5. <i>Hypotheses Development</i>	34
4.6. <i>Sampling</i>	39
4.7. <i>Data Collection</i>	39

CHAPTER 5: ANALYSIS AND RESULTS.....	42
5.1. <i>Structural Equating Modelling (SEM)</i>	42
5.2. <i>Data Analysis</i>	43
5.2.1. <i>Confirmatory Factor Analysis (CFA)</i>	43
5.3. <i>Validity and Reliability</i>	46
5.4. <i>Path Analysis</i>	48
5.5. <i>Mediator role of consumer empowerment</i>	50
5.6. <i>Moderation Analysis</i>	52
5.7. <i>T-Test Results</i>	53
5.7.1. <i>Gender</i>	53
5.7.2. <i>Experience</i>	53
5.7.3. <i>Education</i>	55
5.7.4. <i>Age</i>	56
5.7.5. <i>Income</i>	56
CHAPTER 6: DISCUSSION AND IMPLICATIONS	59
6.1. <i>Discussion</i>	59
6.2. <i>Theoretical Implications</i>	60
6.3. <i>Practical Implications</i>	61
6.4. <i>Conclusion</i>	63
6.5. <i>Limitations and future research</i>	64
REFERENCES.....	66
APPENDICES	73
APPENDIX A: QUESTIONNAIRE FOR DATA COLLECTION IN ENGLISH ...	73
APPENDIX B: QUESTIONNAIRE FOR DATA COLLECTION IN TURKISH ...	78

LIST OF TABLES

Table 1. Average of Constructs in the Pilot Study.....	32
Table 2. Reliability for the Pilot Study	33
Table 3. Sources of the Items	38
Table 4. Demographic characteristics of the sample	40
Table 5. Model Fit Statistic.....	44
Table 6. Sources of the Items and CFA Loadings	45
Table 7. Convergent Validity and Reliability of the Measurement Model.....	47
Table 8. Model Fit Index for the Entire Measurement Model.....	48
Table 9. Model Fit Index of the Path Analysis Measurement Model.....	49
Table 10. Path Analysis Result	49
Table 11. The Hypotheses Testing Results of Indirect Effects.....	51
Table 12. Hypotheses Results	58

LIST OF FIGURES

Figure 1. Research Model	34
Figure 2. Final Research Model Including Estimates and R-Square	50



LIST OF ABBREVIATIONS

AGFI:	Adjusted Goodness of Fit Index
ANOVA:	Analysis of Variance
AVE:	Average Extracted Variance
CE:	Consumer Empowerment
CB:	Consumer Behavior
CST:	Channel Service Transparency
CFA:	Confirmatory Factor Analysis
CFI:	Comparative Fit Index
CMIN/DF:	Relative Chi Square Index
CR:	Composite Reliability
DF:	Degree of Freedom
GFI:	Goodness of Fit Index
IFI:	Incremental Fit Index
LLCI:	Lower Level of Confidence Interval
NFI:	Normed Fit Index
N/S:	Not Significant
OCC:	Omni-Channel Capability
RFI:	Relative Fit Index
RMSEA:	Root Mean Square Error of Approximation
S.E.:	Standard Error
SEM:	Structural Equation Modelling
S-O-R:	Stimulus Organism Response
S:	Satisfaction
T:	Trust
TLI:	The Tucker-Lewis Index
ULCI:	Upper Level of Confidence Interval

CHAPTER 1: INTRODUCTION

1.1. Problem Discussion

In the last decades, retailing is changed by increasing the rates of using both online and offline channel systems at the same time. Also, online retailing channels has a primary role with the help of digital developments in the marketing world (Verhoef et al., 2015).

There is a rapid growth in the online purchase and retail with the digitalization by increasing channels. Websites, physical stores, catalogs, internet kiosks, mobile applications, and call centers provides the relationship between consumer and retailer (Zhang et al., 2018).

The extension of communication types has changed positively from the 1950s to today (Kitchen, 1999). New communication strategies are increased on digital media such as web, e-mail, and mobile in addition to traditional media tools like television, radio, cinema, outdoor and direct mail (Hall and Towers, 2017). Also, technological developments and innovations are provided to improve and increase the interaction between retailers and customers positively (Taylor, 2016). Customer touchpoints such as a physical store or online store of the retailer or traditional advertising like catalogs make marketing more flexible for both customers and retailers (Parsons and Maclaran, 2009). Consumers accesses a great deal of information within these digitalized platforms (Hall and Towers, 2017). According to Pires et al. (2006), consumer empowerment is depended upon the interaction and connection between consumers and retailers.

The journey of channel integration is affected the time consumption of consumers during the purchase process to decide what, when, where or how they buy goods and services which are influenced their shopping behavior in the decision process (Sahi et al., 2016).

According to Meyer and Schwager (2007), the access of quality information about the retailer's products and services within a short time eases within the digitalization in the retailing; thus, the quality of customer experiences in the shopping is increased;

so, the digital retailing offers customers to compare products and services, prices, advertising, packaging, delivery options for 24-hours.

Since the developments in the technological side of the marketing, there is a digital route for 24 x 7 online connectivity between customers and retailers to reach the data and relevant information about products and services, product availability on the online store, products quality, price comparison and other customers' comments about products or services of the retailer (Straker et al., 2015). Digitalization ensures customers to share their positive or negative comments or experiences on goods or services via social networks (Kietzmann et al., 2011; Jiang, Luk, and Cardinali, 2018).

The communication between retailer and consumer is established and improved to integrate channels for designing, managing, executing and evaluating of customers experiences and feedbacks both physical stores, online stores, websites, customer services, and mobile applications, known as touchpoints, which or where customers interact with retailer directly (Jenkinson, 2007).

The trade-name advertising, retailer advertising, physical store communications, face-to-face conversation, old-fashioned media tools, and peer conversations are known as touchpoints that have aimed to reach and ensure personalized customer communication and seamless shopping experience (Jenkinson, 2007; Baxendale et al., 2015). Above mentioned touchpoints of retailers ensure to use the real-time experience tracking between customers during the offline and online shopping at the same time because there is a probability for customers to compare prices, qualities, promotions, comments, diversity of products or services, inventory management simultaneously (Baxendale et al., 2015).

The customer decision-making process depends on all touchpoints and channels; also, it is based on a seamless communication experience in retailer advertising in-store communications, word-of-mouth, more visual websites, practical mobile applications (Wiesel et al., 2010; Baxendale et al., 2015).

Various touchpoints offer to be informed interactively customers about all sales channels and their utilities in the search process (Neslin et al., 2014). Touchpoints have an amount of data availability. Online and offline options of all touchpoints positively affect consumer response (Naik and Peters 2009). Consumers access relevant information about retailers and their goods and services when they want to via digital channels and touchpoints (Baxendale et al., 2015).

The digital retail world provides not only products and services but also convenience and personalization for customers to meet their needs (Kim, Park and Lee, 2017). Information availability, product varieties, price comparison possibilities with other retailers on online stores, delivery options such as click-and-collect, reserve-and-collect, reserve-and-store pick-up, etc. help customers to reduce consumers' search cost both time and money via online stores and touchpoints developed by the help of digitalization in the marketing (Park, Kim, and Lee, 2017; Shen et al., 2018).

The most developed and improved step in the retail sector is channel integration to increase the consumer's needs and expectations in the shopping experience with a seamless shopping experience (Pires et al., 2006; Herhausen et al., 2015). According to Pires et al. (2006), customer satisfaction during and after the shopping experience increases within the digital developments in the retail world.

The usage rate of online shopping by consumers increases in the last years and they can look at products, the quality and prices of products in a physical store, they should buy them from the online store without considering price or quality next time (Pires et al., 2006). Also, if they experience any problem with the product, they should go directly offline store to deal with the problem about a product or its delivery or after-sales service (Shen et al., 2018; Zhang et al., 2018).

According to Pantano and Viassone (2015), seamless customer experience and effective digitalization for channel integration in mobile technology are a competition in the retail world (Adivar et al., 2019). Moreover, digital developments greatly impact consumer behavior and it is a competitive advantage for retailers because retailers use the mobile tools to create an advantage on promotions in-store by paying via phone or accessing the customer comments and reviews on social

networks (Pantano and Timmermans, 2014). Consumer-focused technology for channel experience in the digitalized retailing sector is a significant indicator to provide a seamless shopping experience during the online and offline shopping under the framework of omni-channel system (Cao, 2014; Park, Kim, and Lee, 2017; Yumurtacı Hüseyinoğlu et al., 2018; Adivar et al., 2019).

In fact, integrated and consumer-focused technology named as an omni-channel system in the retailing system is analyzed in previous studies. Besides, empowerment is based on the consumer's behavior and evaluation process (Thomas and Velthouse, 1990). They indicate consumer empowerment and omni-channel system together without dealing with consumer behavior such as trust, satisfaction (Anderson, Fornell and Rust, 1997; Pires et al., 2006; Herhausen et al., 2015; Yüksel et al., 2016; Ailawadi and Farris, 2017; Mishra and Vishwas, 2018).

1.2. Research Aim and Objectives

The study aims to find out the positive effects of online retailing with the help of digital platforms on consumer empowerment on customer satisfaction. Moreover, this thesis aims to use the S-O-R Framework formed by Mehrabian and Russell (1974) for measuring consumers' shopping behavior, their purchase decision or intention, ability to control consumer's choices and perceived consistency like good accessibility, price consistency, service continuity, effects of social media on consumers' decision. One of the main features in this study is to evaluate the effects of online and offline shopping channels including websites, catalogs, mobile applications, and physical stores on the consumer's decision-making process.

According to Pires et al. (2006), consumer empowerment provides a link between suppliers and consumers by increasing the usage of technological devices and developments such as mobile applications, online stores, websites, e-mail or SMS.

The internet and digital world provide access to more information about the retailers, products, and services, prices in the market including a great number of choices that affect consumer perception and behavior during and after the shopping process (Morrissey, 2005).

Previously, suppliers and retailers control over the customer's thoughts and approaches for the goods and services; however, this control power transmits from supplier and retailer to customer by the development in the retailing under the favor of information and communication technologies (Pires et al., 2006). The technological developments in retailing provide the knowledge transparency on goods and services; knowledge is a significant power to understand and share information about the product, retailer, and market to create and develop consumer empowerment (Pires et al., 2006).

According to Perkins and Zimmerman (1995), empowerment points out to gain control over the decision-making process individually. Thus, consumer empowerment is developed and practiced by getting control over decision-making from a retailer and supplier to individuals in the choice environment (Pires et al., 2006).

According to Pires et al. (2006), consumer empowerment is mainly based on getting control over consumers' decision-making process; also, education, commerce, content, additional access are important facts for consumer empowerment. Operations in the retailing process are adopted as a consumer-based and retailers aim to meet their customers' demands and services by using a term known as customization (Fuchs et al., 2010). Consumers get accurate and useful information via the internet and other sources with information transparency depending on consumer empowerment; also, retailers offer service-products to satisfy their customers' needs (Harrison, Waite and Hunter, 2006).

Consumer empowerment provides to help consumers choose what they want to purchase when they want it, where or how they want it on their decision and choices; so, customers have a control over the decision-making on choice options what they want to get or determine without any attempt to change their decision or choices from supplier or retailer (Anderson, Fornell and Rust, 1997; Pires et al., 2006).

Knowledge is a bridge between consumer and empowerment to evaluate the products and services offered by retailers or suppliers to the customers and satisfy their needs

and requirements with various options in less time and effort (Pires et al., 2006; Fuchs et al., 2010).

According to Fuchs et al. (2010), there are psychological consequences for consumers who are empowered to select and purchase products when, where, how they want. Empowered consumers have power on demanding products that they want, and they are stronger about product demand instead of non-empowered consumers.

Consumers are more empowered because they can access more information, and choice on products, retailers, suppliers, and retailers thanks to the technological developments and digitalization in retailing and it provides stronger relation between retailer and consumer in the shopping process (Harrison, Waite, and Hunter, 2006; Fuchs et al., 2010; Immonen, Sintonen, and Koivuniemi, 2018).

Thanks to digitalization in the retailing, consumers access the online information and various options and consumers evaluate the products and other consumers' reviews about it to provide control over the decision-making process individually; thus, consumer gains more empowered to choose and purchase products and services actively (Harrison, Waite and Hunter, 2006).

Consumers gain power via the internet and digitalization on the market; thus, they can empower to make efficient, effective and pragmatic choices on products and services offered by retailers and suppliers to them (Thomas and Velthouse, 1990). So, they consider the options about alternative products and services which are offered or not offered (Waite and Hunter, 2006).

The study will examine and evaluate the relationship between the subjects and determine a research model that contains links between cognitive and peripheral issues. In this study, the S-O-R framework is used to interpret and evaluate the result of the urge for omni-channel system and consumer empowerment with customer trust and satisfaction (Mehrabian and Russell, 1974; Goi et al., 2014; Zhang et al., 2018; Yumurtacı Hüseyinoğlu et al., 2018).

In this study, consumer empowerment is measured regarding its effects on consumers' behavior on omni-channel system within *the Stimulus-Organism-Response (S-O-R) Framework* as a stimulus (Zhang et al., 2018); omni-channel capability is stated as an organism according to the S-O-R framework (Yumurtaci Hüseyinoğlu et al., 2018) and consumer behavior is defined as a response within the S-O-R Framework (Zhang et al., 2018). Furthermore, channel service transparency is an important moderator within the measurement model (Shen et al., 2018) in this study.

This thesis aims to identify the main aspects of why consumers should prefer both online and offline shopping such as websites, mobile applications, social media, physical stores, catalogs as examples of touchpoints (Baxendale, 2015). One further essential aspect is to find out whether one of the potential constructs within the measurement model provides a major determinant or which factors mostly affects consumers' intention/decision or behavior to use online shopping like mobile applications or offline shopping as physical stores (Pires et al., 2006; Harrison, Waite and Hunter, 2006; Herhausen et al., 2015; Baxendale et al., 2015).

1.3. Research Questions

By the aim of this thesis, the development of important research questions provides an essential and primary guideline for the measurement and evaluation process. To measure the tendency approach of consumers' behavioral intention to use regarding mobile applications, online stores, physical stores at the same time, certain research questions were developed for the evaluation process. The research questions of this thesis are:

RQ1: Does omni-channel capability have a positive impact on consumer empowerment?

RQ2: Does consumer empowerment have a positive impact on customer satisfaction?

RQ3: Does consumer empowerment mediate the relationship between omni-channel capability and customer satisfaction?

RQ4: Does channel service transparency moderate the relationship between omni-channel capability and consumer empowerment?

RQ5: Does channel service transparency moderate the relationship between consumer empowerment and customer satisfaction?

1.4. Originality and Significance of the Study

The S-O-R Framework was established by Mehrabian and Russel (1974) and it has been used to understand consumers' interactions with various channel systems like online or offline stores, mobile applications, etc. and identify consumers' responses to these options to shop for their needs or demands. This model is used to indicate and model consumer behavior during the online or offline shopping process (Jacoby, 2002; Eroğlu et al., 2003; Chang et al., 2011; Kim et al., 2013). Hence, the S-O-R Framework is used for this thesis by its research aim, which specifies and indicates the usage of online and offline shops, physical stores, mobile applications, catalogs depending on the omni-channel system.

Research dealing with consumer empowerment and the omni-channel system is limited; also, there is a lack of sources and findings by using the S-O-R Framework on consumer behavior with the focus on consumer empowerment and omni-channel system together. The S-O-R Framework is used to evaluate the relationship between consumer shopping behavior and the retailing environment (Eroğlu et al., 2001; Morin et al., 2007; Zhang et al., 2018). The model of this thesis is built based on previous literature recommendations and items.

Eroğlu et al. (2001) use the S-O-R Framework, which includes an online environmental cue, internal states as affect and cognition and shopping outcomes as approach and avoidance to understand consumer response to online shopping behavior. Also, Jacoby (2002) criticizes comprehensiveness, coherence, and flexibility in consumer behavior. Furthermore, Kim et al. (2012) use the S-O-R Framework to test reputation and website quality as a stimulus, cognition, and emotion as an organism and purchase intention of consumers as a response. Also, Zhang et al. (2018) demonstrate consumers' positive responses on channel integration to meet consumer expectations with better experiences during online and offline shopping experience by using the omni-channel system. Finally, the originality and significance of this thesis lie in its purpose of measuring the differential effect of gender, age, income, education, and experience.

1.5. Structure of the Thesis

Chapter 1 of this thesis is the introduction part and outlines the aims and objectives of this study. Chapter 2, on the other hand, is completely about the literature review of the previous studies and the building of the model and its relevant measures. Besides, Chapter 2 emphasizes the omni-channel retailing, consumer empowerment and consumer behavior in the retailing sector. Chapter 3 explains the approach of the theoretical background and variables used in this study. Besides, items in this study are explained under the framework of the S-O-R Framework. Chapter 4 mentions the approach of the data collection process survey developments, as well as pretests, pilot studies, and hypothesis developments. Chapter 5 indicates the data analysis based on the S-O-R Framework from the perspective of the validity and reliability of this study. Chapter 6 explains the theoretical and practical implications and limitations of this study. It also refers to the conclusion part and provides an overview of future research necessities and limitations.

CHAPTER 2: LITERATURE REVIEW

The following section of the thesis aims to focus on more details about the omni-channel system and consumer empowerment and their effects on consumer behavior. In this section, there are statements regarding online and offline shopping by including consumer empowerment and consumer behavior. Moreover, it focuses on various factors to understand and evaluate consumer choices or preferences under the favor of the omni-channel retailing.

2.1. Omni-channel System

The physical and digital channels offer various delivery options to provide a seamless shopping experience for customers in the omni-channel system. The omni-channel system offers consumers to shop by using channels anywhere and anytime; so, this system provides consumers a unique and seamless shopping experience. Consumers use various types of devices such as smartphone, tablet, mobile phone or laptop as technological developments. Mobile devices are used about 70 % in the buying process as well as laptops (Rodriguez-Torrico et al., 2016).

Digitalization and improvements in technology help consumers by using various channels such as the internet, mobile phone, tablet, social media, and physical stores. Channels gain importance for retailers from multi-channel to the omni-channel system (Shen et al., 2018). There are three-channel scopes offline channels known as stores, online channels known as web stores and traditional direct marketing channels like catalogs in the multi-channel system, respectively. Consumers can search for goods that they want to buy or need by using these three channels and they search in one channel like an online channel and then purchase the good in another channel like offline store (Verhoef et al., 2015). Multi-channel retailers protect their increased reach and service capabilities in all channels (Agatz, Leischmann, and van Nunen, 2008; Zhang et al., 2010).

The retail channels in the omni-channel system are stores, websites, offline-stores mobile channels like smartphone, tablet, application, social media, customer touchpoints like mass-communication channels such as television, radio, etc. All

channels are integrated, and this integration provides seamless retail experiences for consumers (Verhoef et al., 2015).

The omni-channel system offers consumers a seamless, personalized and customer-focused shopping. Increasing the usage of mobile technology provides to improve and develop online retailing with the integration of all channel systems (Li et al., 2018; Yumurtacı Hüseyinoğlu et al., 2019).

2.1.1. Omni-channel Retailing

There is a rapid development in e-commerce and new digital channels to provide a connection between retailers and consumers by using websites, physical stores, catalogs, internet kiosks, mobile applications and call centers (Khanna, Jacob, and Yadav, 2014). And all these developments shift from multi-channel retailing to omni-channel retailing. All channels are served effectively and efficiently to a consumer by retailers and suppliers in the omni-channel retailing (Shen et al., 2018). And all the channels support the same aim for consumers to serve their customers no matter what, where and when they want to purchase the goods and satisfy their customers efficiently and sufficiently (Zhang et al., 2018).

The characteristics of omni-channel retailing are buy-on-line, pick-up in-store and ship-to-store option, unlimited operating hours in shopping access and optional delivery strategy such as store delivery, home delivery like drop-shipping, same-day delivery, store pick-up as click-and-collect, reserve-and-collect, advanced information technologies, and database structure like online stores availability, customer and inventory database, integrated inventory and pricing system across each channel (Huré et al., 2017; Chen, Cheung, and Tan, 2018; Adivar et al., 2019).

Consumers may search and compare products and prices from online and offline stores at the same time in omni-channel retailing. The integrated retailing system named as an omni-channel system includes information access, prices, product assortment, and order fulfillment. The omni-channel system increases customer satisfaction and trust in the shopping experience by integrating channels (Herhausen et al., 2015; Weiner et al., 2018; Zhang et al., 2018).

Customers prefer using smartphones, tablets or laptops to search for products on the online store instead of the physical store in omni-channel retailing. Customers can purchase products and services from the online or offline store when and where they want (Chang et al., 2015; Mclean, Al-Nabhani, and Wilson, 2018).

Omni-channel retailing provides customers to purchase their demands or requirements in a seamless shopping experience by integrating retailing channels like stores, online, and mobile (Chen, Cheung, and Tan, 2018). Integration of channels and its positive effects on their experiences about shopping increases the customers' purchase intentions and retailers integrate channels to implement all services under the favor of technological advances to be transformed from multi-channel to omni-channel retail (Jocevski et al., 2019). Physical stores are essential destinations for customers to get shopping experiences and an omni-channel retailing system helps customers to improve their shopping experiences beneficially in the sense of operational productivity (von Briel, 2018). Previously, there is confusion between channels by increasing the usage of technological developments in retailing (Brynjolfsson et al., 2013; von Briel, 2018).

Omni-channel retailing provides an integrated process including integrated products or services to consumers in the framework of purchase, return and exchange in each channel (Chen, Cheung, and Tan, 2018). The changes in the retail supply chain structure from multi-channel to omni-channel include retailers, suppliers, manufacturers, distributors, distribution centers, retail stores, online stores and end-users (Herhausen et al., 2015; Murfield et al., 2018; Jocevski et al., 2019).

The omni-channel retailing has crucial and basic features such as benefit from the discount opportunity across all channels to ensure channel consistency, full integration of channel data systems across all channels (Yumurtaçı Hüseyinoğlu et al., 2018).

The integration of online and in-store experiences increases sales rates (Ishfaq et al., 2015). Omni-channel retailing for consumers aims to provide performance and long-term success utilizing technological investments and developments, security issues, marketing strategies and searching options (Herhausen et al., 2015). Moreover,

retailers need to improve and develop the use of mobile technology, information system, marketing, operations, and supply chain strategies (Rodriguez-Torrico et al., 2016). There are front-end and back-end components in the omni-channel retailing. Front-end known as B2C components focuses on customer experiences and customers' purchase decisions. Especially, a customer purchase decision is related to spend time shopping, price, promotion and special offers, product assortment, good service, efficient buying experience (Pantano and Timmermans, 2014). Back-end known as B2B components is based on the supply chain visibility, streamlined inventory, logistics operations (Verhoef et al., 2015; Yumurtacı Hüseyinoğlu et al., 2019).

Sustainability, responsiveness, flexibility, efficiency, and effectiveness are performance metrics in the omni-channel retailing (Berthon et al., 2012). In addition to them, usage of various channels on online retailing such as mobile stores, mobile application stores or telephone sales provides to gain a competitive advantage for retailers (Straker, Wrigley and Rosemann, 2015).

In omni-channel retailing e-mail, printed and social media, mail, and television increase consumer awareness; also, websites, blogs, and social media provide a product assessment by purchasing through a mobile application like a tablet, catalog (Yumurtacı Hüseyinoğlu et al., 2019).

There are major and critical criteria for customers to use and select omni-channel retailing. These criteria are searching utilities, the availability of communication channels, inventory visibility, flexible delivery alternatives, personalized in-store service for a seamless shopping experience (Lazaris and Vrechopoulos, 2014). Internet, channel comparison and customers' channel behavior are the main components of omni-channel retailing to provide an integration between consumers and retailers, share information about inventory on online and in-store and product variety, offer variety logistics services, save time on shopping to have a seamless shopping experience without any barriers between channels during purchase process (Verhoef et al., 2015; Juaneda-Ayensa, Mosquera and Murillo, 2017).

The omni-channel retailing provides customers both shopping across channels and interacting with retailers on the online form where they want and when they want in a seamless shopping experience. The omni-channel retailing removes all obstacles between physical stores and online or mobile stores. By the help of technological developments in the retailing, new channels and touchpoints such as mobile applications, social media, smart TV and smartwatches help to change consumer habits and shopping behavior in the shopping process in addition to physical and online stores so there is a transformation in buying process (Mosquera et al., 2017).

2.1.2. Omni-channel Capability

The aim of the multi-channel retailing is to provide the integration of all retail channels and the management of customers across all channels (Ishfaq and Bajwa, 2018). New challenges to integrating online and offline retailing are used for digitalization in the marketing and retailing industry to transform from multi-channel to omni-channel retailing (Verhoef et al., 2015).

Offline channels as stores, online channels as web stores, traditional direct marketing channels as catalogs are used for the multi-channel retailing system (Agatz, Fleishmann and van Nunen, 2007). There are three channel options for customers in the multi-channel retailing like online stores and physical stores. Customers can search products and services on online and buy it from online store, or they can go to physical store to buy their needs before the progression from the multi-channel to omni-channel system in retailing. After the establishment of the omni-channel system in the retailing, there are additions on channels such as mobile applications, touchpoints (Verhoef et al., 2015).

The multi-channel system changes into the omni-channel retailing system and it aims to offer a seamless shopping experience by using technological and integrated channels in the system to guide consumer purchase intentions with uninterrupted and independent shopping experience by providing product availability in all channels (Verhoef et al.,2015; Beck and Rygl, 2015).

Integrated and consumer-focused technology is a significant need for retailers to transform the channel experience from a multi to omni-channel system (Li et

al.,2017). The integrated channel system is the primary strategy for the progress in the omni-channel system in the retailing industry (Kim, Park and Lee, 2017; Rosenmayer et al., 2018).

There are crucial dimensions to satisfy customers who use omni-channel retailing such as transportation and logistics (Murfield et al., 2017). As a result of developing consumer's perceptions and demands on omni-channel retailing, the new term is revealed named as "omni-channel capability" (Yumurtacı Hüseyinoğlu et al., 2018). This term includes the ability on the usage of retailers' omni-channel marketing in terms of service, assortment, notifications, return and delivery options from retailer to consumer. Logistics service quality is a measure to develop omni-channel capability (Wiener et al., 2018).

The omni-channel retailing strategy offers customers to search and access the relevant information about products and services, product availability on the online stores, product quality, promotions, price comparison within the channel consistency and these significant features offer customers uninterrupted flow between channels to offer and ensure remarkable benefits to their customers (Mosquera et al., 2017).

Retailers integrate both physical stores and online channels about their order management, fulfillment, and logistics processes including delivery options such as click and collect, click and reserve, reserve and collect (Kim, Park and Lee, 2017). The omni-channel system offers its customers to purchase goods and services not only physical store-based but also online store-based to satisfy consumers and provide a seamless shopping experience in shopping process (Lazaris and Vrechopoulos, 2014; Ishfaq, Defee and Gibson, 2015). The omni-channel system offers customers to purchase goods and services not only physical store but also online store to satisfy consumers and provide a seamless shopping experience in shopping process (Lazaris and Vrechopoulos, 2014; Ishfaq, Defee and Gibson, 2015; Juanede-Ayensa et al., 2016).

The omni-channel system has a bridge between retailers and consumers to purchase the same brand by using both the retailer's physical and online store at the same time. In general, most retailers provide their supply chains for their customers in their

store-based operation except using online channels, and they try to ensure satisfaction level of their customer service in the physical stores in an omni-channel environment (Dennis, 2017; Kim, Park and Lee, 2017; Dwivedi et al., 2018). In addition to these factors, there are many requirements and capabilities to manage and provide an omni-channel strategy during the retailing environment. Also, the logistics operations chain is one of the significant features for the omni-channel capability as it is mentioned as a requirement and capability (Wiener et al., 2018). The quality of logistics service is one of the significant features of omni-channel retailing under the framework of business-to-consumer (Jocevski et al., 2018). Omni-channel capability focuses on the ability of a retailer's marketing channels to be consistent in terms of service level, assortment, notification (informing), return and delivery options with consumers' perspective (Yumurtacı Hüseyinoğlu et al., 2018).

2.2. Consumer Empowerment

There is a significant improvement in e-commerce and digital channels. Websites, physical stores, catalogs, internet kiosks, mobile apps, and call centers are newly available channels to build a bridge between retailers and consumers in the progression process from the multi-channel to omni-channel retailing (Ishfaq and Bajwa, 2018). In the omni-channel retailing, retailers provide the requirements of their customers what, when and where they want to purchase (Baxendale et al., 2015; Sahi et al., 2016). Moreover, retailers aim to satisfy the retailer's consumers by getting and improving services in any channel (Zhang et al., 2018).

Channel integration means the integration in price, assortment, inventory, order-fulfillment and service (Herhausen et al., 2015). Also, consumer shopping decision is a key item on the pricing strategy for retailers. Price consistency and profitability are other key items to ensure an effective price differentiation strategy in all channels (Ishfaq and Bajwa, 2018; Zhang et al., 2018).

Consumer perceptions and responses are important issues for the omni-channel retailing. The implementation of omni-channel retailing and its processes are assessed positively or negatively by consumers, and retailers give importance to consumers' responses through their shopping experience to ensure higher trust, satisfaction and purchase intention level by using channel integration in the omni-

channel retailing; thus, consumers' perceived trust and satisfaction about shopping experiences and purchase intention to ensure and increase the consumer empowerment about the omni-channel retailing (Zhang et al., 2018).

Empowerment attempts and improvements in retailing helps to increase the usage of technological developments such as social media, mobile apps., laptops, tablets (Tjhin et al., 2017). Self-efficacy, self-experience, self-determination can be increased to provide consumer empowerment. Empowerment is a term to define the consumers' influences on the product design and decision-making process in shopping (Pires, Stanton and Rita, 2006; Fuchs et al., 2010). Consumers contribute to solve problems on products, goods, and services and develop solutions; thus products, goods, and services can be improved in the omni-channel retailing by consumers' comments and directions (Füller et al., 2009).

Consumers get advantages in searching for and gathering new market data, increasing consumer market knowledge, evaluating offers in terms of economic, time and logistic constraints (Pires et al., 2006). Technology makes suppliers and retailers more empowered and consumers also provide empowerment by developing technology and devices such as tablets, laptops, mobile apps, the internet kiosks to give response to customer demands on quality, affordable price and satisfactory service in the omni-channel retailing (Jocovski et al., 2018; Rosenmayer et al., 2018).

2.2.1. Path to Purchase Journey of Consumer

Before the improvements in online shopping, the shopping activity was based on face-to-face interaction between consumers and retailers, and their service personnel in the physical stores. Furthermore, the developments in commerce on online shopping impacts on consumer behavior (Park and Kim, 2003).

Consumers gather information about products and services on the internet with the help of retailers' websites; thus, consumers look at the pictures, images, general and quality information and comments of products and services via the online store (Eroğlu et al., 2001). There are key issues such as the characteristic information about products and services via slides, short presentations, order fulfillment on online shopping (Park and Kim, 2003).

Online shopping aims to save consumers' time and money by gathering relevant and essential information about products and services during searching and purchasing processes. Online shopping helps consumers to collect various information about the product such as price comparison, quality characteristics, product visuals like pictures and videos. In addition to them, other consumers' comments, the retailer's inventory database for online and physical store availability, delivery service options like click-and-collect, reserve-and-collect or store-pick-up are accessible from online shopping (Holford, 2018). In addition to these issues, consumers give importance to sales-service, after-sales services such as customer service both in online and physical stores. They want to reach all the information about products and services which are available. All these factors shape consumer behavior in the purchasing process (Park and Kim, 2003; Mosquera et al., 2017; Zhang et al., 2018).

The consumer behavior is a crucial issue for retailers in the shopping process both in a physical and online store. Retailers know about consumers' needs. The consumer purchase behavior significantly affects the quality and quantity of products, pricing policy, retailing, advertising, sales options, delivery options (Holdford, 2018).

Consumer wants to be insecure in the payment process because consumers are concerned about online payment security, reliability and privacy policy of online stores in online shopping (Juaneda-Ayensa et al., 2016; von Briel, 2018). Furthermore, retailers offer consumers the protection of personal information and guarantee for transaction security to their customers to gain consumer trust in online shopping (Elliot and Fowell, 2000). When the security risks decrease, consumer trust and satisfaction on online shopping increases. Also, consumers give importance to information quality about product and service both online and offline shopping to ensure and increase trust and satisfaction in shopping period (Park and Kim, 2003).

Channel integration aims to increase consumer trust and satisfaction by empowering consumers in the shopping process both online and offline. Besides, there is a relationship between consumer perceptions of channel integration and empowerment on consumer trust and satisfaction and behavior (Sahi et al., 2016; Mishra and Vishwas, 2018). Omni-channel retailing offers integrated shopping experience to customers in higher trust, satisfaction and several purchases and delivery options to

provide and increase a seamless shopping experience (Herhausen et al., 2015; Pantano and Viassone, 2015; Zhang et al., 2018).

Consumer perception is impacted by positive and direct interactions between the consumer and retailer both in online and offline stores. Besides, when consumer perception is increased both in an online and physical store, the consumer is empowered (Fuchs et al., 2010; Baxendale et al., 2015). Empowered consumers are not in control over their decisions and choices in a shopping process (Füller et al., 2009; Zhang et al., 2018). These issues increase consumer perception. Moreover, consumers are conscious of their needs, requirements, and demands which they satisfy. Thus, consumer behavior changes positively in an empowered way by being more conscious in a shopping process (Sahi et al., 2016; Zhang et al., 2018).

2.3. Channel Service Transparency in Retailing

The channel integration is related to omni-channel retailing and the channel integration quality includes channel choices in the shopping process within the channel service transparency. The channel choices are shown via channel service transparency and it helps customers to access the information and services from different channels for their needs and requirements; thus, the access of information about products from different channels at the same time makes the customer more satisfied in the shopping process (Shen et al., 2018).

The channel service transparency defines the level of customers familiarity with the available channels both in online stores and in physical stores. It provides consistency in inventory both online, offline and physical stores at the same time. Thanks to the channel service transparency in retailing, customers can gather information about products and services, product availability on the online store, product quality, promotions, price comparison and other customers' comments about products and services from different channels (Shen et al., 2018).

Content and process consistency are provided by channel service transparency and it has a positive effect on customers' perceptions by using the omni-channel service for a seamless shopping experience; also, the customer's awareness of all available service channels is provided by channel service transparency; thus, it reduces the customer's

uncertainty in the shopping process, and it provides fluency in all channels during the online and offline store shopping (Shen et al., 2018).



CHAPTER 3: THEORETICAL BACKGRROUND

3.1. Theoretical Background

The omni-channel retailing system which is used to shop both online and physical stores by using technological devices is still developing (Verhoef et al., 2015; Yumurtacı Hüseyinoğlu et al., 2018). Innovativeness, usefulness, ease of use, timesaving and/or subjectiveness are characteristics that create and ensure the impact on consumers and their purchasing behavior within a seamless shopping experience (Galipoğlu et al, 2018; Hüseyinoğlu et al, 2018).

Chang et al. (2015) argued that the concept of retailing has transformed from multi-channel retailing to omni-channel retailing with the help of new other channels within the digitalization such as mobile channels like mobile applications, online stores, internet kiosks and social media like Twitter, Instagram, and Facebook. The rate of online users increases by using and developing a network for marketing channels. The usage of social media is a powerful communication tool to share information about sales, products, and services, prices with consumers whenever retailers want. Moreover, communication technologies provide cohesion between retailers and consumers (Baxendale et al., 2015; Wiener et al., 2018).

Mobile applications help consumers to get and collect a variety of products and services whenever and wherever they want (Tjhin et al., 2017; von Biel, 2018). Digitalization with technological developments in the retailing sector provides to shape customers' usage and purchasing behavior within the omni-channel retailing. It eases to explain consumer behavior and attitudes, ease of use (McLean et al, 2018).

Li et al. (2018) stated that the omni-channel retailing system offers customers to provide a seamless shopping experience both online and offline shops in shopping and channel activities are correlated with promotions, transaction information management, products and pricing, information access and order fulfillment, customer service. It aims to integrate cross-channel information and functions through the omni-channel retailing system. The omni-channel retailing helps consumer to evaluate products and services and compare them in-store via mobile applications in the shopping process.

According to Zhang et al. (2018), the improvements in e-commerce and new digital channels are a bridge between retailers and consumers including websites, physical stores, online stores, mobile apps. Omni-channel retailing provides integrated service and channel integration to meet consumers' expectations and demands from retailers both online and offline stores at the same time; also, it increases consumer perception in the shopping (Shen et al., 2018). Consumer satisfaction depends on the consumer's shopping experience (Kim, Park and Lee, 2017; McLean, Al-Nabhani and Wilson, 2018). In addition to customer satisfaction, channel integration increases consumer empowerment. For instance, consumers can view and compare products, their quality and prices in the stores; then, consumers can purchase them online (Wathieu et al., 2002; Fuchs, Prandelli and Schreier, 2010). Furthermore, consumers can visit online stores to compare the prices; then, they may go to store to check the product quality in the physical stores.

The omni-channel retailing offers new challenges to both consumers and retailers by integrating channels for e-commerce and digitalization in the retailing channels. Self-aware and self-motivated consumers may emerge under the favor of channel integration via omni-channel retailing (Shen et al., 2018; Zhang et al., 2018). According to Saghiri et al. (2017), self-motivated integrated channels and services are required for consumers in the shopping process and thanks to the integrated channels, products, and prices may be compared both online and offline stores by consumers. Furthermore, consumers may have multiple accounts on the different channels to collect information about quality or price, compare products and prices and purchase the goods and services. Consumers can shop buy-online and pick-up-in-store in omni-channel (Saghiri et al., 2017).

According to Zhang et al. (2018), the integrated channel system influences on the consumer and consumer perception in the purchase decision process in shopping (Mummalaneni, 2005). Also, channel availability both in-store and on an online store can be controlled in an omni-channel retailing system. Consumer intentions, usage of browse, buying or retaining goods and services by using omni-channel system can shape shopping behavior (Richard et al., 2010; Holford, 2018; Tjhin et al., 2017).

The omni-channel channel provides consumers direct shopping channels with interaction based on social media, mobile applications, internet-based technologies, e-commerce (Tjhin et al., 2017; Weiner et al., 2018). Shopping behavior, loyalty intentions of both omni-channel customers, supply chain processes, service quality, returns management, inventory management, capacity management are basic points of omni-channel retailing (Galipoğlu et al., 2018).

Integrated and advanced technology in each channel provides a seamless shopping experience to consumers during and afterward the shopping process. The omni-channel retailing system provides an uninterrupted shopping experience for customers during a shopping. They can reach product availability both online and in the store's inventory and purchase products online in a comfortable way (Herhausen et al., 2015). Furthermore, they can choose delivery options such as click-and-collect, brick-and-collect, reserve-and-collect, etc. (Yumurtacı Hüseyinoğlu et al., 2018). On mobile applications, consumers can search for products on social platforms, find and collect information like price comparison, comments about products (Mosquera et al., 2018).

Omni-channel capability includes the level of service, the integration of all channels, delivery options, inventory management, notifications to inform (Yumurtacı Hüseyinoğlu et al., 2018). With the help of the omni-channel capability, the logistics service quality can be tested and developed measures for omni-channel retailing (Verhoef et al., 2015; Murfield et al., 2017; Jocevski et al., 2018).

According to Yumurtacı Hüseyinoğlu et al. (2018), there is an integration between all channels in the marketing to increase and develop consumer perception on pricing, varieties, and consistency in both channels and services. Order management, fulfillment, and logistics processes are organized both on retailers' physical and online channels by retailers. The customer satisfies with the integration of all channels in the market under the favor of the omni-channel retailing (von Briel, 2018). Retailers may observe the operational features of how the goods and services are offered to consumers effectively and efficiently.

3.1.1. The S-O-R Framework

The S-O-R framework is used to define and explain the relationship between the retailing environment and consumer shopping behavior (Mehrabian and Russell, 1974; Morin et. al., 2007). There are basic, primary and essential responses which are indicated by stimuli. Human judgments can differ in three dimensions: evaluation, activity, and potency. In addition to this, there are also emotional responses such as pleasure, arousal, dominance (Mehrabian and Russell, 1974).

According to Peng et. al. (2014), the S-O-R framework ensures evidence for the social sciences, especially psychology. Input-output (I-O) models have offered an approach to more advanced the stimulus-organism-response (S-O-R) models. Jacoby (2002) stated that consumer behavior (CB) is described and indicated by thoughts to build with comprehensiveness, coherence, and flexibility. In the previous models, the CB models were described in the form of the Input to Output (I-O) model. However, this I-O model was expanded as a more sophisticated form in the stimulus-organism-response (S-O-R) model.

The S-O-R framework suggests that environmental issues create (S-stimulus) which has the capacity the effect consumer behaviors or moods (O-organism) that lead to behavioral response (R-response) (Baker, 1992). Goi (2014) suggests that S-O-R framework requires environmental issues as a set of independent variables in a certain behavior, and it contains a behavioral or cognitive response to the variables.

The S-O-R framework expresses that the environment includes stimuli (S) that trigger alterations in consumers' internal and organismic states (O), which impacts an approach or avoidance responses (R) (Mehrabian and Russell, 1974).

In the traditional S-O-R framework, the environmental principle explains the cognitive reactions which take place due to encounter with the stimuli of specific conditions (Mehrabian and Russell, 1974; Donovan and Rossiter, 1982).

The S-O-R framework describes the connection between the stimulus, organism – consumers' internal opinions and states - and response, which is the final reaction to a stimulus. According to studies on the S-O-R framework, a stimulus affects

consumers' state of mind or internal state which will lead to change in their behaviors.

Eroğlu et al. (2001; 2003) state that the S-O-R framework provides the conceptual foundations for online retailing, and it encourages an empirical baseline for the significant effects of websites, online stores, mobile applications on individuals' attitudes, satisfaction levels and a variety of approach and avoidance behaviors.

3.1.1.1. Omni-channel Capability as Stimulus

The S-O-R model is one of the most utilized conceptual foundations for online shopping, consumer behaviors, independent shopping experience and product availability in all channel systems (Goi et al., 2014).

Consumers get information about products via mobile and social media with the help of the omni-channel system. Social media is an outstanding touchpoint for consumers to get information on products or communicate about their shopping experiences and retailers' attitudes (Berthon et al., 2012). There is an integration between social media and retailers' applications. In addition to customers, retailers use social media to reach, inform and get the attention of consumers through their omni-channel management strategies (Hüseyinoğlu et al., 2018).

The omni-channel retailing consists of the channel consistency, the returnability of products, the purchase points, the integration between data about channels for consumers, pricing, assortment and consistency in all services. Moreover, retailers arrange their order management, fulfillment, and logistics processes both in their physical stores and online stores (Verhoef et al., 2015; Murfield et al., 2017; Yumurtacı Hüseyinoğlu et al., 2018).

There are some advantages of the omni-channel retailing for consumers such as catching discounts on online shopping, returnability of products, different delivery options like click-and-collect, click-and-reserve, reserve-and-collect, data integration across all channels, pricing (Kim, Park and Lee, 2017; Yumurtacı Hüseyinoğlu et al., 2018). There is an uninterrupted shopping experience for consumers across channels.

Moreover, retailers can understand customer needs and expectations directly (Verhoef et al.,2015; Beck and Rygl, 2015).

A stimulus refers to a connective and crucial factor between consumers and retailers. In the current literature, channel consistency (Yumurtacı Hüseyinoğlu et al., 2018) is a significant measure item for the delivery time, price, uninterrupted shopping experience, delivery options, etc. Various channels like a physical store, online store, mobile application or social media are formed the omni-channel system as a stimulus. Consumers want to get more information about the same product variety, product availability, product price, delivery options like click-and-collect, reserve-and-collect, etc. by using both online and physical stores at the same time as a capability of the omni-channel system (Kietzmann et al., 2011; Straker et al., 2015).

Omni-channel capability as a stimulus is affected by operation logistics service qualities. Back-end operations like inventory availability, on-time and accurate delivery, order fulfillment, return management and service recovery in the part of the operational logistics service quality are related to the consumers' satisfaction level (Saghiri et al., 2017; Wiener et al., 2018). Moreover, omni-channel capability provides to understand and be aware of the consumer's needs and requirements (Hüseyinoğlu et.al, 2018).

The channel integration and channel consistency have become more significant terms to increase the usage of mobile technologies in physical stores and on online stores to remove all barriers for consumers between online and offline shopping experience. Omni-channel capability includes physical stores as a showroom, online stores, mobile applications (Hüseyinoğlu et.al, 2018).

3.1.1.2. Consumer Empowerment as an Organism

In S-O-R model, organism represents the internal evaluation and triggers an effect between external stimuli and consumers' expectations for consistent, uniform, integrated services and experiences through all channels in the omni-channel system within the channel integration (Zhang et.al, 2018).

Consumer responses depend on the consumer perceived reactions through their shopping experiences and it is called a consumer empowerment (Pires et al., 2006). It has an influence on purchase intention of consumers in the shopping experience both online and in physical store. Channel integration advances the consumer empowerment under the stimulus-organism-response (S-O-R) framework (Harrison, Waite and Hunter, 2006; Zhang et.al, 2018).

There is a rapid growth in the e-commerce and new digital channels to be used for transaction between retailer and consumers such as websites, physical stores, catalogs, Internet kiosks, mobile applications and the integration within all these channels is called omni-channel retailing (Khanna, Jacob and Yadav, 2014). In the omni-channel retailing, consumers can search and purchase goods and services no matter what, when and where they want to. These services in the omni-channel retailing provide consumers to be empowered in shopping process (Sahi et al., 2016; Zhang et.al, 2018).

New channels and their integrations in the e-commerce significantly affect consumer perceptions and responses positively (Ishfaq and Bajwa, 2018). Additionally, consumer responses for omni-channel retailing depend on their shopping experience; thus, it increases the consumer empowerment (Pires et al., 2006). Consumer empowerment (Thomas and Velthouse, 1990) is a mediating item to explain how the consumer satisfaction and consumer trust are increased under favor of the omni-channel retailing (Herhausen et al., 2015). Omni-channel capability are mentioned as a stimulus and consumer empowerment is defined as an organism in this study (Mishra and Vishwas, 2018; Zhang et.al, 2018).

Consumer empowerment is defined as a mediating factor to influence on consumer behavior in the online shopping process (Fuchs, Prandelli and Schreier, 2010). Furthermore, consumer perception in the channel integration and empowerment have a relationship to be empowered consumers on the omni-channel retailing process. In addition to increasing in the consumer perception, empowered consumers have a control over the products and their choices in the shopping process because they search and get more information about products and services from retailers and other

consumers via comments with the help of the omni-channel retailing (Mishra and Vishwas, 2018; Zhang et.al, 2018).

Satisfaction affect positively consumers to empower their decision-making process to gain more choices with expanded information about the products and services given by retailer in a shopping process (Wathieu et al.,2002; Mishra and Vishwas, 2018). Consumer perception is based on the self-determination and self-control to be empowered in a shopping process (Pires, Stanton and Rita, 2006; Fuchs et al., 2010).

3.1.1.3. Consumer Behavior as a Response

There is a relationship between consumer perception in channel integration and consumer attitudes and behaviors by using the Stimulus-Organism-Response (S-O-R) framework. The channel integration on omni-channel retailing provides consumers to access information about products and services, prices, product assortment, order fulfillment, and logistics services to get a seamless shopping experience (Herhausen et al., 2015; Zhang et.al, 2018).

Digitalization in the retailing is a beneficial development for consumers to be involved directly in the decision-making and shopping process (Meyer and Schwager 2007). An all-new digital improvement in the retailing makes consumer empowered to gather information accurately and directly about all retailer's products and services including price, product quality, inventory in stores, advertisements, product comments, etc. Also, consumers can choose other alternatives between all channels offered by the retailing (Fuchs et.al, 2010; Baxendale et al., 2015).

Consumer empowerment is a mediating factor to control consumer attitudes, judgments and behaviors about retailers, their products and services in the shopping process and after-sale services by using omni-channel capability. A consumer can collect the accurate, expanded and integrated information system from retailer's websites and other consumers' comments (Kietzmann et al., 2011).

The new digital developments in the retailing market provide useful interactions between retailers and consumers both in online stores and in physical stores in the shopping processes. These new digital developments help to increase consumer

perception about products and services in the shopping process and they have a seamless shopping experience with trustworthy and satisfied online and offline shopping under the favor of omni-channel retailing system (Saghiri et al., 2017; Mishra and Vishwas, 2018; Zhang et.al, 2018).

Consumer behavior is constructed via omni-channel capability and consumer empowerment both online and in-store shopping process. Consumers interact with retailers and other consumers with the help of digitalization in the retailing (Herhausen et al., 2015). They can control and empower themselves in the shopping process with self-determination and they can collect more accurate information about the retailer's products and services both retailer and other consumers directly (Huré et al., 2017). When they reach more data about products that they want to purchase both online and in a physical store, omni-channel retailing helps a consumer to build a trustworthy and satisfying shopping experience (Ieawa and Ziliani, 2018). Consumer empowerment and customer trust affect positively the consumer's purchase decision-making process (Pires et al, 2006). Also, empowered consumers to mean that they are satisfied with the retailer's products and services (Fuchs et.al, 2010; Mishra and Vishwas, 2018; Zhang et.al, 2018;)

Empowered consumers control over their decision-making process in shopping. They perceive their requirements and they can compare other retailers' products on online in terms of price, quality, delivery options, and services, comments about products or retailer, after-sale service, etc. before they purchase the product (Chen, Cheung, and Tan, 2018; Wiener et al., 2018). Moreover, they can be more independent to choose products that they want, when they want, where they want to purchase the products and omni-channel retailing offers consumers to be empowered with the help of digitalization in all channels by providing a more trustworthy and satisfied shopping process (Chang et al., 2015). In addition to these facts, consumers are stronger to decide and select the products themselves (Fuchs et.al, 2010; Vogel and Paul, 2015; Zhang et.al, 2018).

The digitalization in retail provides consumers to be empowered with a seamless shopping experience within satisfaction. Empowered consumers have gained the power to control over decision-making and choice options without any attempt from

retailer (Perkins and Zimmerman, 1995; Pires et al., 2006). Furthermore, they can collect and get accurate information about products and services, pricing, product and service quality, inventory management, delivery options such as brick-and-collect, reship-serve-and-collect, click-and-reserve, click-and-collect (Baxendale et al., 2015; Galipoğlu et al., 2018). Thus, all these outcomes make the consumer satisfied with seamless customer experience on shopping (Fuchs et.al, 2010; Herhausen et al., 2015; Vogel and Paul, 2015; Zhang et.al, 2018; Adivar et al., 2019).



CHAPTER 4: RESEARCH MODEL & METHODOLOGY

The following section deals with the scientific approach of this study. It emphasizes how data was gathered through questionnaires and it explains in which context the survey was developed. Additionally, it clarifies the prior literature review, which provides the vital background for the hypothesis development. In a final step, the section shows the approach of data analysis by using a software program which is reached accurate results during the analysis.

4.1. Survey Development

The survey, which was used for this research was developed to reach as many respondents within the legal limits of online shopping (age 18) as possible. The questions of the survey were adapted from prior articles, which studied the effect of omni-channel retailing and consumer empowerment on distinct fields. The scale-items of the entire thesis were used from previous literature to ensure the availability of adequate items for the data analysis approach. Nine items for omni-channel capability were taken from Hüseyinoğlu et al. (2018). Additionally, five items on consumer empowerment were added from Zhang et al. (2018) for measuring the consumer perception in channel integration and empowerment. Also, 3 items for measuring the channel service transparency were selected from Shen et al. (2018). There were 5 items for measuring customer satisfaction were mentioned by Zhang et al. (2018) (displayed in Table 1).

4.2. Pretest

The scale-items of the entire thesis were used from previous literature to ensure the availability of adequate items for the data analysis approach. After the integration of all scale-items, the questionnaire was pretested with ten lecturers in logistics management and English translation and interpreting departments and asked them to comment on the understandability, readability, and clarity of the statements in the questionnaire.

According to participants comments, the independent and dependent variable scripts were separated into two groups depending on their contents. The format and statements of the measures in the questionnaire were considered and reviewed in accordance with their suggestions.

4.3. Pilot Study

The survey was developed as a five-scale questionnaire. The following answer possibilities were given within the survey: 1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, 5 = strongly agree. To ensure the comprehension of the questionnaire, a pilot study was conducted in Izmir. A total of 50 respondents were chosen for attending the survey. The questionnaire was tested by respondents of different ages, branch. After the pilot study was completed, it was observable that the survey provided enough comprehension related to the questions and the answer opportunities. All respondents completely fulfilled the questionnaire and generally found it to be comprehensible. There were some improvement suggestions made by 10 respondents to be clearer with the full definition of the survey on the introduction page before starting to answer it and be more comprehensible questions. After the improvement suggestions, the survey was revised.

Table 1. Average of Constructs in the Pilot Study

Variable	Items	Averages
Omni-channel Capability	OCC1 OCC2 OCC3 OCC4 OCC5 OCC6 OCC7 OCC8 OCC9	3.856
Consumer Empowerment	CE1 CE2 CE3 CE4 CE5	3.592
Channel Service Transparency	CST1 CST2 CST3	3.54
Customer Satisfaction	S1 S2 S3 S4 S5	3.98

Table1. illustrates the average constructs of each variable including its items measured by using SPSS 22.0. There were five main criteria and their sub-items to be observed as can be seen on the above table. The averages of variables are over

3.5. Due to averages of these items above table, all items can be used to achieve accurate results in a larger sample size for the final analysis, which could change the values by gained from the pilot study for this thesis.

Table 2. Reliability for the Pilot Study

Variable	Items	Cronbach's Alpha
Omni-channel Capability	OCC1 OCC2 OCC3 OCC4 OCC5 OCC6 OCC7 OCC8 OCC9	0.685
Consumer Empowerment	CE1 CE2 CE3 CE4 CE5	0.746
Channel Service Transparency	CST1 CST2 CST3	0.758
Customer Satisfaction	S1 S2 S3 S4 S5	0.810

Table 2. illustrates the reliability of each variable including its items measured by using SPSS 22.0. As can be seen in the above table, five main criteria within 22 sub-items are observed. Regarding Nunally et al. (1968) the required value provides over 0.7 (Natarajan et al., 2017). Due to Cronbach's alpha of these items above table, five items of this study fulfill the criteria in the pilot study. Also, it was continued with all items to achieve a larger sample size for the final analysis, which could change the values again.

4.4. Research Model

In this study, the S-O-R framework is used for constructing hypotheses and research model. Omni-channel capability as a stimulus, consumer empowerment as an organism and customer satisfaction as a response are indicated to show dependent and independent variables, mediator and moderator roles in the path.

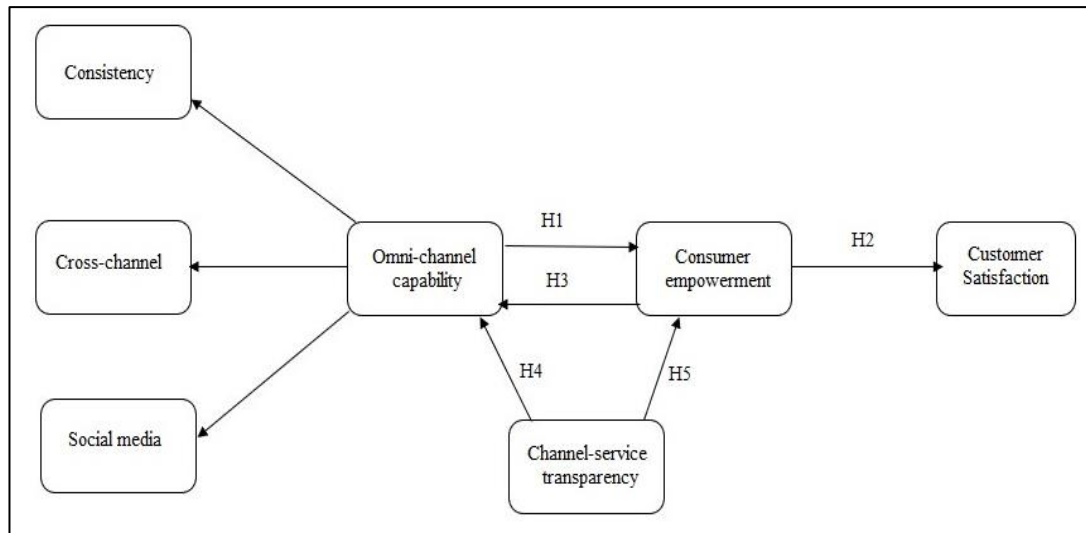


Figure 1. Research Model

The above research model was conceptualized based on the S-O-R Framework by Mehrabian and Russell (1974) to define the research path. Previous studies and researches were used for the preparation of the links between items, dependent variables and the moderator variables to draw a research path. Other sections of the research model provide further details about the hypothesis development regards to previous prior literature. Besides, all sections provide to develop hypotheses of this thesis by the research model. All items and their variables that are used to construct the model of this thesis are referenced from previous researches on the literature.

4.5. Hypotheses Development

The omni-channel capability is a new term which has been included the literature along with recent researches. The prior study measured logistics service quality on omni-channel capability. For instance, Hüseyinoğlu et al. (2018) measured the omni-channel capability and claimed that logistics service quality significantly affects consumer perception regarding e-commerce.

It was established that integrated, consumer-focused technology within the channel experience alteration into a total retail experience both online and in-store shopping by using omni-channel service usage (PWC, 2014; Huré et al., 2017; Shen et al., 2018). However, there are several studies about the digitalization on the retailing both consumer and retailers' sides (Shen et al., 2018). According to Kim et al. (2017), digitalization in the retailing provides both products and services in a convenience and personalization for all customers to meet their needs in the shopping by using

mobile applications, websites of retailer's to access the relevant information on product availability and varieties, compare prices with other retailers on online stores and delivery options such as click-and-collect, reserve-and-collect etc. and save consumers' time and money on online search (Shen et al.,2018).

According to Park and Kim (2017), digitalization in commerce significantly affect consumer's shopping behavior. Consumers can search for information about products and services online and purchase at a lower price by using online channels such as websites, online shops, mobile applications. Thus, consumers experience during their product search and purchase process in different sales channels created by the omni-channel environment (Verhoef et al., 2015).

Naik and Peters (2009) studied on the positive impacts of online and offline options of all touchpoints on consumer response. Moreover, the detailed information about the retailer's products and services are accessed via digital channels anytime and place by the consumer (Baxendale et al., 2015).

Information availability, product variety, price and service comparison with other retailers on online stores, inventory management have been provided in the retail world by channel integration to increase the consumer's needs and expectations during both online and in-store shopping process with a seamless shopping experience (Pires et al., 2006; Herhausen et al., 2015; Park, Kim, and Lee, 2017; Shen et al., 2018).

After the channel integration, the usage rate of online stores by consumers increases because they access more information and comments about retailer's goods and services to offer their customers both online and in-store shopping processes to create a seamless customer experience (Pantano and Viassone; 2015; Adivar et al., 2019).

According to Rodriguez-Torrico et al. (2016), the omni-channel system refers to the use of both physical and online channels with new delivery options simultaneously in a seamless shopping experience. Furthermore, the retail channels in the omni-channel system are stores, online websites and direct marketing, mobile channels like smartphone, tablet, applications, social media, customer touchpoints known as mass-

communication channels such as television, radio, etc. and all of these channels are integrated to provide seamless and positive retail experience for consumers and develop and improve the online retailing with integration of these channels (Verhoef et al., 2015, Li et al., 2018).

The experience based on the integration of online and in-store shopping channels increases the sales rates; and omni-channel retailing also aims to provide good performance with long-term success by using technological improvements in a secure way with new marketing strategies and option (Herhausen et al., 2015; Ishfaq et al., 2015). Usage of mobile technology, information system, marketing, operations, and supply chain strategies have been improved and developed by retailers to integrate the front-end and back-end components on the omni-channel retailing (Verhoef et al., 2015; Rodriguez-Torrico et al., 2016).

The omni-channel system has a bridge between retailers and consumers to purchase goods and services by using the retailer's physical and online store simultaneously (Dennis, 2017). The logistics service quality is another significant feature of omni-channel retailing for business-to-consumer (Jocovski et al., 2018).

The improvements in the e-commerce and digital channels build a bridge between retailers and consumers in the transformation process from the multi-channel to omni-channel retailing (Ishfaq and Bajwa, 2018). According to Baxendale et al. (2015), consumers can access what, when, where and how they want to purchase their requirements. Additionally, consumer perceptions and responses are significant issues for the omni-channel retailing (Zhang et al., 2018).

Technological developments increase and improve the empowerment in the retailing system via social media, mobile apps., laptop, etc. (Tjhin et al., 2017). Besides, the digitalization provides to increase the self-efficacy, self-experience, self-determination to provide consumer empowerment (Pires, Stanton and Rita, 2006). Consumers contribute to solve problems on products and services and develop new solutions; thus, consumers have a positive and direct impact on improvements of goods and services in the omni-channel retailing (Füller et al., 2009). All these technological developments in the retailing create more powerful and empowered

consumers to select and purchase products (Fuchs et al., 2010). Empowered consumers have had a power on demanding products what, when and how they want and they access more information and choice on products, retailers and services depends on the technological developments and digitalization in the retailing (Harrison, Waite and Hunter, 2006). Despite the lack of literature regarding the omni-channel capability, it was decided to test the effect of omni-channel retailing and its capability on consumer empowerment. Based on the above-mentioned argumentations, the following hypothesis was proposed:

H1: Omni-channel capability has a positive impact on consumer empowerment.

It can be argued that consumer empowerment directly impacts customer satisfaction positively, which might affect behavioral intention to use any technology in the shopping process. Furthermore, there is a direct link between consumer empowerment and consumer behavior. Zhang et al. (2018) focused their research on the impact of channel integration on consumer responses in the omni-channel retailing mediated by consumer empowerment. It was claimed that consumer responses depend on the consumer's perceived reactions through their shopping experiences, called consumer empowerment (Pires et al., 2006). Consumer's purchase intention in the shopping experience both online and in-store has been influenced by consumer's perceived reactions. And channel integration improves the consumer empowerment under the stimulus-organism-response (S-O-R) framework (Zhang et al., 2018). In the omni-channel retailing, the consumer has an opportunity to search and purchase goods and services whatever, whenever and wherever they want and all these services in the omni-channel provide consumers to be more empowered in the shopping process (Khanna, Jacob, and Yadav, 2014; Sahi et al., 2014; Zhang et al., 2018). Based on this suggestion, the following hypotheses were proposed:

H2: Consumer empowerment has a positive impact on consumer satisfaction.

H3: Consumer empowerment mediates the relationship between omni-channel capability.

Channel integration quality is a significant term to offer a seamless shopping experience to customers across different channels. Consumers can search and purchase products and services by accessing from different channels; hence, channel service transparency offers all available familiar channels in the shopping process to customers (Shen et al., 2018). Moreover, channel service transparency positively affects consumer perception in the omni-channel services because customers consider more alternative channels in the shopping in addition to physical stores (Wu and Chang, 2015; Shen et al., 2018). Channel service transparency increases in the customer's awareness of the available service channels and familiarity of different channels; thus, it makes consumers more empowered about omni-channel shopping (Shen et al., 2018). Additionally, channel service transparency provides customers to access various channels at the same time; thus, they can access more information and service from different channels in the market to meet their needs with a satisfied and empowered way (Shen et al., 2018). Based on the upon argumentation, the following hypotheses were formed:

H4. Channel service transparency moderates the relationship between omni-channel capability and consumer empowerment.

H5. Channel service transparency moderates the relationship between consumer empowerment and customer satisfaction.

Table 3. Sources of the Items

Variable	Items	Source
OCC	OCC1 OCC2 OCC3 OCC4 OCC5 OCC6 OCC7 OCC8 OCC9	Hüseyinoğlu et al, 2018
CE	CE1 CE2 CE3 CE4 CE5	Zhang et al., 2018
CST	CST1 CST2 CST3	Shen et al., 2018
S	S1 S2 S3	Zhang et al., 2018

Table 3 (cont'd)

	S4 S5	
--	----------	--

4.6. Sampling

There are two main sampling techniques which are used in researches namely, probability and non-probability sampling methods (Smith and Albaum, 2010; Taherdoost 2016). The data in the research should be collected by selecting a sample. The first sampling technique is the probability sampling method is to be a known non-zero probability of being part of the sample and the second sampling technique is based on unknown (Smith and Albaum, 2010; Taherdoost 2016). In this study, the non-probability sampling method was used to collect data, because it is less cost-intensive when it is compared to the probability sampling method. Additionally, the non-probability sampling method was used in e-commerce studies (Aldas-Manzano et al. 2009).

Non-probability sampling has four categories as follows: quota sampling, judgment sampling, snowball sampling and convenience sampling (Smith and Albaum, 2010; Etikan et al., 2016; Taherdoost 2016). In this study, convenience sampling was used to collect data. Accessibility, convenient and easiness for measurement are the main reasons to use the convenience sampling method in this study to collect data. Moreover, this technique provides the possibility to access a larger number of respondents during the process (Smith and Albaum, 2010). The target population of this study was end-users and omni-channel users. Thus, convenience sampling was very beneficial for accessing and collecting enough data in a short period of time.

4.7. Data Collection

The paper-based questionnaire was prepared and there was a brief introduction to the omni-channel service and customer satisfaction measures. And the purpose of this study was indicated in this introduction page. Also, one screening question was added to ensure that the respondents had an omni-channel service user experience. Data was collected by using hard copy. Finally, a total of 262 valid responses were received. Furthermore, SPSS 22.0 was used to evaluate and distinguish the frequency of gender, age, income, marital status, education and profession level of the respondents

(Table 4). This was prepared to access a general overview of the basic and main characteristics of the respondents in the survey. The usage frequency of online shops was clearly defined. The expense rate in three months and the usage rate in six months were also clearly indicated. In addition to them, online shopping users were marked out.

Table 4. Demographic characteristics of the sample

Characteristic	Frequency	Percentage
Gender:		
Female	157	59.9
Male	105	40.1
Total	262	100.00
Age:		
18-25 years old	39	14.09
26-35 years old	116	44.3
36-45 years old	76	29
46-55 years old	23	8.8
Age 56 or older	8	3.0
Total	262	100.00
Marital status:		
Married	163	62.2
Single	99	37.8
Total	262	100.00
Education level:		
Primary-secondary school	2	0.8
Highschool	40	15.3
Bachelor's degree	185	70.6
Master's degree and PHD	35	13.3
Total	262	100.00
Income:		
Minimum wage-3000 TL	2	0.8
3001 TL-5000 TL	3	1.1
5001 TL-7000 TL	49	18.7
7001 TL-9000 TL	138	52.7
Over 9001 TL	70	26.7
Total	262	100.00
Occupation		
Employee	166	63.4
Retired	22	8.4
Housewife	20	7.6
Jobseeker	5	1.9
Student	49	18.7

Table 4 (cont'd)

Total	262	100.00
-------	-----	--------

Based on the above demographics table, 59.9 % (n = 157) were female respondents and 40.1% (n = 105) were male respondents. 14.9% (n = 39), 44.3% (n = 116), 29% (n = 76), 8.8% (n = 23), 8.8% (n = 8) of respondents were 18-25 years old, 26-35 years old, 36-45 years old, 46-55 years old and age 56 and older, respectively. Additionally, 62.2% (n = 163) of respondents were married and 37.8% (n = 99) were single when the marital status was considered. Moreover, the great majority of education level of the respondents was 70.6% (n = 185) with bachelor's degree. 13.4% (n = 35) of the respondents was master's degree and PHD. 15.3% (n = 40) and 0.8% (n = 2) were high school and primary-secondary school, respectively.

Furthermore, the annual income was also a significant determinant to categorize the respondents in income classification. 52.7% (n = 138) of respondents had monthly income in the range of 7001 TL-9000 TL. 26.7% (n = 70) were respondents with a monthly income of over 9001 TL. 18.7% (n = 49) of respondents had monthly income between 5001 TL-7000 TL. 1.1% (n = 3) and 0.8% (n = 2) of respondents had monthly income in the range of 3001 TL-5000 TL and under 3000 TL.

Lastly, the occupation of the respondents was also another consideration in the survey. 63.4% (n = 166) of respondents were employed. The rate of retired respondents was 8.4% (n = 22). 7.6% (n = 20) of respondents were housewives and 1.9% (n = 5) of respondents was jobseeker. Lastly, 18.7% (n = 49) of respondents were student.

CHAPTER 5: ANALYSIS AND RESULTS

The role of omni-channel and consumer empowerment in the shopping process were examined in various contexts (Kitchen, 1999; Meyer and Schwager, 2007; Parsons and Maclaran, 2009; Verhoef et al., 2015; Pires et al., 2016; Shen et al., 2018; Zhang et al., 2018; Hüseyinoğlu et al. 2018). This thesis provides a new review of omni-channel retailing and consumer empowerment with the help of the prior studies. The field chosen for this study provides a new perception of the role of omni-channel capability on consumer empowerment and customer behaviors. The developments in the omni-channel retailing via digitalization provides new opportunities and perspectives for the online and in-store shopping process with a seamless shopping experience (Brynjolfsson et al., 2013; Shen et al., 2018; Zhang et al., 2018). These opportunities and perspectives can provide further stimulus for omni-channel shoppers and retailers to extend and develop both consumers' and retailers' targets regarding the technological developments in the retailing. Mainly, the implications of this thesis get a result in conformity with consumers' perceptions and responses on omni-channel capability and consumer empowerment in the online and in-store shopping process. The following section explains the analysis results of the measurement model and the hypothesis testing of this study.

5.1. Structural Equaling Modelling (SEM)

The S-O-R framework expresses that the environment includes stimuli (S) that trigger alterations in consumers' internal and organismic states (O), which impacts an approach or avoidance response (R) (Mehrabian and Russel, 1974). In general, the S-O-R framework is used to be considered the relationship between the retail world and consumer shopping behavior (Morin et al., 2007). Evaluation, activity, and potency are dimensioned for consumer judgments, and it shows the emotional responses like pleasure, trust, satisfaction or dominance (Mehrabian and Russel, 1974).

The measurement of results for the research model in the fields of psychology and social science is provided via structural equation modeling (Bentler, 1983; Browne, 1984). It provides an accurate opportunity to analyze and measure theoretical models in the research studies. Especially, the confirmatory factor analyses in AMOS 26.0

are a good indicator to measure, modify and develop theories and the theoretical models of the study in the research process by using SEM (Anderson and Gerbing, 1988). CFA is to validate the theories and develop additional theories (Eroğlu et al., 2001; Morin et al. 2007). The approach of path analysis shows accurately the covariances between items. To get accurate results from the research analyses is provided via the path analysis between covariance-based analysis (CB-SEM). The optimal methodology based on a theory testing and confirmatory study is considered by the results of CB-SEM. Path coefficients can be also calculated via SPSS 22.0 and AMOS 26.0 to consider the mediator and moderator variables such as a complex structure (Hair et al., 2011). AMOS 26.0 provides an optimal methodology concerning a theory testing and confirmative study either by using both Average Variance Extracted (AVE) Analysis and Confirmatory Reliability (CR) Analysis. AVE by using AMOS 26.0 is highly applicable for prediction and theory development. CR by using AMOS 26.0 also provides the ability to measure results very efficiently and effectively at larger sample sizes in accordance with the research model of this study.

For this thesis, AMOS 26.0, SPSS 22.0 and SPSS PROCESS v3.4 seem to be more applicable to analyze the research model with a complex structure, especially regarding the consideration of mediator and moderator variables. Thus, the estimate loadings of CFA-SEM can contribute to the path coefficients and covariances. Additionally, the sample size of this study contains 262 respondents, which provides the next main reason for the usage of SPSS 22.0 as a measurement approach. Hence, some variables in the construct of this study include two items that fit the requirements of Independent T-Test and some variables in the construct include over three items that fit the requirements of Analysis of Variance (ANOVA) in SPSS 22.0.

5.2. Data Analysis

5.2.1. Confirmatory Factor Analysis (CFA)

After the data collection was completed, SPSS 22.0 and AMOS 26.0 were used for the evaluation of the collected data. Firstly, variables were determined through the mean of the related items to build the final research model for the measurement

approach. CFA-SEM was conducted to assess the validity of the measurement model. The CFA showed loadings for all items (above 0.5).

According to this, the items with estimation values above 0.5 were accepted for the construct within 22 items were considered for the S-O-R framework. Moreover, the CFA in AMOS 26.0 showed the Relative Chi-Square Index (CMIN/DF) needs to be between 2:1 and 3:1. This value showed items which were needed to be in covariance by using values in the modification indices in AMOS 26.0 to improve the model. After the covariances between relevant items in the research model, the CFA was run again for measuring the values of the remaining items to improve the model. There were some measurements attempts to improve the model. After the last attempt to improve with the CFA-SEM has provided acceptable values (Table 5.). Additionally, there were fit statistics to be used for defining the fitness of each variable regarding the indicated model in the study. The common aspects were Chi-Square/Degree of Freedom (CMIN/DF), which need to be below 3.0 above 2.0 (Kline, 2005), Comparative Fit Index (CFI), Incremental Fit Index (IFI) and Normed Fit Index (NFI), which need to be above 0.9 (Bentler, 1990; Hair et al., 2006), the Tucker-Lewis Index (TLI), which needs to be above 0.9 (Gerbing and Anderson, 1992), Root Mean Square Error of Approximation (RMSEA) which should be below 0.08 (Hair et al., 2006). Table 5 shows the related values above mentioned of each variable regarding the model fit statistic:

Table 5. Model Fit Statistic

Variable	Chi-square/DF	CFI	GFI	IFI	NFI	RMSEA
Criteria	< 3.000	> 0.9	> 0.9	> 0.9	> 0.9	< 0.08
Omni-channel capability	2.115	0.988	0.972	0.988	0.978	0.065
Consumer empowerment	0.520	1.000	0.999	1.001	0.999	0.000
Channel service transparency	0.000	1.000	1.000	1.000	1.000	0.801
Customer satisfaction	1.249	1.000	0.996	1.000	0.998	0.031

Table 6. Sources of the Items and CFA Loadings

Variable	Items	CFA Loadings	Sources
OCC	I can purchase the products from the retailers' online stores which are available at its physical stores	0.518	Hüseyinoğlu et al, 2018
	I can purchase the products from the retailers' physical stores, which are available at its online stores	0.569	
	I can complete my shopping without difficulty regardless of which of the retailer's marketing channel I use	0.615	
	All the retailer's sales channels (physical and online stores) work with the same effectiveness	0.708	
	I can collect the products purchased online from the retailer's physical stores	0.751	
	The order I make from online stores can be delivered the same day to the retailer's physical store for collection	0.786	
	I can purchase the product from the retailer's physical store, which I ordered from online store	0.820	
	The retailer uses social media effectively to promote its products in all marketing channels	0.779	
	The retailer uses social media effectively to notify the current discounts on products in all marketing channels	0.752	
CE	In my dealings with this retailer, I feel I am in control	0.818	Zhang et al., 2018
	The ability to influence the goods and services of this retailer is beneficial to me	0.845	
	I feel good because of my ability to influence the choice set offered to me by this retailer	0.833	
	During the shopping process, I can select product and service freely	0.647	
	My influence over this retailer has increased relative to the past	0.756	
CST	I am aware of the existence of all available service channels	0.841	Shen et al., 2018
	I am aware of the differences between service attributes across different channels	0.860	
	I know how to utilize different channels to meet my consumption needs	0.820	
S	Altogether, I'm satisfied with the goods and services of this retailer	0.787	Zhang et al., 2018
	I'm totally convinced of this retailer	0.912	

Table 6 (cont'd)

	This retailer totally meets my expectations	0.963	
	This retailer totally meets my expectations	0.894	
	This retailer offers me exactly what I need	0.816	

Table 5. indicates that each variable in this study is acceptable in accordance with the defined values and fulfills the requirements for the construct with reference to the model fit statistics in AMOS 26.0. Omni-channel capability indicates χ^2/df (Chi-Square/DF) = 2.115, a Competitive Fit Index (CFI) = 0.988, a Goodness-of-Fit-Index (GIF) = 0.972, Incremental Fit Index (IFI) = 0.988, a Normed Fit Index (NFI) = 0.978 and Root Mean Square Error of Approximation (RMSEA) = 0.065. In addition to this, Consumer empowerment reveals χ^2/df (Chi-Square/DF) = 0.520, a Competitive Fit Index (CFI) = 1.000, a Goodness-of-Fit-Index (GIF) = 0.999, Incremental Fit Index (IFI) = 1.001, a Normed Fit Index (NFI) = 0.999 and Root Mean Square Error of Approximation (RMSEA) = 0.000.

Besides, channel service transparency as a moderator variable in this study also shows these values like χ^2/df (Chi-Square/DF) = 0.000, a Competitive Fit Index (CFI) = 1000, a Goodness-of-Fit-Index (GIF) = 1.000, Incremental Fit Index (IFI) = 1.000, a Normed Fit Index (NFI) = 1.001 and Root Mean Square Error of Approximation (RMSEA) = 0.801. Lastly, customer satisfaction embodies in χ^2/df (Chi-Square/DF) = 1.249, a Competitive Fit Index (CFI) = 1.000, a Goodness-of-Fit-Index (GIF) = 0.996, Incremental Fit Index (IFI) = 1.000, a Normed Fit Index (NFI) = 0.998 and Root Mean Square Error of Approximation (RMSEA) = 0.031.

5.3. Validity and Reliability

The measurements model in validity and reliability were evaluated by using SPSS 22.0 and AMOS 26.0. Cronbach's Alpha was assessed via SPSS 22.0 to analyze the internal consistency of the items in this study. As to Cronbach's Alpha, the scale was suggested by George and Mallery (2003) as follows: > 0.9 = Excellent, > 0.8 = Good, > 0.7 = Acceptable, > 0.6 = Questionable, > 0.5 = poor and below 0.5 = unacceptable (quoted from Gliem and Gliem, 2003). Omni-channel capability = 0.909, Consumer empowerment = 0.880, Channel service transparency = 0.899 and Customer

satisfaction = 0.948 were scales for Cronbach's Alpha by evaluating via SPSS 22.0. Items in this study provide results above 0.8; hence, the items have adequate and acceptable values. Also, the Composite Reliability (CR) provides essential values to prove the reliability of the measurement model mentioned in this study. Omni-channel capability = 0.898, consumer empowerment = 0.887, channel service transparency = 0.878 and customer satisfaction = 0.942. Each value exceeds the indicated value in 0.6 for the composite reliability (Bagozzi and Yi, 1988). In consideration of these values and results, it is validated that the reliability requirements in this construct are observed. As it can be seen in Table 5, the reliability of each variable is indicated. The validity of the measurement model is displayed in Table 7.

The average variance extracted needs to be above 0.5. The below and equal to 0.5 indicates the latent variable as to its indicators' variance (Hair et al., 2012). The variables reveal the average variance extracted results about this study as follows: Omni-channel capability = 0.499, consumer empowerment = 0.613, channel service transparency = 0.706 and satisfaction = 0.768 (Table 7). Almost all values are over the desired value of 0.5 except Omni-channel capability. However, the value of Omni-channel capability (AVE = 0.499) is a very close value to 0.5 indicated abovementioned value; for this reason, the variable is still used for the measurement in this study.

Table 7. Convergent Validity and Reliability of the Measurement Model

Variable	Average variance extracted (AVE)	Composite reliability (CR)	Cronbach's Alpha
Omni-channel capability	0.499	0.898	0.909
Consumer empowerment	0.613	0.887	0.880
Channel service transparency	0.706	0.878	0.899
Customer satisfaction	0.768	0.942	0.948

5.4. Path Analysis

The model fit statistic of the measurement model was also analyzed not to overlook the variables of path construct within the entire measurement model for this thesis. The model fit indices of the entire measurement of the model were considered well as the following values: $\chi^2/df = 2.528$; comparative fit index (CFI) = 0.950; relative fit index (RFI) = 0.901; The Tucker-Lewis Index (TLI) = 0.938; normed fit index (NFI) = 0.921; incremental fit index (IFI) = 0.951; root mean square error of approximation (RMSEA) = 0.077. Table 8 demonstrates the relevant values of the entire measurement model within the model index values regarding fit statistics in AMOS 26.0.

Table 8. Model Fit Index for the Entire Measurement Model

Name of the index	Score	Criteria
Chi-square/DF	2.528	< 3
CFI	0.950	> 0.9
RFI	0.901	> 0.9
TLI	0.938	> 0.9
NFI	0.921	> 0.9
IFI	0.951	> 0.9
RMSEA	0.077	< 0.08

As the values can be seen on the above table, almost all values in the entire model are over the desired and acceptable values except goodness of fit index (GFI) = 0.866; normed fit index (NFI) = 0.913. However, the value of GFI is very close value to 0.9 indicated in Table 8; thus, the entire values in the model meets the requirements within the indicated model in the thesis. The comparison of entire values in the measurement model in this study should be seen on the Table 8.

Furthermore, the model fit indices of the measurement model in the path analysis were considered well as follows: $\chi^2/df = 2.528$; the relative fit index (RFI) = 0.901; normed fit index (NFI) = 0.921; root mean square error of approximation (RMSEA) = 0.077; comparative fit index (CFI) = 0.950. The results of the path analysis can be seen on Table 9 with compared results.

Table 9. Model Fit Index of the Path Analysis Measurement Model

Name of the Index	Score	Criteria
Chi-square/DF	2.528	< 3
RFI	0.901	> 0.9
CFI	0.950	> 0.9
NFI	0.921	> 0.9
RMSEA	0.077	< 0.08

Omni-channel capability significantly affects consumer empowerment ($\beta=0.803$; S.E.= 0.130; C.E.=11.099; $p<0.05$), thus H1 is supported. Omni-channel capability has a positive impact on consumer empowerment. Additionally, customer satisfaction is significantly related to consumer empowerment ($\beta=0.659$; S.E.=0.056; C.E.=10.932; $p<0.05$); hence, H2 is also supported. Consumer empowerment has a positive impact on customer satisfaction.

Table 10. Path Analysis Result

Relationship	Path Coefficient	S.E.	C.E.	P-value
CE \longrightarrow OCC	0.803	0.130	11.099	0.000
S \longrightarrow CE	0.659	0.056	10.932	0.000

Table 8 shows the result values of the hypothesis in entire model testing by using structural equation modelling. Critical ratio is a significant value to test the hypothesis in the study. The critical ratio reports that there is a two-sided significance of the hypothesis at the customary 5% level. The critical ratio is formed by dividing the estimation value by its standard error.

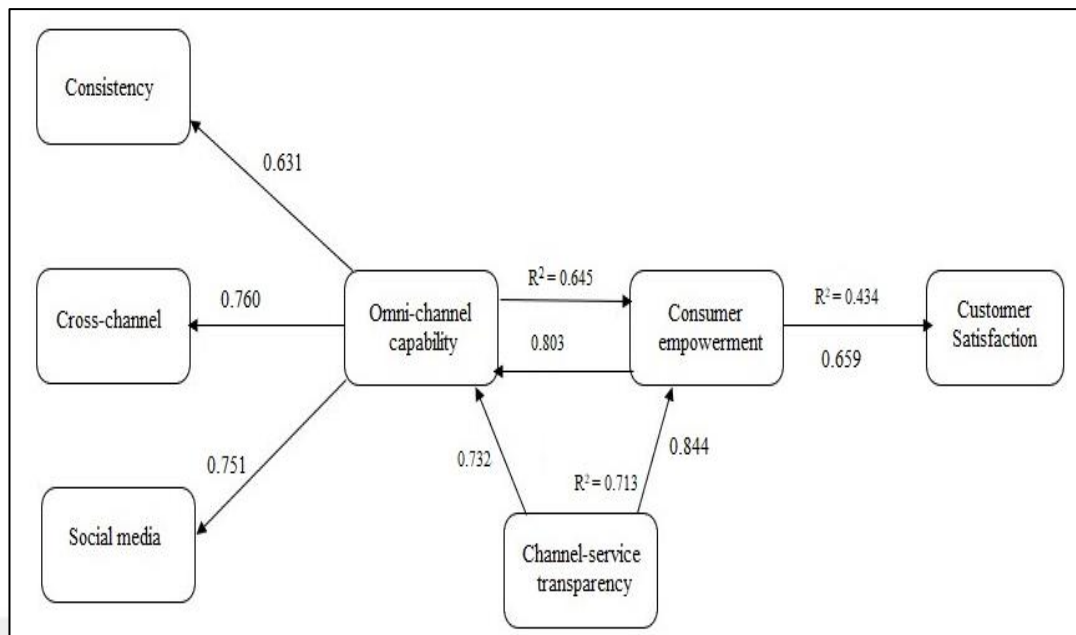


Figure 2. Final Research Model Including Estimates and R-Square

The measurement model which is shown above demonstrates the output by AMOS 26.0 and SPSS PROCESS v3.4. There are two of five hypotheses are accepted. The r-square values of omni-channel capability and consumer empowerment is showed. Omni-channel capability reveals a $R^2 = 0.645$, which means that 64% of the variance is explained the impact on consumer empowerment and it indicates the mediator effect of consumer empowerment between variables. Customer satisfaction shows a $R^2 = 0.434$, which means that 43% of the variance is explained on consumer empowerment.

5.5. Mediator role of consumer empowerment

After the completion of the path analysis and hypothesis testing, the results demonstrated that some paths had “indirect” links instead of “direct” relations. Consumer empowerment has a mediating effect between omni-channel capability and customer satisfaction because consumers were empowered via digital marketing; thus, they could be more satisfied (Zhang et al., 2018). Consumer empowerment, digitalization in marketing and customer satisfaction were explained by Zhang et al. (2018) and consumer empowerment had a mediating effect in the beforementioned study. The measurement approach of this thesis regarding the path analysis and hypothesis testing shows an indirect path with an external variable between omni-

channel capability and customer trust. Consequently, consumer empowerment was added for the mediation effect between omni-channel and customer satisfaction.

The estimation of the mediation effect was considered with the AMOS-SEM and there are various distinct patterns about the mediation effects on studies (Zhai et al., 2001, p.200). In this study, there is an indirect-only mediation. It means that there is a mediated effect, but it does not have a direct effect on the variables.

The accurate and efficient results about the mediation analyses are evaluated with the indirect effect (see Table 11). Additionally, the mentioned and desired measurement was done pursuant to these indicated patterns. In Table 9, there is a mediating effect of consumer empowerment. However, its mediation effect is only considered by calculating and evaluating after getting all results about the mediator explained by Zhao et al. (2011).

Table 11. The Hypotheses Testing Results of Indirect Effects

Omni-channel capability → Consumer empowerment → Satisfaction		Effect	SE	LLCI	ULCI	p-value
Total effect	OCC → S	0.8481	0.611	0.7278	0.9685	0.000
Direct effect	OCC → S accounting for the effects of CE	0.4517	0.0981	0.2585	0.6449	0.000
Indirect effect	OCC → CE → S	0.3965	0.1036	0.2005	0.6097	0.000

The number of bootstrap samples is 5000.

SE refers to “Standard Error”

LLCI refers to “Lower Level of Confidence Interval”.

ULCI refers to “Upper Level of Confidence Interval”.

2-tailed significance (p-value) were computed using the bootstrapping bias-corrected percentile method.

*** p < 0.001; ** p < 0.01; * p < 0.05; NS: not significant

There is a partial mediation effect as an indirect-only. The abovementioned pattern is calculated by using the following equation $a \times b \times c = c'$ (Zhao et al., 2011).

The confidence level is 95%. Two-tailed significance values between omni-channel capability-consumer empowerment and consumer empowerment-customer satisfaction indicate that there is a standardized indirect (mediated) effect but it is

stated as 0.000 in the Table 11. As a result, consumer empowerment is an indirect-only mediator. It has a mediated effect on omni-channel capability and customer satisfaction as a. Thus, H3 is supported the indirect mediator of consumer empowerment between omni-channel capability and customer satisfaction by lower and upper bounds with significant values with two-tailed significance indicated as 0.000.

5.6. Moderation Analysis

Channel service transparency would be a significant point for this thesis to find out the moderator effect on omni-channel capability-consumer empowerment or consumer empowerment-customer satisfaction (Shen et al., 2018). Either omni-channel capability and consumer empowerment could be influenced by channel service transparency or consumer empowerment and customer satisfaction could be moderated by channel service transparency. There are options for constraints for the moderator effects in the studies.

1. The independent variable (X) is affected by a moderator (W) in H4.
2. W influences X and outcome variable (Y) in H5.
3. X is affected by W in H5.
4. W influences X and Y in H5.

The outcome variable (Y) indicated as consumer empowerment; independent variable (X) demonstrated as omni-channel capability. And moderator effect (W) revealed as channel service transparency in H4. The measurement approach was conducted by using SPSS 22.0 to reach the moderator effect of channel service transparency on omni-channel capability and consumer empowerment. However, the results show that there is no significant effect of channel service transparency between omni-channel capability and consumer empowerment. The interaction term between OCC x CST is not significant ($p = 0.8029$); thus, there is no moderated effect by channel service transparency on omni-channel capability and consumer empowerment. H4 is not supported.

The outcome variable (Y) pointed out satisfaction; independent variable (X) indicated as consumer empowerment. the moderator effect (W) is channel service transparency in H5. The measurement was calculated by using SPSS 22.0 to estimate

and consider the moderator effect of channel service transparency on consumer empowerment and customer satisfaction. The interaction terms between CE x CST is significant ($p = 0.000$); hence, channel service transparency has a moderator effect between consumer empowerment and customer satisfaction. Consequently, H5 is supported.

5.7. T-Test Results

5.7.1. Gender

The consideration of the effects on gender on the omni-channel capability and consumer empowerment, T-test was conducted by SPSS 22.0. The result of Levene's Test for Equality of Variances is proved that there is homogeneity between variances and gender if the significance value is over 0.05. According to this test between gender and omni-channel capability, there was a homogeneity ($p = 0.864 > 0.05$). Also, a 2-tailed significance value between omni-channel capability and gender indicated there was no significance between omni-channel capability and gender ($p = 0.497 > 0.05$).

Furthermore, there was a homogeneity of variance between consumer empowerment and gender ($p = 0.268 > 0.05$); however, there was no significant difference between consumer empowerment and gender because the 2-tailed significance value was over 0.05 ($p = 0.916$). According to the test, there was homogeneity between channel service transparency and gender ($p = 0.984 > 0.05$); but the significance value between channel service transparency and gender was over 0.05 ($p = 0.869$). So, there was no significance between channel service transparency and gender. The homogeneity of variance for satisfaction and gender was 0.538 ($p > 0.05$); this value showed the homogeneity. However, there was not a significance between satisfaction and gender ($p = 0.769 > 0.05$). Consequently, there were a homogeneity between variables and gender; however, gender did not have a significant effect on these variables in this study.

5.7.2. Experience

The effects of omni-channel usage experience were conducted with ANOVA by SPSS 22.0. There is homogeneity of variance between omni-channel capability and omni-channel usage experience depends on the significant value in the test of

homogeneity variances in ANOVA ($p = 0.3 > 0.05$). It was homogeneity at 95% and it could be seen the significant differences between groups for the omni-channel usage experience ($p = 0.247 > 0.05$). Additionally, the Tukey Test was carried out to consider a significant difference between the groups. There was a difference between groups about usage experience ($p = 0.226 > 0.05$); hence this was not a significant difference because usage experience on the omni-channel capability [$F(3, 393) = 1.389$; $p = 0.247$]. The means of the user experience on omni-channel capability at the below 6-months usage, between 6-months-and-a-year, between a-year-and-3-years, over 3-years were $M=4.0583$, $M=4.2370$, $M=4.2011$, $M=4.2066$, and $M=4.1777$, respectively. According to these mean values, there were not any significant differences between user experience groups and omni-channel capability.

Secondly, consumer empowerment and omni-channel usage experience had a significant value in the test of homogeneity of variances in ANOVA ($p = 0.4 > 0.05$). It meant that consumer empowerment for the user experience did not have a significant difference; however, in the Tukey test, there was a difference between groups [$F(3, 397) = 0.814$; $p = 0.487$]. The means of the user experience on consumer empowerment at the below 6-months usage, between 6-months-and-a-year, between a-year-and-3-years, over 3-years were $M=3.9475$, $M=4.0433$, $M=4.1302$, $M=4.0949$, and $M=4.0573$, respectively. As to these mean values, it could not be noticed a significant difference in indicated groups.

Furthermore, channel service transparency and omni-channel usage experience had also a significant value as to the homogeneity of variances ($p = 0.199 > 0.05$). In the Tukey Test, there was a difference between groups [$F(3, 273) = 0.461$; $p = 0.710$]; hence, the means of the usage experience on channel service transparency at the below 6-months user, between 6-months-and-a-year, between a-year-and-3-years, over 3-years were $M=3.9290$, $M=4.0056$, $M=4.0476$, $M=4.0769$, and $M=4.0191$, respectively. When the mean values were considered, the groups did not have significant differences between each other.

Besides, customer satisfaction and omni-channel user experience had also a significant value as to the homogeneity of variances ($p = 0.282 > 0.05$). In the Tukey Test, there was a difference between groups [$F(3, 194) = 0.401$; $p = 0.752$]; thus, the

means of the usage experience on customer satisfaction at the below 6-months usage, between 6-months-and-a-year, between a-year-and-3-years, over 3-years were $M=4.3180$, $M=4.3600$, $M=4.2667$, $M=4.2385$, and $M=4.2916$, respectively. There were no significant differences between groups based on the mean values.

5.7.3. Education

The effects of education on the omni-channel capability were analyzed via T-Test by SPSS 22.0. The result of Levene's Test for Equality of Variances is proved that there is homogeneity of variances and education groups if the significance value is over 0.05. According to Levene's test for equality of variances between the education group and omni-channel capability, there was no homogeneity ($p = 0.016 < 0.05$). Moreover, a two-tailed significance value between omni-channel capability and education showed there was no significance between them ($p = 0.033 < 0.05$).

Consumer empowerment and education groups had a homogeneity of variances ($p = 0.595 > 0.05$) as in the value of Levene's test for equality of variances, but the significance value between the consumer empowerment and education was below 0.05 ($p = 0.006$). Thus, there were not a significant difference between consumer empowerment and education group. Education groups in channel service transparency had a homogeneity of variances with $p = 0.970 > 0.05$ according to Levene's test; however, there was no significant differences between groups as to 2-tailed value ($p = 0.037 < 0.05$).

Channel service transparency and education groups had significant value as $p = 0.970$ over $p = 0.05$. However, the high significance value did not provide the homogeneity of variances value between groups by using a 2-tailed significance value ($p = 0.037 < 0.05$). Thus, there was not a homogeneity between channel service transparency and education groups.

The final homogeneity of variances was customer satisfaction in the education group evaluation. The Levene's test value for satisfaction on education variance was 0.575 ($p > 0.05$); so, there was homogeneity between groups. Additionally, a 2-tailed significance value showed significant differences between groups ($0.655 > 0.05$). As

a result, it would be homogeneity between variances and education groups; but education groups would not affect these variables significantly.

5.7.4. Age

The age factor and omni-channel capability were analyzed with T-Test by using SPSS 22.0. The significance value between age and omni-channel capability was $p = 0.685$ over $p = 0.05$ indicated in the Levene's test for an equation. These variances' 2-tailed significance value provided the significance between age and omni-channel capability ($p = 0.825 > 0.05$).

Consumer empowerment and age had a homogeneity of variances ($p = 0.574 > 0.05$) as in the value of Levene's test for equality of variances; also, the significance value between consumer empowerment and age was over 0.05 ($p = 0.792$). Thus, there was a significant difference between consumer empowerment and age.

Channel service transparency and age groups had a significant value as $p = 0.995$ over $p = 0.05$. Moreover, the significance value indicated the homogeneity value between groups by using 2-tailed significance value ($p = 0.324 > 0.05$). Thus, there was a homogeneity between channel service transparency and age.

The final variance was the evaluation between customer satisfaction and age. The Levene's test value for satisfaction on age variance was 0.407 ($p > 0.05$); so, there was a homogeneity between groups. Additionally, a 2-tailed significance value showed significant differences between groups ($0.318 > 0.05$). As a result, it would be homogeneity between variances and age; but the age factor did not have a significant effect on the variables.

5.7.5. Income

The effects of omni-channel usage experience on income were conducted with ANOVA by SPSS 22.0. There is homogeneity of variances between omni-channel capability and income depends on the significant value in the test of homogeneity variances in ANOVA ($p = 0.077 > 0.05$). It was homogeneity at 95% and there were no significant differences between groups for the income groups ($p = 0.000 < 0.05$). Additionally, the Tukey Test was conducted to consider the significant difference

between the groups. There was a difference between groups about income ($p = 0.000 < 0.05$); hence there was not a significant difference because income on the omni-channel capability [$F(2, 3.025) = 11.483$; $p = 0.000$]. The means of the age values on omni-channel capability at the below 7000 TL, between 7000 TL-9000 TL, and over 9000 TL $M=3.9259$, $M=4.1779$, $M=4.3714$, and $M=4.1777$, respectively. According to these mean values, there were not any significant differences between age and omni-channel capability.

Secondly, consumer empowerment and age provide significant value in the test of homogeneity variances in ANOVA ($p = 0.543 > 0.05$). It meant that there were significant differences between groups for consumer empowerment in the age group; however, in the Tukey test, there was a difference between groups [$F(2, 4.179) = 9.122$; $p = 0.000$]. The means of the age factor on consumer empowerment at the below 7000 TL, between 7000 TL-9000 TL, and over 9000 TL were $M=3.7593$, $M=4.0594$, $M=4.2829$, and $M=4.0573$, respectively. As to these mean values, there were no significant differences between groups.

Furthermore, channel service transparency and income also indicated a significant value as to the homogeneity variances ($p = 0.441 > 0.05$). In the Tukey Test, there was a difference between groups [$F(2, 2.979) = 5.226$; $p = 0.006$]; hence, the means of the income factor on channel service transparency at the below 7000 TL, between 7000 TL-9000 TL, and over 9000 TL were $M=3.7963$, $M=3.9976$, $M=4.2333$, and $M=4.0191$, respectively. When the mean values were considered, the groups did not have significant differences between each other.

Lastly, customer satisfaction and income offered a significant value as to the homogeneity of variances ($p = 0.062 > 0.05$). In the Tukey Test, there was a difference between groups [$F(2, 1.003) = 2.102$; $p = 0.124$]; thus, the means of the user experience on customer satisfaction at the below 7000 TL, between 7000 TL-9000 TL, and over 9000 TL were $M=4.2111$, $M=4.2507$, $M=4.4343$, and $M=4.2916$, respectively. Consequently, the mean values between groups were no significant differences.

Table 12. Hypotheses Results

No.	Hypothesis	Results
H1	Omni-channel capability has a positive impact on consumer empowerment	Supported
H2	Consumer empowerment has a positive impact on customer satisfaction	Supported
H3	Consumer empowerment mediates by the relationship between omni-channel capability and customer satisfaction	Supported
H4	Channel service transparency moderates the relationship between omni-channel capability and consumer empowerment	Not supported
H5	Channel service transparency moderates the relationship between consumer empowerment and customer satisfaction	Supported

CHAPTER 6: DISCUSSION AND IMPLICATIONS

6.1. Discussion

This thesis contributes to consider the positive effects of the digitalization in the retailing. There are three main elements and one subsidiary element to explore and validate the role of the omni-channel capability and consumer empowerment on consumer behavior as satisfaction. Digitalization and technology have provided to integrate all marketing channels by implementing omni-channel strategies in the retailing: product variety and its availability, delivery and collection options and price. The digital world offers consumers a real-time inventory knowledge, product replenishment, flexible transportation processes and fast-order fulfillment (Yumurtacı Hüseyinoğlu et al., 2018; Shen et al., 2018; Zhang et al., 2018).

Moreover, this thesis provides new perceptions and awareness about the impressions on the consumer empowerment, their perceptions and behaviors in the omni-channel retailing process. The relevant information about the subject of this thesis was collected from the related literature within the scope of the S-O-R framework. In addition to this, the results were acquired by using structural equation modeling analysis by using SPSS 22.0 and AMOS 26.0. However, there is a lack of evidence on consumer perception and behavior on omni-channel retailing and capability.

After the digitalization in marketing, the characteristics of omni-channel retailing develops and its effects on consumer perception and behavior increase. In recent years, digital improvements in the retailing has been evaluated and analyzed as a stimulus with a wider perspective, especially consumer side (Chang et al., 2015; Huré et al., 2017; McLean et al., 2018; Mosquera et al., 2018; Shen et al., 2018). Consumer empowerment as a mediator effect indicates the consumer perceptions during and after the shopping process both online and in-store shopping and the consumer perception during online retailing is to be as a response (Zhang et al., 2018). In this research, the relationship between customer, retailer, product, service, and mobilization were indicated and the effects of digitalization on the customer in the retailing were defined in a detailed way.

The upcoming parts explain the theoretical implications of dealing with the comparison of the results gained by this thesis and previous literature. Therefore, the implications in this thesis provide further research and perceptions, how the results of this thesis could be useful for retailers and suppliers have taken a part in the digital retail world to improve and develop consumer response in the shopping process. Finally, the conclusion discusses the general topic of this thesis and future research limitations and findings.

6.2. Theoretical Implications

According to this study's results, there is a positive impact of technological developments on both consumers and retailers in the retailing. However, this study focuses on consumer behavior during and after the shopping process by using omni-channel retailing. Consumers can collect various information about goods and services of retailers, compare goods and services, follow the new products or services, achieve other consumers' comments about goods and services, new options for the delivery process by using the omni-channel system. Thus, the new developments provide consumer empowerment during the decision-making process because consumers can search for various possibilities at the same time in shopping and their decision-making power is increased and empowered depends on the technology. The reasonable integration of components in this study has been selected as the harmony of concept to be helpful both consumer and retailer in the process of decision-making in shopping.

The S-O-R framework is used to show the relationship between retailers and customers and describes the connection between dependent and independent variables in the research. Omni-channel capability is indicated as a stimulus; consumer empowerment is defined as an organism which has the capacity the effect consumer behaviors and customer satisfaction is stated as a response which leads to behavioral response. Environmental issues are set of independent variables and a behavioral or cognitive response to the variables.

Moreover, the results offer some recommendations for both consumers and retailers regarding online and offline stores by using the omni-channel system. Empowerment is the process of decision-making and purchasing and consumer behavior as

satisfaction have a significant effect on the omni-channel. The digitalization attempts to strengthen and combine with online and in-store shopping has a significant effect on consumer and the improvements and developments on online options enhance the consumers' moods and behaviors in the shopping. And all these attempts and developments in the digital retailing increase the usage rate of online options instead of in-store shopping.

This thesis may offer significant and primary contributions to online shoppers who want to empower, satisfy and save time and money at the same in the shopping process by using digital channel options. Research results show that consumers want to access all goods, comments, and services during their purchasing process.

The consumer empowerment has a mediation effect between omni-channel, and consumer behavior depends on the technological complementary in a positive manner because consumers can perceive and consider more utilities regarding the technological developments in the shopping process. Their perceptions about products and services offered by a retailer can increase and improve by using omni-channel. Also, the mediation effect of consumer empowerment has a bridge role between omni-channel and consumer behavior.

Moreover, the impact of channel service transparency between consumer empowerment and consumer behavior indicates the moderator effect on online shopping. There are various channels to shop online and customer satisfaction is affiliated with consumer empowerment to be moderated by channel service transparency in the shopping.

6.3. Practical Implications

There are various national and international retailers that use the integration of digital channels which are indicated in the questionnaire's answers. Considering the effect of consumer empowerment, it positively affects the consumer decision-making process in shopping. The indirect only mediation among omni-channel capability and customer satisfaction emphasize that the strength of consumers in the decision-making process provides an advantage, which makes consumers more power to decide on what, when, where or how they want to buy the products and services.

For this reason, retailers need to set their focus on providing more satisfaction for consumers within the integration of channels. Especially, the use of online shopping channels can be modified with an easy content which guides the consumer for the online shop. Also, the access to in-store and online store inventories on mobile application need to be easier to use for consumers. In addition to this, both an online store and physical store can be synchronized on inventory simultaneously. Delivery options like reserve-and-collect, click-and-collect can be defined clearly for all consumers. For instance, consumers have a chance to reserve a product before it arrives in the physical store.

Furthermore, social media can be used more effectively and efficiently by retailers. It provides the opportunity for drawing the attention of consumers in each age group to purchase goods and services. Especially, social media influences younger consumers between the ages of 18-35. Particularly, consumers who are between the ages of 26 and 35 spend more time to search and purchase products on omni-channel. Hence, they notice that they can collect more information about products instead of buying from a physical store. For this reason, they can reach other consumers' comments about products and services; so, they have a chance to compare other retailers' prices on the same or equivalent goods and services online. However, the demographics do not have any impact neither positive neither impact on the decision-making process by using omni-channel shopping.

All issues mentioned above, which have been analyzed and examined within the sample, may be developed and improve the consideration of the impacts of consumers' behaviors in terms of the positive effects of the digitalization on the decision-making and shopping process of consumers.

Additionally, these results and implications provide new perceptions for the academic field about the omni-channel retailing. When the effects of consumer empowerment on omni-channel retailing and consumer behavior are considered, retailers can benefit from these results. The usage of omni-channel is associated with retailers that have various channel options in addition to physical stores.

Moreover, the retailer and retailer can modify and improve their online options on products, services especially delivery options. The consumers have the possibility to search products as to their price and quality before they purchase it from a physical store. They can collect various comments from other consumers who have experience in using the products purchased by them. All these points have a significant impact on the behavioral intention of consumers regarding omni-channel usage to shop online instead of a physical store. Also, retailers can be more active on social media to introduce and share their products and services because consumers use social media to access more information and comments about products and other consumers' experiences on goods and services.

These practical implications should indicate the effects of the omni-channel retailing on consumer empowerment and consumer behavior. Some recommendations are about online and offline retailing to satisfy consumers about online shopping by using omni-channel services.

6.4. Conclusion

The S-O-R framework by Mehrabian and Russel (1974) is used as a theoretical background to measure the effects of omni-channel capability and consumer empowerment on consumer empowerment moderated by channel service transparency. Additionally, the S-O-R framework is provided both for the explanation of the system in a detailed way and the effects of variables on each other.

The impact of consumer empowerment on consumer's behavioral intention significantly affect in the shopping process. The S-O-R framework also provides an accurate path to reach the result directly. The measurements of this study within the research model are clear to identify the effects and impacts of the digitalization on the shopping process regards to consumers. The consumer empowerment has a direct and significant impact on consumer behavior, especially satisfaction. The measurement model provides the opportunity to increase consumer empowerment and customer satisfaction by using omni-channel.

This thesis recommends improvements to increase customer satisfaction during the online shopping process by using the omni-channel opportunity. Thus, the thesis

provides the consumer perceptions and usage characteristics of online shopping and the further approach of online shopping improvements. As a result, these insights can help both consumers to be more empowered during the online shopping process and retailers how to develop and improve themselves to increase customer satisfaction via omni-channel retailing.

6.5. Limitations and future research

Despite the important contributions, there are limitations to this research. The conduction of this research could lead to significant and interesting results and provide new perceptions both online and in-store shopping. Therefore, the thesis was just limited to online shopping users in Izmir. Hence, the research was conducted in a restricted area that could be used to compare omni-channel users' behaviors in the market globally.

Additionally, the examination of the effects of omni-channel capability and consumer empowerment on customer satisfaction could be interesting; however, there were limited sources about the omni-channel capability and consumer behavior to access and collect more information about them to combine accurately. The research model in this thesis includes three different main variables from the primary researches and studies about omni-channel retailing and consumer behaviors.

Moreover, participants expressed positively or negatively their thoughts with a paper-based questionnaire and there were limited consumers to participate the survey. Therefore, positive and negative perceptions were affected the survey results; so, the implications about human emotions were changed by their responses.

There were a multi-item scale and the items were in English; thus, the multi-item scale about variables was adopted and translated into Turkish. Owing to the originality of the items used in the thesis, the scale would be adopted accurately to be understood and notices accurately and effectively by the participants.

Also, this study was conducted with a paper-based questionnaire. The understandability of the introduction part and its visual design, its length and clearance were another limitations for the participants; thus, some of the participants

did not attend the survey due to its length because they did not want to lose any time by attending the survey. Thus, as future research, online-based questionnaire may be prepared and used to conduct further studies.

Finally, this thesis focuses on using the S-O-R framework to understand the omni-channel capability and consumer empowerment effects on consumer behavior. In future studies, stimulus and organisms can be changed and different responses can be investigated as a result. For instance, the omni-channel capability was indicated as a stimulus in this study; thus, in future studies, it can be investigated as an organism with different stimulus and response. Also, the studies can be conducted by using different research methods such as focus groups, interviews, participant and non-participant observation, case studies within larger groups.

REFERENCES

- Adivar, B., Hüseyinoğlu, I. Ö. and Christopher, M. (2019) *A quantitative performance management framework for assessing omni-channel retail supply chains*, Journal of Retailing and Consumer Services, Vol. 48, pp. 257–269.
- Agatz, N.A.H., Fleischmann, M. and van Nunen, J.A.E.E. (2008) *E-fulfillment and multi-channel distribution – a review*, European Journal of Operational Research, Vol. 187, no. 2, pp. 339-356.
- Ailawadi, K. I. and Farris, P. W. (2017) *Managing Multi- and Omni-channel Distribution: Metrics and Research Directions*, Journal of Retailing, Vol. 93, no: 1, pp. 120-135.
- Ajzen, I. and Fishbein, M. (1980) *Understanding attitudes and predicting social behavior*, Michigan University, Englewood Cliffs, New Jersey: Prentice-Hall.
- Anderson, E. W., Fornell, C. and Rust, R. T. (1997) *Customer Satisfaction, Productivity, and Probability: Differences between Goods and Services*, Marketing Science, Vol. 16, no. 2, pp: 129-145.
- Anderson, J.C. and Gerbing, D.W. (1988) *Structural equation modeling in practice: a review and recommended two-step approach*, Psychological Bulletin, Vol. 103, no. 3, pp. 411-423.
- Bagozzi, R. P. (1986) *Attitude formation under the theory of reasoned action and a purposeful behaviour reformulation*, British Journal of Social Psychology, Vol. 25 no. 2, pp.95-107.
- Bagozzi, R. P. and Yi, Y. (1988) *On the evaluation of structural equation models*, Journal of the Academy of Marketing Science, Vol. 16 no. 1, pp. 74-94.
- Balasubramanian, S., Peterson, R. A. and Jarvenpa, S. L. (2002) *Exploring the implications of m-commerce and marketing*, Journals of the Academy of Marketing Science, Vol. 30, pp. 348-361.
- Baxendale, S., Macdonald, E.K. and Wilson, H.N. (2015) *The impact of different touchpoints on brand consideration*, Journal of Retail, Vol. 91 no. 2, pp. 235–253.
- Beck, N. and Rygl, D. (2015) *Categorization of multiple channel retailing in multi-, cross-and omni-channel retailing for retailers and retailing*. Journal of Retailing and Consumer Services, Vol. 27 no. 11, pp. 170-178.

- Berthon, P. R., Pitt, L. F., Plangger, K. and Shapiro, D. (2012) *Marketing meets Web 2.0, social media, and creative consumers: Implications for international marketing strategy*, Business Horizon, Vol. 55, pp: 261-271.
- Brynjolfsson, E., Hu, Y. J. and Rahman, M. S. (2013) *Competing in the age of omni-channel retailing*, MIT Sloan Management Review, Vol. 54, no.4, pp. 23.
- Chen, Y., Cheung, C. M.K. and Tan, C-W. (2018) *Omni-channel Business Research: Opportunities and challenge*, Decision Support Systems Vol. 109, pp. 1-4.
- Chang, H. J., Eckman, M. and Yan, R. N. (2011) *Application of the Stimulus-Organism- Response model to the retail environment: the role of hedonic motivation in impulse buying behavior*, The International Review of Retail, Distribution and Consumer Research, Vol. 21, no. 3, pp. 233-249.
- Chebat, J-C. and Michon, R. (2003) *Impact of ambient odors on mall shoppers' emotions, cognition, and spending A test of competitive causal theories*, Journal of Business Research, Vol. 56, pp. 529-539.
- Cao, L. (2014) *Business-model transformation in moving to cross-channel retail strategy: a case study*, International Journal of Electronic Commerce, Vol.18, no. 4, pp. 69-96.
- Dwivedi, A., Johnson, L. W., Wilkie, D. C. and de Araujo-Gil, L. (2018) *Consumer emotional brand attachment with social media brands and social media brand equity*, European Journal of Marketing, Vol. 56, no. 6, pp. 1-29.
- Elliot, S. and Fowell, S. (2000) *Expectations versus reality: a snapshot of consumer experiences with Internet retailing*, International Journal of Information Management, Vol. 20, no. 5, pp. 323-336.
- Eroğlu, S. A., Machleit, K. A. and Davis, L. M. (2001) *Atmospheric qualities of online retailing: A conceptual model and implications*, Journal of Business Research, Vol. 54, no. 2, pp. 177- 184.
- Fuchs, C., Prandelli, E. and Schreier, M. (2010) *The Psychological Effects of Empowerment Strategies on Consumers' Product Demand*. Journal of Marketing, Vol. 74, pp. 65-79.
- Füller, J., Mühlbacher, H., Matzler, K. and Jawecki, G. (2009) *Consumer Empowerment Through Internet-Based Co-creation*, Journal of Management Information Systems, Vol. 26, no. 3, pp. 71-102.
- Galipoglu, E, Kotzab, H., Teller, C., Yumurtacı Hüseyinoglu, I. Ö. and Pöppelbuß, J. (2018) *Omni-channel retailing research – state of the art and intellectual*

foundation, International Journal of Physical Distribution & Logistics Management, Vol. 48, no. 4, pp. 365-390.

Gerbing, D. W. and Anderson, J. C. (1992) *Monte Carlo evaluations of goodness of fit indices for structural equation models*, Sociological Methods and Research, Vol. 21, no. 2, pp. 132-160.

Goi, M. T., Kalidas, V. and Zeeshan, M. (2014) *Comparison of stimulus-organism response framework between international and local retailer*, Procedia-Social and Behavioral Sciences, Vol. 130, pp. 461-468.

Hair, J. F., Ringle, C. M. and Sarstedt, M. (2011) *PLS-SEM: Indeed, a silver bullet*, Journal of marketing theory and Practice, Vol. 19, no. 2, pp. 139-152.

Hall, A. and Towers, N. (2017) *Understanding of how millennial shoppers decide what to buy: Digitally connected unseen journeys*, International Journal of Retail & Distribution Management, Vol. 45, no. 5, pp:498-517.

Harrison, T., Waite, K. and Hunter, G. I. (2006) *The internet, information and empowerment*. European Journal of Marketing, Vol. 40, no. 9/10, pp. 972-993.

Herhausen, D., Binder, J., Schoegel, M. and Herrmann, A. (2015) *Integrating bricks with clicks: retailer-level and channel-level outcomes of online-offline channel integration*, Journal of Retailing, Vol. 91, no. 2, pp. 309-325.

Holdford, D. (2018) *Consumer Behavior*. Virginia Commonwealth University, Chapter 11, pp: 209-233.

Yumurtacı Hüseyinoğlu, I. Ö., Sorkun M. F. and Börühan G. (2018) *Revealing the impact of operational logistics service quality on omni-channel capability*, Asia Pacific Journal of Marketing and Logistics, Vol. 30, no. 5, pp. 1200-1221.

Ieva, M. and Ziliani, C. (2018) *Mapping touchpoint exposure in retailing: Implications for developing an omni-channel customer experience*, International Journal of Retail & Distribution Management, Vol. 46, no. 3, pp.304-322.

Immonen, M., Sintonen, S. and Koivuniemi, J. (2018) *The value of human interaction in service channels*, Computers in Human Behavior, Vol. 78, pp. 316-325.

Ishfaq, R., Defee, C.C., Gibson, B.J. and Raja, U. (2016) *Realignment of the physical distribution process in omni-channel fulfillment*, International Journal of Physical Distribution & Logistics Management, Vol. 46, no. 6, pp. 543-561.

- Jacoby, J. (2002) *Stimulus-organism-response reconsidered: an evolutionary step in modeling (consumer) behavior*, Journal of Consumer Psychology, Vol. 12, no. 1, pp.51-57.
- Jenkinson, A. (2007) *Evolutionary implications for touchpoint planning as a result of neuroscience: a practical fusion of database marketing and advertising*, Journal of Database Marketing & Customer Strategy Management, Vol. 14, no. 3, pp. 164-185.
- Jiang, K., Luk, S.T. and Cardinali, S. (2018) *The role of pre-consumption experience in perceived value of retailer brands: consumers' experience from emerging markets*, Journal of Business Research, Vol. 86, pp: 374-385.
- Jocevski, M., Arvidsson, N., Miragliotta, G., Ghezzi, A. and Mangiaracina, R. (2019) *Transitions towards omni-channel retailing strategies: a business model perspective*, International Journal of Retail & Distribution Management, Vol. 47, no. 2, pp.78-93.
- Juaneda-Ayensa, E., Mosquera, A. and Murillo, Y. S. (2016) *Omni-channel Customer Behavior: Key Drivers of Technology Acceptance and Use and Their Effects on Purchase Intention*, Frontiers in Psychology, Vol. 7, article. 1117.
- Konuş, U., Verhoef, P.C. and Neslin, S.A. (2008) *Multichannel shopper segments and their covariates*. Journal of Retailing, Vol. 84, no. 4, pp. 398-413.
- Krueger, J. (2015) *Omni-channel shoppers: an emerging retail reality*, Available at: www.thinkwithgoogle.com/articles/omni-channel-shoppers-an-emerging-retail-reality.html (Accessed 13 March 2016).
- McLean, G., Al-Nabhani, K. and Wilson, A. (2018) *Developing a Mobile Applications Customer Experience Model (MACE)-Implications for Retailers*, Journal of Business Research, Vol. 85, pp. 325-336.
- Mehrabian, A. and Russell, J. A. (1974) *An approach to environmental psychology*, The MIT Press.
- Mishra, A. and Vishwas, R. (2018) *Retail shopper empowerment: a consumer-centric measure for store performance*, IIMB Management Review, Vol. 31, no.1, pp. 20-36.
- Mummalaneni, V. (2005) *An empirical investigation of Web site characteristics, consumer emotional states and on-line shopping behaviors*, Journal of Business Research, Vol. 58, pp. 526-532.

- Murfield, M., Boone, C. A., Rutner, P. and Thomas, R. (2017) *Investigating logistics service quality in omni-channel retailing*, International Journal of Physical Distribution & Logistics Management, Vol. 47, no. 4, pp.263-296.
- Natarajan, T., Balasubramanian, S. A. and Kasilingam, D. L. (2017) *Understanding the intention to use mobile shopping applications and its influence on price sensitivity*, Journal of Retailing and Consumer Services, Vol. 37, pp. 8-22.
- Park, C. and Jun, J. K. (2003) *A cross-cultural comparison of Internet buying behavior: Effects of Internet usage, perceived risks, and innovativeness*, International Marketing Review, Vol. 20, no. 5, pp. 534-553.
- Park, C-H. and Kim, Y-G. (2003) *Identifying key factors affecting consumer purchase behavior in an online shopping context*, International Journal of Retail & Distribution Management, Vol. 31, no. 1, pp.16-29.
- Parsons, E. and Maclaran, P. (2009) *Contemporary Issues in Marketing and Consumer Behavior*, Butterworth-Heinemann, Oxford.
- Pires, G. D., Stanton, J. and Rita, P. (2006) *The internet, consumer empowerment and marketing strategies*, European Journal of Marketing, Vol. 4, no. 9/10, pp.936-949.
- Rodríguez-Torrico, P., Cabezudo, R. S. J. and San-Martín, S. (2017) *Tell me what they are like and I will tell you where they buy. An analysis of omni-channel consumer behavior*, Computers in Human Behavior, Vol. 68, pp. 465-471.
- Russell, J. A. and Mehrabian, A. (1977) *Evidence for a three-factor theory of emotions*, Journal of research in Personality, Vol. 11, no. 3, pp. 273-294.
- Saghiri, S., Wilding, R., Mena, C. and Bourlakis, M. (2017) *Toward a three-dimensional framework for omni-channel*, Journal of Business Research, Vol. 77, pp: 53-67.
- Sahi, K., Sekhon, H. and Quareshi, T. (2016) *Role of trusting beliefs in predicting purchase intentions*, International Journal of Retail & Distribution Management, Vol. 44, no. 8, pp. 860-880.
- Shen, X. L., Li, Y. J., Sun, Y. and Wang, N. (2018) *Channel integration quality, perceived fluency and omni-channel service usage: The moderating roles of internal and external usage experience*, Decision Support Systems, Vol. 109, pp. 61-73.
- Smith, S. M. and Albaum, G. S. (2010) *An introduction to marketing research*. Qualtrics Labs, Inc. (Online Edition), (Accessed 2010).

- Straker, K., Wrigley, C. and Rosemann, M. (2015) *Typologies and touchpoints: designing multi-channel digital strategies*, Journal of Research in Interactive Marketing, Vol. 9, no. 2, pp. 110-128.
- Sulastini, F. I., Bacik, R. and Fedorko, R. (2018) *An Analysis of Online Consumer Shopping Behavior*, Polish Journal of Management Studies, Vol. 18, no.2, pp. 338-349.
- Taylor, E. (2016) *Mobile payment technologies in retail: a review of potential benefits and risks*, International Journal of Retail & Distribution Management, Vol. 44, no. 2, pp. 159-177.
- Thomas, K.W. and Velthouse, B. A. (1990) *Cognitive Elements of Empowerment: An "Interpretive" Model of Intrinsic Task Motivation*, Academy of Management Review, Vol. 15, no. 4, pp. 666-681.
- Tjhin, V. U., Abbas, B. S., Budiastuti, D. and Kosala, R. (2017) *Mobile Utility: An Antecedent for Influencing Purchase Intention Moderated by Omni-channel Integration Quality*, 3rd International Conference on Information Management.
- Verhoef, P.C., Kannan, P. K. and Inman, J.J. (2015) *From multi-channel retailing to omni-channel retailing: introduction to the special issue on multi-channel retailing*, Journal of Retailing, Vol. 91, no. 2, pp. 174-181.
- Von Briel, F. (2018) *The future of omni-channel retail: A four-stage Delphi Study*, Technological Forecasting & Social Change, Vol. 132, pp. 217-229
- Wathieu, L., Brenner, L., Carmon, Z., Chattopadhyay, A., Wertebroch, K., Drolet, A., Gourville, J., Muthukrishnan, A. V., Novemsky, N., Ratner, R. K. and Wu, G. (2002) *Consumer Control and Empowerment: Primer*. Kluwer Academic Publishers, *Manufactured in The Netherlands*, Marketing Letters, Vol. 13, no. 3, pp. 297-305.
- Wu, J. H. and Wang, S. C. (2005) *What drives mobile commerce? An empirical evaluation of the revised technology acceptance model*, Information & Management Vol. 42, pp. 719-729.
- Yüksel, M., Milne, G. R. and Miller, E.G. (2016) *Social Media as complementary consumption: the relationship between consumer empowerment and social interactions in experimental and informative context*, Journal of Consumer Marketing, Vol. 33, no. 2, pp: 111-123.

Zhang, M., Ren, C., Wang, G. A. and He, Z. (2018) *The impact of channel integration on consumer responses in omni-channel retailing: The mediating effect of consumer empowerment*, *Electronical Research and Application*, Vol. 28, pp. 181-193.

Zimmerman, M. A. and Perkins, D. D. (1995) *Empowerment theory, research, and application*, *American Journal of Community Psychology*, Vol.23, no. 5 pg. 569.

Zhou, L. and Wong, A. (2004) *Consumer impulse buying and in-store stimuli in Chinese supermarkets*, *Journal of International Consumer Marketing*, Vol. 16, no. 2, pp. 37-53.



APPENDICES

APPENDIX A: QUESTIONNAIRE FOR DATA COLLECTION IN ENGLISH

Dear Consumer,

The measurements of customer satisfaction are not only products and services is provided from the physical stores, but also online and mobile stores are improved via technological developments.

You help us to be defined the effects of online, mobile and physical stores on the customer in the retailing sector by participating into this survey.

You need to only 5-7 minutes to answer the full survey. All answers given by you are kept in secret.

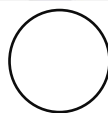
We thank you to participate and spend time on this survey for this academic survey.

Have you ever done shopping to use a website, mobile application and/or social media (facebook, Instagram, twitter, youtube etc.) of a retailer having online, mobile and physical store?

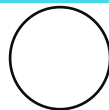
- Physical store

- Online store

- Mobile store



Evet



Hayır

If your answer is “YES”, you can continue to answer the survey; if it is “NO”, you finish the survey.

Please, you answer the survey to consider the retailer which you do shopping both online, mobile and physical store.

.....

Please answer the questions by thinking out the retailer which you do shopping more than one.

1. Section: Please select the answer based on your assumption	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
I can purchase the products from the retailers' online stores which are available at its physical stores					
I can purchase the products from the retailers' physical stores, which are available at its online stores					
I can complete my shopping without difficulty regardless of which of the retailer's marketing channel I use					
All the retailer's sales channels (physical and online stores) work with the same effectiveness					
I can collect the products purchased online from the retailer's physical stores					
The order I make from online stores can be delivered the same day to the retailer's physical store for collection					
I can purchase the product from the retailer's physical store, which I ordered from online store					
The retailer uses social media effectively to promote its products in all marketing channels					

The retailer uses social media effectively to notify the current discounts on products in all marketing channels					
In my dealings with this retailer, I feel I am in control					
The ability to influence the goods and services of this retailer is beneficial to me					
I feel good because of my ability to influence the choice set offered to me by this retailer					
During the shopping process, I can select product and service freely					
My influence over this retailer has increased relative to the past					
2. Section: Please select the answer based on your assumption	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
I am aware of the existence of all available service channels.					
I am aware of the differences between service attributes across different channels					
I know how to utilize different channels to meet my consumption needs					
<u>Answer the questions thinking out the retailer:</u>					
Altogether, I'm satisfied with the goods and services of this retailer					

I'm totally convinced of this retailer					
This retailer totally meets my expectations					
I've made especially good experiences with this retailer					
This retailer offers me exactly what I need					

Demographics:

1. Gender

- Female
- Male

2. Age

- 18-25
- 26-35
- 36-45
- 46-55
- Over 56

3. Marital Status

- Single
- Married

4. Monthly income

- Minimum wage – 3000 TL
- 3001 TL – 5000 TL
- 5001 TL - 7000 TL
- 7001 TL-9000 TL
- over 9000 TL

5. Employment

- Employee
- Retired
- Housewife
- Jobseeker
- Student

6. Education level

- Primary-Secondary school
- High school
- University
- Master's Degree/PHD

7. When did you start doing shopping on online store?

- Less than 6 months
- 6 months – 1 year
- 1 year – 3 years
- Over 3 years

8. How much Money spend on online shopping in 3 months?

- 1 – 500 TL
- 501 TL- 1000 TL
- 1001 TL – 1500 TL
- 1501 TL – 2000 TL
- 2001 TL and over

9. How many times do you visit the online and mobile stores?

- Only need
- Sometimes
- Regularly

10. How many times do you do shop from online and mobile stores in 6 months?

- Never
- 1-3 times
- 4-6 times
- Over 7 times

APPENDIX B: QUESTIONNAIRE FOR DATA COLLECTION IN TURKISH

Sayın tüketici,

Tüketici memnuniyetinin ölçütleri sadece fiziksel mağazadan temin edilen ürün ya da hizmetler değildir aynı zamanda teknolojinin gelişmesiyle ortaya çıkan online ve mobil mağazalar aracılığıyla sizlerin hayatına giren yenilikler ve teknolojik ilerlemeler ile de orantılıdır.

Bu ankete katılım göstererek perakende sektöründe özellikle online, mobil ve fiziksel mağazacılığın siz tüketiciler üzerindeki etkilerini belirlememize yardımcı olacaksınız.

Anketin tamamını yanıtlamanız için 5 – 7 dakikanızı ayırmanız yeterli olacaktır.

Anket sorularına vereceğiniz yanıtlar tamamen gizli kalacaktır.

Bu akademik araştırma için yapılan bu çalışmaya katılımınız ve ayırmış olduğunuz zaman için şimdiden çok teşekkür ederiz.

ÖZLEM ÜRGÜPLÜ, İzmir Ekonomi Üniversitesi Lojistik Yönetimi

Daha önce online, mobil ve fiziksel mağazası olan bir perakendecinin mobil uygulaması ve/veya sosyal medya (facebook, instagram, twitter, youtube vb.) kanallarını ziyaret ederek alışveriş yaptınız mı?

- Fiziksel mağaza

- Online mağaza

- Mobil mağaza



Evet

Hayır

Cevabınız “EVET” ise ankete devam edebilirsiniz, “HAYIR” ise anketi sonlandırırız.

Lütfen bu şekilde alışveriş yaptığınız perakendeciyi düşünerek anketi cevaplayınız.

.....

Lütfen aşağıdaki soruları **anketin başında belirttiğiniz birden fazla alışveriş yaptığınız perakendeci (firma)** düşünerek (deneyimlerinize ve bilginize dayanarak) yanıtlayınız.

1.Bölüm: Aşağıdaki ifadelere lütfen katılma derecenizi belirtiniz.	Kesinlikle katılmıyorum	Katılmıyorum	Ne katılıyorum Ne katılmıyorum	Katılıyorum	Kesinlikle katılıyorum
Perakendecinin fiziksel mağazasında bulunan herhangi bir ürünü online mağazalarından da satın alabilirim.					
Perakendecinin online mağazalarında bulunan herhangi bir ürünü perakendecinin fiziksel mağazasından da satın alabilirim.					
Alışveriş yaptığım hangi satış kanalı olursa olsun (fiziksel mağaza veya online mağaza) alışverişimi sorunsuz gerçekleştirebilirim.					
Perakendecinin tüm satış kanalları (fiziksel ve online mağazaları) aynı etkinlikte çalışmaktadır.					
Online mağazalardan satın aldığım ürünleri fiziksel mağazaya gidip alabilirim.					
Online mağazalardan verdiğim sipariş, aynı gün perakendecinin fiziksel mağazasında bana teslim edilebilir.					
Online mağazalarda gördüğüm ürünü ayırtıp fiziksel mağazadan satın alabilirim.					
Perakendeci, sosyal medyayı ürünlerini tanıtmak için etkin bir şekilde kullanmaktadır.					
Perakendeci, sosyal medyayı indirimleri bildirmek için etkin bir şekilde kullanır.					
Perakendeci ile olan ilişkilerimde kendimi kontrol altında hissedirim.					

Perakendecinin mal ve hizmetleriyle ilgili etkileme yeteneği benim için faydalıdır.					
Perakendeci tarafından bana sunulan seçeneklerin etkisiyle kendimi iyi hissediyorum.					
2.Bölüm: Aşağıdaki ifadelere lütfen katılma derecenizi belirtiniz.	Kesinlikle katılmıyorum	Katılmıyorum	Ne katılıyorum Ne katılmıyorum	Katılıyorum	Kesinlikle katılıyorum
Alışveriş süresince istediğim ürün ve hizmeti seçebilirim.					
Perakendeci üzerindeki etkim geçmişe kıyasla daha fazladır.					
İlgili perakendecinin sunduğu tüm hizmet kanallarından haberim var.					
Perakendecinin farklı hizmet kanallarının birbirinden farklı hizmet özelliklerini sunduğundan haberdarım.					
Tüketim ihtiyaçlarımı karşılamak için perakendecinin farklı hizmet kanallarından nasıl faydalanacağımı biliyorum.					
<u>İlgili perakendecinizi düşünerek cevaplayınız:</u>					
Ürün ve hizmetlerinden memnunum.					
Sunduğu ürün ve hizmetler ile ikna edicidir.					
Beklentilerimi tamamen karşılamaktadır.					
Bugüne kadar iyi tecrübelerim oldu.					
Neye ihtiyacım varsa onu sağlamaktadır.					

2. Bölüm: Demografik Sorular:

1. Cinsiyetiniz

- Kadın
- Erkek

2. Yaşınız

- 18-25
- 26-35
- 36-45
- 46-55
- 56 ve üzeri

3. Medeni durumunuz

- Bekâr
- Evli

4. Aylık hane halkı gelirinizi belirtiniz

- Asgari Ücret – 3000 TL
- 3001 TL – 5000 TL
- 5001 TL – 7000 TL
- 7001TL- 9000 TL
- 9001 TL ve üzeri

5. Şu anki iş durumunuz

- Çalışan
- Emekli
- Ev Hanımı
- İş arayan
- Öğrenci

6. Eğitim durumunuz

- İlkokul – Ortaokul
- Lise
- Üniversite
- Yüksek lisans / Doktora

7. Online ve mobil mağazacılık üzerinden ne zamandan beri alışveriş yapmaktasınız?

- 6 aydan az
- 6 ay ile 1 yıl arasında
- 1 yıl ile 3 yıl arasında
- 3 yıl ve üzerinde

8. Son 3 ayı düşünerek online ve mobil mağazalardan yaptığınız alışverişlere toplam ne kadar para harcadınız?

- 1-500 TL
- 501-1000 TL
- 1001-1500 TL
- 1501-2000 TL
- 2001 TL ve üzeri

9. Alışveriş internet sitelerini ve mobil mağaza uygulamaları ne kadar sıklıkla ziyaret ediyorsunuz?

- Sadece ihtiyacım olduğunda
- Ara sıra
- Düzenli

10. Son 6 ayı düşünerek online ve mobil mağazalardan kaç defa alışveriş yaptınız?

- Hiç alışveriş yapmadım
- 1-3 kere
- 4-6 kere
- 7 ve üzeri