



The Effects of New Service Development Antecedents On New Service Performance: A Research On E-Commerce Businesses*

Mine SÖNMEZAY ¹

Abstract

In today's intensely competitive environment, one of the activities carried out by businesses in order to differentiate, gain new customers and retain their existing customers is to develop new services. One of the areas where radical and incremental service innovations emerge as a result of rapid advances in technology is the e-commerce sector. The purpose of this study is to determine the dimensions of e-commerce businesses in service innovation and to reveal the effects of these dimensions on new service performance, along with the effects of new service performance on the marketing performance of e-commerce businesses. The research was conducted between June 18, 2020 - September 20, 2020. The convenience sampling method was used in the study. The data collected from the research conducted on e-commerce companies were analyzed by Structural Equation Modeling (SEM). According to the results of the analysis, it has been found that the exogenous variables of strategic investment, service innovation experience, information technology experience, and competitive environment have a significant and positive impact on the new service performance of e-commerce businesses. However, exogenous variables of risk tolerance, collaboration, and consumer demand did not substantially affect the new service innovation performance of e-commerce businesses. In addition, as a result of the analysis, new service innovation performance of e-commerce businesses on marketing performance has also been found to have a significant and positive impact. It can be stated that it is essential for e-commerce businesses to analyze the competitive environment correctly, to gain experience in service innovations, and focus on information technologies and their strategic investments in service innovations.

Keywords: New Service Development, Servis Innovation, E-commerce, Marketing Performance, Structural Equation Model
Jel Codes: M30, M31, M39

Yeni Hizmet Performansı Üzerinde Yeni Hizmet Geliştirme Öncüllerinin Etkileri: E-Ticaret İşletmeleri Üzerinde Bir Araştırma

Özet

Günümüzün yoğun rekabet ortamında işletmelerin farklılaşmak, yeni müşteriler kazanmak ve mevcut müşterilerini elde tutabilmek için gerçekleştirdikleri faaliyetlerden biri yeni hizmetler geliştirmektir. Teknolojideki hızlı ilerlemeler neticesinde radikal ve artımsal hizmet yeniliklerinin ortaya çıktığı alanlarda birisi de e-ticaret sektörüdür. Bu çalışmanın amacı, e-ticaret işletmelerinin hizmet yeniliğinde yer alan boyutları belirleyerek, bu boyutların yeni hizmet performansına etkilerini ve yeni hizmet performansının da e-ticaret işletmelerinin pazarlama performansına etkilerini ortaya koymaktır. Araştırma 18 Haziran 2020 - 20 Eylül 2020 tarihleri arasında gerçekleştirilmiştir. Araştırmada kolayda örnekleme yöntemi kullanılmıştır. E-ticaret işletmeleri üzerinde yapılan araştırmadan toplanan veriler, Yapısal Eşitlik Modellemesi (YEM) ile analiz edilmiştir. Analiz sonuçlarına göre stratejik yatırım, hizmet yeniliği deneyimi, bilgi teknolojisi deneyimi ve rekabet ortamı egzojen değişkenlerinin e-ticaret işletmelerinin yeni hizmet performansı üzerinde anlamlı ve pozitif bir etkiye sahip olduğu bulunmuştur. Ancak risk toleransı, işbirliği ve tüketici talebi egzojen değişkenlerinin e-ticaret işletmelerinin yeni hizmet performansı üzerinde anlamlı bir etkisi bulunmamıştır. Ayrıca analiz sonucunda e-ticaret işletmelerinin yeni hizmet performansının pazarlama performansı üzerinde anlamlı ve pozitif bir etkisinin olduğu bulunmuştur. Bu sonuçlar doğrultusunda, e-ticaret işletmelerinin rekabet ortamını doğru analiz etmesinin, hizmet yenilikleri konusunda deneyim kazanmasının, hizmet yeniliklerine yaptıkları stratejik yatırımlarının ve bilgi teknolojilerine ağırlık vermesinin çok önemli olduğu ifade edilebilir.

Anahtar kelimeler: Yeni Hizmet Geliştirme, Hizmet İnovasyonu, E-ticaret, Pazarlama Performansı, Yapısal Eşitlik Modellemesi (YEM)

Jel Kodu: M30, M31, M39

CITE (APA): Sonmezay, M. (2023). The Effects Of New Service Development Antecedents On New Service Performance: A Research On E-Commerce Businesses. *İzmir İktisat Dergisi*. 38(1). 54-76. Doi: 10.24988/ije.1074343

¹ Dr., Bursa Uludağ University/Institute of Social Sciences, Business Administration, Bursa / Turkey

EMAIL: mine@sonmezay.com **ORCID:** 0000-0002-0965-3353

* This article is derived from doctorate thesis completed by Mine Sonmezay under the supervision of Professor Doctor Erkan Ozdemir in 2021.

1. INTRODUCTION

In the last decade, there has been an increasing focus on services in many industries with transformational advances in information and communication technologies. Developments in these technologies create new opportunities for businesses to increase their service innovation efforts (Barrett et al., 2015: 135). One of the areas where interest in services has increased is e-commerce. With the rapid growth of e-commerce, business interest and investments in this developing sales channel are increasing. In e-commerce, one factor that directs consumers to purchase and affects their preferences most is service. Service innovation in e-commerce includes all customers' contact points, from consumers experience surfing on the website to completing the experience (Vakulenko et al., 2019: 463).

Businesses with the most success in using e-commerce have begun to realize that the main determinants of success and failure include the availability of the website or low price and the quality of the e-service offered (Lee and Lin, 2005: 161). Online sales fail mostly due to consumers' low-quality experiences of the e-services (Zhang and Tang, 2006: 5). Studies have shown that 80 percent of customer complaints about e-commerce businesses are about the low quality of the service they experience (Gounaris et al., 2010: 142). Based on this, it has become an important issue for companies to consider the content of their e-services to both increase the quality of their e-commerce and to direct them according to consumers' needs (Lee and Lin, 2005: 161).

In order to be successful in an online environment with a high level of competition, online businesses need to highlight themselves by developing a correct differentiation strategy. A key component of such a strategy is that companies need to focus on services and relationships that show that they value their customers (Gounaris et al., 2010: 150). New services provide business advantages such as increasing profitability, increasing the number of consumers, increasing existing sales, and providing new market opportunities (Özdemir, 2015: 151). Making innovations in services can also increase customer satisfaction and loyalty by improving customer relations (Jong et al., 2003: 52).

Online services are processes that integrate the combination of stored algorithms and other manual processes. It is stated that e-services offered through this process are actions that create value and provide benefits for consumers (Hofacker et al., 2007: 5). Online customers want personal choices and convenience in transactions in addition to fast, easy, and quality services (Zhang and Tang, 2006: 5). E-commerce businesses offer product recommendations or customized service recommendations based on the consumer's past purchases. It is also known that small service innovations can increase e-commerce businesses' profitability (Zhao et al., 2015: 220).

This study aims to determine the dimensions involved in service innovation of e-commerce businesses and reveal the impact of these dimensions on new service performance and the effects of new service performance on the marketing performance of e-commerce businesses. Considering the important developments in e-commerce mentioned above, in this study, the dimensions of service innovation were primarily examined under the two main headings of internal and external factors. While "Strategic Orientation Towards New Services" (Strategic Investment, Risk Tolerance) and "Mechanisms That Facilitates New Services" (Collaboration, Service Innovation Experience, Information Technology Experience) are considered in the internal variables; Consumer Demand and Competitive Environment are discussed as external factors.

In the continuation of the study, after the literature review, the relationship between the dimensions in the research model were examined and with the support of the literature, the research hypotheses and model were formed. As a result of the research carried out thereafter, the data collected from e-commerce businesses was analyzed by structural equation modeling. In the conclusion of the study, the study's findings were compared with the results in the literature, and suggestions were made to researchers for future research and for managers in business.

2. RELATED WORKS

Service innovation is about transferring non-physical attributes to meet customer needs. These innovations can allow, for example, customers to repurchase and make recommendations to other potential customers. These developments also positively impact businesses' financial results (Jong et al., 2003: 52). A new service increases companies' perceived service quality and customer satisfaction, and increases the frequency of purchases. Satisfied customers refer their feelings to other consumers, and they will also be willing to pay a higher price (John and Storey, 1998: 197). In the continuation of the study, the antecedents that are thought to affect service innovation are discussed.

2.1 Strategic Investments of Businesses

Strategic investments involve a high level of risk, challenging to measure, and have significant long-term effects on the performance of businesses (Alkaraan and Northcott, 2007: 134). Strategic investments are among the most important decisions taken by companies, providing businesses with a competitive advantage through cost reduction and product/service differentiation. These help businesses increase their overall performance (Henriques and Sadorsky, 2011: 79). New procedures and concepts in existing services are often developments of existing services rather than new core technology for service innovations. In other words, service innovations are often implemented as incremental rather than radical innovations. In this context, strategic focusing and investment decisions regarding service innovations are considered very important (Yen et al., 2012: 815).

Alkaraan and Northcott (2007: 134), in their study on the impact of strategic investment decision-making, stated that issues such as the generation of new product or service lines, the establishment of new production processes, and the use of advanced new technologies require important strategic investment decisions. Yen et al. (2012) conducted research on 312 businesses on the dimensions of service innovation readiness and performance results. According to the results of this research, a successful new service performance starts with an innovation-oriented strategy. Such a strategy ensures that appropriate and sufficient resources are allocated to realize service innovations in businesses. Based on this, the first hypothesis suggested is as follows:

H₁: The strategic investment orientation of e-commerce businesses has a positive effect on the new service performance of these businesses.

2.2 Risk Tolerance of Business Managements

The concept of risk tolerance is defined as the amount of risk that a business wants to accept or take while implementing an innovation (Antonites and Wordsworth, 2009: 72). Companies should plan possible actions after defining and analyzing their risk tolerance (Bu and Liang, 2011: 3). Determining risk tolerance helps companies to use resources more efficiently. The successful determination of the businesses' risk tolerance allows them to achieve better performance results by providing lower costs and a shorter innovation process (Kwak and LaPlace, 2005: 692).

In the study of Avlonitis and Gounaris (1999: 1028) evaluating the data collected from 444 Greek businesses on marketing orientation and determinants, it was stated that the attitude of the businesses to the risk is an essential factor in the success of the marketing activities of the companies and facilitates the development of marketing activities. In their study on the relationship between e-commerce adoption and organizational culture, Nickels and Kwun (2006: 308) found that the adoption and success of e-commerce depended on the business's acceptance of risk tolerance. In this study, it was considered that companies with high-risk tolerance provide a higher level of strategic focus on innovations, and this situation positively contributes to the new service performance. The second hypothesis proposed in this context is as follows:

H₂: The risk tolerance of e-commerce businesses has a positive effect on these businesses' new service performance.

2.3 Collaboration with Different Partners on Service Innovation

Collaboration within the scope of business service innovation studies has been an important research topic for a long time (Miozzo et al., 2016: 1337). In this study, the collaboration of different actors that can affect service innovations success in the new service development process such as customers, employees, and business partners, is evaluated.

2.3.1 Collaboration with Customers and the Relationship between New Service Performance

Customer engagement and satisfaction contribute to businesses' success in new service development (Eberle et al., 2018: 370). Companies discover possible opportunities by collaborating with their customers (Cheng et al., 2012: 446; Yen et al., 2012: 816). In their study on new service development, Johne and Storey (1998: 212) state that it is difficult for many customers to understand the basic features of new services fully. For this reason, it has been stated that customer familiarity provides an advantage for businesses, especially for innovations that require a high degree of customer involvement. Therefore, it is noted that consumer participation in the service development phase is essential for service innovations.

2.3.2 Collaboration with Employees and the Relationship between New Service Performance

Employees' participation in business activities has been one of the most significant business management success steps in the last 50 years (Benson et al., 2013: 234). Employees' comprehensive knowledge of customer demands and business skills is seen as the key to business success in new service activities (Jong and Vermeulen, 2003: 849; Karlsson and Skåln, 2015: 1359). In the Banjongprasert (2017: 11) study, it was found that employees are the leading resource for successful innovation performance. It is seen that the participation of employees in innovations improves the new service performance of businesses.

2.3.3 Collaboration with Business Partners and the Relationship between New Service Performance

Collaboration of businesses with partners encourages creative ideas and can become a critical facilitator in the innovation process by increasing knowledge sharing (Froehle and Roth, 2007: 173; Sergeeva, 2016: 4). Yen et al. (2012: 816) reveal that collaboration and interaction with business partners increase business performance. According to the results obtained from the research of Ritter and Gemünden (2004: 548), early and intensive collaborations provide businesses with shorter innovation processes, lower innovation costs, and higher innovative outputs.

However, contrary to the above studies, although Zach (2012: 421) states that partner collaboration in businesses is decisive for developing innovations that match the businesses' marketing strategies, it has shown that collaboration with partners does not contribute to the strategic and institutional harmony of innovations. Following this literature review discussed under the three subheadings above, the proposed hypothesis on collaboration is as follows:

H₃: The collaboration of e-commerce businesses has a positive effect on these businesses' new service performance.

2.4 Service Innovation Experience and The Relationship Between New Service Performance

Service experiences are defined as the interactions between the processes, employees, and customers of the business. They constitute a set of clues for companies' new service performance (Patrício et al., 2008: 320; Thakur and Hale, 2013: 1110). Pennings and Harianto (1992: 356) present a theory of innovation that assumes successful innovations arising from businesses' experiences.

According to this study, the more a business accumulates technological know-how, the better its innovation capacity will be. As a result of the case study conducted by Syson and Perks (2004: 262) on the development of new services, it was found that knowledge and experience significantly contributed to businesses' new service performance.

Gürkan and Gürkan (2017: 224) state that business rate of innovation positively impacts the companies' performance. Berry et al. (2006: 45), in their study on service clues and customer evaluations obtained from service experiences, found that the indications obtained from experience help businesses to be more successful in understanding and satisfying consumer needs and desires. Supporting these studies, Yen et al. (2012) also stated in their research that service experiences obtained from past innovations increased businesses' ability to evaluate and use new knowledge. In addition, they indicated that service experiences increase the new service performance by supporting the readiness of companies for service innovation. Based on these statements, the proposed hypothesis is as follows:

H4: The service innovation experience of e-commerce businesses has a positive impact on these businesses' new service performance.

2.5 Information Technology Experience and the Relationship between New Service Performance

Information technology experience is seen as a factor that facilitates service innovation and is a supportive factor in the business innovation process (Yen et al., 2012: 817). Integrated information technology covers various elements, such as identifying and tracking automated products and services, and sharing this information with all partners, developing special offers, and tracking business goals (Borges et al., 2009: 885). Ghani and Said (2011: 66) found that the availability of adequate information technology capabilities in businesses enables the information required for decision making to be transferred and processed more successfully. In addition, in this study, it was found that advanced information technology skills are positively correlated with business performance. When it comes to e-commerce, it is a mandatory condition that the information technology infrastructure is positioned to facilitate online interactions and transactions with suppliers, business partners, and consumers (Zhu and Kraemer, 2002: 291).

Boateng et al. (2011: 4) conducted a study examining the factors affecting the adoption of e-commerce in Ghana. In this study, it was found that the performance of e-commerce businesses depends on the use of information technology services by the companies. Okunoye et al. (2007: 7) conducted exploratory research for the services in an online environment. The findings show that information technology has an important impact on every stage of service innovations, such as generation and delivery stages. Another critical finding obtained in this study is that the increase in the use of information technology in businesses today affects service innovation quality and performance in many ways. In the light of this information, the fifth hypothesis proposed in this study is as follows:

H5: The information technology experience of e-commerce businesses has a positive impact on a businesses' new service performance.

2.6 Consumer Demand and the Relationship between New Service Performance

In the global competitive environment, consumers are now in a position to expect and demand customization in service delivery. In line with this changing demand structure, accurate service innovations that match consumers' expectations satisfy consumers more than standard offers (Coelho and Henseler, 2012: 335). In order to be successful in developing innovative and value-added services that drive markets, businesses should take into account consumer demands that form the core of services (Thakur and Hale, 2013: 1111). Alam and Perry (2002: 518), in their study on how

to manage a new service development program, identified the stages in the new service development process and examined consumer input at various stages of the process. The results show that the successful integration of consumer and business mechanisms is one of the most critical factors in service innovations' success.

Kindström et al. (2013: 1070) stated that planning service innovations by learning the changes in consumer demand of businesses are essential to new service performance. Aurich et al. (2010: 140) stated that an orientation towards consumers is vital in integrating external factors into service innovation processes. In other words, one of the critical points in the success of businesses is that they should provide services in line with consumer demand. Based on these statements, the proposed hypothesis is as follows:

H₆: Consumer demand has a positive impact on new service performance of e-commerce businesses.

2.7 Competitive Environment and the Relationship between New Service Performance

Globalization in the economy increases the competition intensity of businesses. This increasing competition pushes companies to seek innovation in in-service presentation to survive (Thakur and Hale, 2013: 1113). Service innovation is an essential factor in maintaining businesses' competitive advantage due to the gradual transformation of economies into a service-oriented environment (Chen et al., 2016: 54). The fact that companies do not take part in the competition in the marketplace causes them to disappear from the market. Therefore, the competitive environment provides a strong incentive for businesses to innovate (Hartley et al., 2013: 828). Huse et al. (2005: 319) examined the competitive environment and innovation relationship of Norwegian businesses. This study found that businesses' competitive environment plays a vital role in affecting innovation performance. In the study, it was also stated that competition intensity encourages companies to innovate.

Hartley et al. (2013: 830) conducted a study on innovation and market competition. In this study, it is stated that market-based competition is an essential incentive for businesses to innovate. Contrary to these studies, Cornett et al. (2019: 56) examine the intensity of competitive environment and innovations. They state that businesses' competitive environment does not increase innovativeness, but companies' innovation increases competition. The following hypothesis has been established considering the different results presented in the literature.

H₇: The competitive environment of e-commerce businesses has a positive effect on these businesses' new service performance.

2.8 New Service Performance and Its Relationship between Marketing Performance

In today's relations marketing, businesses' marketing performance is accepted as the main determinant of business performance (Lamberti and Noci, 2010: 150). Businesses that implement high-level innovation activities increase their marketing performance by seizing new market opportunities. Therefore, companies need to adopt a strong service innovation strategy for new services (Chen et al., 2016: 55). Wang et al. (2010: 148) stated that investing strategically in primary service innovation, specializing in technology related to services or having resources such as collaboration with employees, increases the probability of launching innovative services and affects businesses' performance. If service innovations are implemented correctly, they positively impact financial and non-financial results (Thakur and Hale, 2012: 1119).

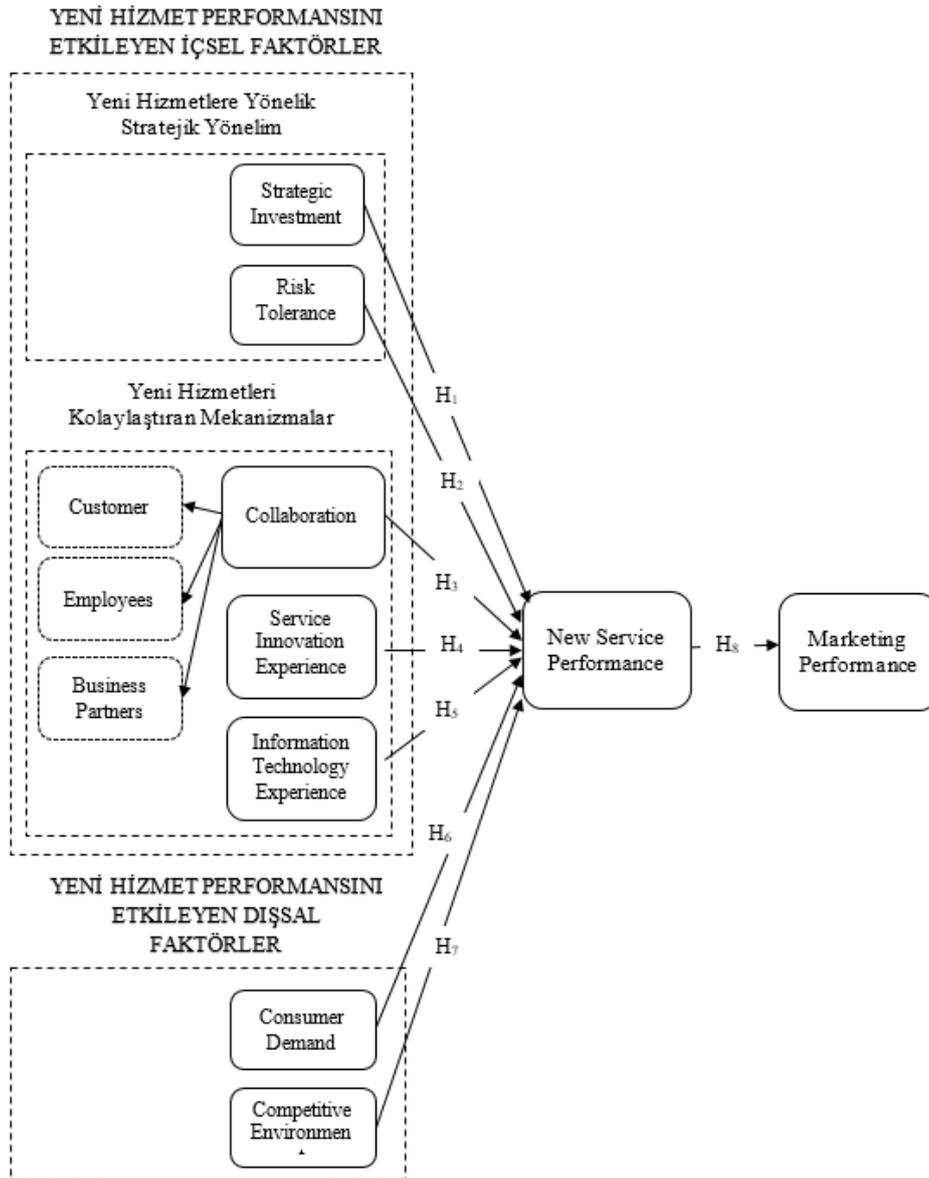
Due to changing consumer demands, businesses that offer innovative products or services with advanced features take advantage of being the first or early in the market, and benefit from long-term business profitability (Kostopoulos et al., 2011: 1337). In the study of Alam et al. (2013: 66) on customer interactions in service innovations, it was found that business innovation success has a

substantial effect on their overall performance. According to this study, companies with an innovative culture are ahead of their competitors. This is because the innovations ultimately affect variables such as business performance, marketing performance, and financial performance. That helps businesses to grow on a larger scale.

When the studies in the literature are examined, it is seen that the new service performance has a direct positive relationship with the marketing performance (Eisingerich et al., 2009: 353; Grawe et al., 2009: 294; Love et al., 2010: 285; Hussain et al., 2016: 37). Berry et al. (2006: 56) found that service innovations notably create a market increase. It was also noted that the marketing performance of businesses also increased more. In this study, the impact of businesses' new service performance on the marketing performance of e-commerce businesses is investigated. Based on these studies, the proposed hypothesis is as follows:

H₈: The new service performance of e-commerce businesses positively affects these businesses' marketing performance.

Figure 1: Research Model



3. METHOD

This study aims to reveal the effect of new service development antecedents in e-commerce on the companies' new service performance and the new service performance-marketing performance. This study covers companies operating in the field of e-commerce in Turkey. For the research population, 760 websites with monthly e-commerce traffic of 15 thousand or more, which were also included in the TÜBİSAD (2020) E-Commerce Market Size report, were taken. The sample of the study was calculated over this number.

In this study, the survey method was chosen as the data collection method. The questionnaire form consisted of two groups as "Likert scale questions" and "categorical questions." In the first part, the factors of "strategic investment, risk tolerance, collaboration, service innovation experience, information technology experience, consumer demand and competitive environment" were chosen and discussed as they are considered to affect businesses' new service performance. Likert questions on new service performance and marketing performance are also included in this section. In this part, the questions were created using the 5-point Likert scale (from Strongly Disagree to Agree Strongly). The literature was used to develop the questionnaire, and 54 questions were adapted in the form of a 5-point Likert scale using the relevant literature. In the second part of the questionnaire form, there are eight categorical questions such as the area in which the businesses operate, the number of employees, the size of the companies according to the annual turnover, the experience of the companies making online sales, the gender, age and years of work experience of participants.

The survey was conducted online, and an online questionnaire was delivered to e-commerce businesses via e-mail. Participants were chosen from business owners, e-commerce managers, and marketing managers. In order to test the reliability of the questionnaire questions, a pilot study was carried out first. 30 businesses contributed to this pilot study. Pilot study data were collected between June 5, 2020 - June 15, 2020. After the pilot study, it was observed that there was no need to make any changes, and the data collection process was carried out on the target audience between June 18 - September 20, 2020 using the existing questionnaire. At the end of this process, 265 questionnaires were collected from businesses. 259 questionnaires were used in the analysis phase after the incorrect or incomplete ones were removed from among these questionnaires. The data obtained were analyzed using IBM SPSS 23 and SmartPLS 3.2.8 package programs.

4. ANALYSES AND FINDINGS

In analyzing the data, frequency analysis was performed, and the participants' demographic characteristics were revealed. Then, the reliability and validity analyses of the scale dimensions used in the study were made, and the proposed research model was tested using Smart PLS 3.2.8.

4.1 Respondents' Demographic Characteristics

Frequency analysis was conducted to reveal the demographic characteristics of the participants in the study. The results of this analysis are shown in Table 1 below.

Table 1: Demographic characteristics

		f	%
Gender	Female	36	13,9
	Male	223	86,1
Age	21-30	8	3,1
	31-40	113	43,6
Age	41-50	125	48,3

Table 1: Demographic characteristics (Continue)

		f	%
Age	51 and above	13	5,0
Participant's Work Experience	Less than 1 year	3	1,2
	1-3 year	45	17,4
	4-6 year	108	41,7
	7-9 year	52	20,1
	10 year and above	51	19,7
	The Sector Where E-Commerce Businesses Mainly Operates	Textile	51
Shoes		49	18,9
Baby and Nursery		29	11,2
Decoration		11	4,2
Cosmetics		10	3,9
Household Appliances		3	1,2
Supermarket		3	1,2
Others		103	39,8
E-Commerce Business by Annual Turnover	Small Business	77	29,7
	Medium Business	123	47,5
	Large Business	59	22,8
Online Sales Experience of An E-Commerce Business	Less than 1 year	7	2,7
	1-3 year	59	22,8
	4-6 year	85	32,8
	7-9 year	73	28,2
	10 year and above	35	13,5
Total		259	100

When Table 1 is examined, it is found that employees from 259 businesses participated in the study; 223 of them (86.1%) were male, 36 (13.9%) were female. It is seen that 113 respondents (43.6%) are in the 31-40 age range, and 125 respondents (48.3%) are in the 41-50 age range. These results show that most survey participants are men and in the 31-50 age group. When the businesses participating in the research are classified according to their size, it is seen that 123 (47.5%) are medium-sized businesses, 77 (29.7%) are small businesses, and 59 (22.8%) are large businesses. When online sales experience is examined, it can be stated that 85 (32.8%) have 4-6 years, 73 (28.2%) have 7-9 years, and 59 (22.8%) have 1-3 years of experience. When the areas of operation of the businesses participating in the survey are examined, 51 (19.7%) textile, 49 (18.9%) shoes, 29 (11.2%) baby and nursery, and 103 (39.8%)) operate in other unspecified areas.

4.2 Measurement Model Analysis Results

In this study, Cronbach's Alpha and Composite Reliability (CR-Composite Reliability) values were calculated within the scales' scope of reliability analysis. While the Cronbach's Alpha value expresses the research's reliability coefficient, the CR value is used as an alternative assessment tool to the Cronbach's Alpha value. The reason for this is that as the number of variables increases, the

Cronbach's Alpha coefficient is a statistic that tends to give high results (Eskioğlu, 2017: 82). Within the scope of testing the scales' validity, convergent validity and discriminant validity analyses were performed. The convergent validity is expressed as the Average Variance Extracted (AVE) value and shows the factor loadings' average variance. Within the scope of the discriminant validity, the discriminant validity suggested by Fornell and Larcker (1981) and the values of the HTMT (Heterotrait-Monotrait Ratio) criterion proposed by Henseler et al. (2015) were examined.

Fornell and Larcker (1981) explained what values the analysis should be within the reliability and convergent validity analysis scope. While Cronbach's Alpha and CR values are expected to be above 0.70 (Fornell and Larcker, 1981: 40-42), the AVE value should be above 0.50 (Fornell and Larcker, 1981: 46).

Since the factor loadings of the expressions related to customer collaboration (CC1, CC2, CC3, CC4, CC5) in the measurement model was below 0.50, this dimension was completely excluded from the analysis. After the customer collaboration dimension was removed, the analysis was re-run and carried out for 49 expressions in the scale used in this study. The measurement model results of the dimensions in the model are shown in Table 2 below.

Table 2: Measurement model analysis results

Items	Factor Loadings	Cronbach's Alpha	CR	AVE
SIE3	0,756	0,921	0,937	0,679
SIE4	0,866			
SIE5	0,837			
SIE6	0,858			
SIE7	0,838			
ITE1	0,756	0,769	0,852	0,590
ITE2	0,808			
ITE3	0,806			
ITE4	0,699			
CD1	0,821	0,883	0,914	0,679
CD2	0,818			
CD3	0,853			
CD4	0,833			
CD5	0,794			
CE1	0,809	0,858	0,892	0,580
CE2	0,805			
CE3	0,773			
CE4	0,734			
CE5	0,755			
CE6	0,687			
NSP1	0,796	0,781	0,859	0,603
NSP2	0,751			
NSP3	0,734			
NSP4	0,823			

Table 2: Measurement model analysis results (Continue)

Items	Factor Loadings	Cronbach's Alpha	CR	AVE
MP1	0,756	0,831	0,876	0,540
MP2	0,775			
MP3	0,695			
MP4	0,750			
MP5	0,718			
MP6	0,714			

When the reliability and convergent validity results of this study are examined, it is seen that the Cronbach's Alpha coefficients of the dimensions are between 0.769 and 0.921. The CR coefficients are between 0.852 and 0.937. Based on these results regarding the reliability analysis, it is seen that the internal consistency of the scale is ensured, and it is reliable. The AVE values of the dimensions are between 0.540 and 0.785, indicating that the scale's convergent validity was met.

Considering the analysis of the discriminant validity of the study, the discriminant validity table proposed by Fornell and Larcker (1981: 46) (Table 3) and the Heterotrait-Monotrait Ratio (HTMT) criterion table (Table 4) suggested by Henseler et al. (2015: 116) are shown below.

Table 3: Discriminant validity results

	1	2	3	4	5	6	7	8	9	10
(1) Information Technology Experience	0,768									
(2) Service Innovation Experience	0,322	0,824								
(3) New Service Performance	0,388	0,436	0,777							
(4) Partner Collaboration	0,306	0,546	0,320	0,857						
(5) Marketing Performance	0,310	0,537	0,585	0,422	0,735					
(6) Competitive Environment	0,351	0,420	0,425	0,374	0,526	0,762				
(7) Risk Tolerance	0,186	0,212	0,351	0,183	0,216	0,210	0,849			
(8) Stratejic Investment	0,152	0,359	0,420	0,269	0,342	0,248	0,537	0,847		
(9) Consumer Demand	0,150	0,318	0,227	0,257	0,299	0,466	0,253	0,349	0,824	
(10) Employee Collaboration	0,268	0,392	0,440	0,344	0,468	0,452	0,383	0,496	0,400	0,886

When Table 3 is examined, it is seen that the square root of the AVE value of each dimension is higher than the correlation with the other dimensions. Therefore, as a result of the analysis, the discriminant validity suggested by Fornell and Larcker (1981: 46) was met.

Henseler et al. (2015: 127) state that the HTMT value should be below the threshold value of 0.90 if the dimensions are conceptually very similar and 0.85 if they are not conceptually very similar. The results of the analysis made according to the HTMT criteria regarding the discriminant validity are shown in Table 4 below.

Table 4: Discriminant validity results according to the HTMT criteria

	1	2	3	4	5	6	7	8	9	10
(1) Information Technology Experience										
(2) Service Innovation Experience	0,379									
(3) New Service Performance	0,485	0,499								
(4) Partner Collaboration	0,369	0,609	0,383							
(5) Marketing Performance	0,367	0,605	0,699	0,482						
(6) Competitive Environment	0,415	0,452	0,491	0,415	0,603					
(7) Risk Tolerance	0,217	0,236	0,414	0,204	0,246	0,223				
(8) Strategic Investment	0,167	0,385	0,484	0,293	0,388	0,267	0,600			
(9) Consumer Demand	0,179	0,351	0,262	0,290	0,345	0,530	0,285	0,382		
(10) Employee Collaboration	0,323	0,439	0,529	0,392	0,550	0,511	0,435	0,556	0,449	

When Table 4 showing the HTMT values is examined, it is seen that all values are below the threshold value of 0.85. When Table 3 and Table 4 are evaluated together, it is seen that the validity of discriminant between dimensions is met. The measurement model results show that the proposed research model is suitable for structural equation analysis.

According to the study of Sarstedt et al., (2017), model fit values in the PLS SEM technique are not the focal point as in the CB SEM technique. Similarly, Hair et al., (2018) stated that focusing on model-of-fit values in PLS SEM may harm the goal of the program. However, when the Model Fit values of the model are examined before performing the structural equation analysis, the SRMR (Standardised Root Mean Square Residual) value is 0.077; it is seen that this value is below the threshold value of 0.08. In addition, the NFI (Normed Fit Index) value is 0.93, so it is seen that this study considered a good fit values.

4.3 SEM Analysis Results

Within the scope of the structural model, it is tested whether the hypotheses proposed in this study are supported or not. In the evaluation of the model, estimation power (Q^2) and effect size (f^2) values were examined with basic measurements such as R^2 , β , and t-values (t value > 1.96). PLS algorithm was run to calculate path coefficients, linearity, effect size and R^2 values; Blindfolding analysis was run to calculate the predictive power (Q^2) value. To measure the PLS path coefficients' significance, 5000 sub-samples were taken from the sample using the bootstrapping technique, and the t-values were re-calculated. Structural equation modeling analysis results are shown in Table 5 below.

Table 5: PLS-SEM analysis results

Hypotheses	Paths	Standardized Beta Coefficient (β)	T Statistics	P Values	Results
H ₁	Strategic Investment → New Service Performance (NSP)	0,191	3,104	0,002	Supported
H ₂	Risk Tolerance →(NSP	0,107	1,669	0,095	Not Supported
H ₃	Collaboration → NSP	0,141	1,804	0,071	Not Supported
H ₄	Service Innovation Experience→ NSP	0,158	2,612	0,009	Supported
H ₅	Information Technology Experience → NSP	0,189	3,058	0,002	Supported
H ₆	Consumer Demand → NSP	-0,097	1,347	0,178	Not Supported
H ₇	Competitive Environment → NSP	0,196	2,838	0,005	Supported
H ₈	New Service Performance → Marketing Performance	0,587	6,944	0,000	Supported

When Table 5 is examined, it is seen that the strategic investment dimension expressing the H₁ hypothesis has a substantial ($p=0.002$; $p < 0.05$) impact on new service performance. Therefore, the proposed H₁ hypothesis was accepted. Strategic investments of e-commerce businesses have had an effect of $\beta=0.191$ on new service performance. When the effect ratio of this hypothesis is examined, it is seen that it has the second-highest impact among the accepted hypotheses in exogenous variables. The considerable value of the H₂ hypothesis, which expresses the impact of the risk tolerance dimension on new service performance, was found to be $p=0.095$ ($p < 0.05$). In other words, the risk tolerance dimension of e-commerce businesses does not have a substantial effect on the new service performance. Therefore, the proposed H₂ hypothesis was not accepted.

This hypothesis was not accepted because the significance value of the H₃ hypothesis, which expresses the effect of the collaboration dimension on the new service performance, was also found to be $p=0.071$ ($p < 0.05$). As a result of the analysis, the impact of having service innovation experience expressing the H₄ hypothesis on the new service performance of e-commerce businesses was found to be significant ($p=0.009$; $p < 0.05$). Therefore, the proposed H₄ hypothesis was accepted. Having experience of service innovation on new service performance was found to have a high effect of $\beta=0.158$.

The information technology experience dimension, which expresses the H₅ hypothesis, has a considerable ($p=0.002$; $p < 0.05$) effect on new service performance. Therefore, the proposed H₅ hypothesis was accepted. The information technology experience of e-commerce businesses has had an impact of $\beta=0.189$ on new service performance. H₆ hypothesis was not accepted because the significance value of this hypothesis, which expresses the effect of the consumer demand dimension on new service performance, was found to be $p=0.178$ ($p < 0.05$).

The competitive environment dimension, which expresses the H₇ hypothesis, has a substantial ($p=0.005$; $p < 0.05$) impact on new service performance. Therefore, the proposed H₇ hypothesis was accepted. The competitive environment of e-commerce businesses has an impact of $\beta=0.196$ on new service performance. When this hypothesis's impact rate is examined, it is seen that it is the exogenous variable with the highest effect rate. The effect of the new service performance on the

marketing performance of e-commerce businesses expressing the H₈ hypothesis was found to be considerable (p=0.000). Therefore, the proposed H₈ hypothesis was accepted. The new service performance has a high impact of $\beta=0.587$ on the marketing performance of e-commerce businesses. Consequently, it is seen that the effect level is quite high.

In Table 6 below, R², f², Q², and VIF values of structural equation modeling are given and the results obtained are evaluated.

Table 6: Results of determination coefficient (R²), VIF values, effect size (f²), and predictive relevance (Q²)

Hypotheses	Paths	R ²	f ²	Q ²	VIF
H ₁	Strategic Investment → New Service Performance	0,386	0,038	0,214	1,698
H ₂	Risk Tolerance → New Service Performance		0,014		1,452
H ₃	Collaboration → New Service Performance	0,386	0,011	0,214	1,982
H ₄	Service Innovation Experience → New Service Performance		0,026		1,577
H ₅	Information Technology Experience → New Service Performance		0,047		1,231
H ₆	Consumer Demand → New Service Performance		0,010		1,413
H ₇	Competitive Environment → New Service Performance		0,041		1,627
H ₈	New Service Performance → Marketing Performance	0,342	0,519	0,176	1,000

R² values of 0.75, 0.50, or 0.25 for the endogenous latent variables in the structural model are defined as significant, medium, or weak, respectively (Hair et al., 2011: 145). When the R² values of the research model are examined, strategic investment, risk tolerance, collaboration, service innovation experience, information technology experience, consumer demand, and competitive environment dimensions explain the new service performance dimension at the level of 39%. The new service performance explains 34% (R² = 0.342) of the marketing performance.

However, although R² allows evaluating a model's within-sample estimation, it does not explain the out-of-sample prediction performance (Ali et al., 2017: 523). For this reason, Hair et al. (2017) state that f², Q², and VIF values should be examined in addition to R² in the evaluation of the reflective model.

The effect size coefficient provides information about the size of the difference between groups, the power of a relationship, the explanatory power of the independent variable, and the rate of change in the dependent variable explained by the independent variables (Parks et al., 1999: 140). The impact size being in the range of 0.02-0.15 is low; 0.15-0.35 is medium; 0.35 and above are considered high (Hair et al., 2014: 114). When the effect size values of this study are examined, it is seen that the impact sizes of all exogenous variables on new service performance are low; it is seen that the effect of new service performance on marketing performance is high (0.519).

Q², another value that needs to be examined, reflects the predictive power of the model. This analysis based on the Blindfolding procedure reveals the predictive power of exogenous variables to

endogenous variables. The fact that the calculated prediction power coefficients (Q^2) are more significant than zero indicates that the research model has the predictive power of endogenous variables (Hair et al., 2011: 145). When Table 6 is analyzed, it is seen that the Q^2 value of the strategic investment, risk tolerance, collaboration, service innovation experience, information technology experience, consumer demand, and competitive environment dimensions is 0.214, and the Q^2 value of the new service performance dimension is 0.176. These values show that the model has predictive power.

The calculation of the path coefficients connecting the structures is based on a series of analyzes. Therefore, the researcher must be sure that linearity problems do not affect analysis results. At this stage, VIF (Variance Inflation Factor) values should be checked. In the study of Hair et al. (2011: 145), it is stated that VIF values should be below the threshold value of 5. It is stated that there is no problem with linearity between variables below this threshold value. When the results in this study are examined, it is seen that all the results regarding the VIF value are below 5, so there is no linearity problem between the variables.

5. DISCUSSION

When the literature is examined, it has been seen in many studies that strategic investment decisions affect service innovations (Alkaraan and Northcott, 2007: 134; Henriques and Sadorsky, 2011: 79; Yen et al., 2012: 815). In this study, supporting the literature, it was found that strategic investments have a positive and considerable impact on the new service performance of e-commerce businesses. Looking at this result, if companies want to compete successfully in e-commerce, they should consider strategic investment decisions not only in the process of creating new ventures but also in the process of creating service innovations. This step will help them set up a mechanism to facilitate potential service innovations.

Hallahan et al. (2004: 58); Kwak and LaPlace, (2005: 692); Yen et al. (2012: 816) mentioned the importance of risk tolerance and its effect on service innovations in their studies. Innovative processes are long-term investments that require commitment and generate potential risks for businesses. Contrary to the literature mentioned above, this study revealed that risk tolerance does not affect the companies' new service performance. Considering this result, as Yen et al., (2012: 816) mentioned in their study, although it is known that service innovation will contribute to the growth of businesses, it is seen that many businesses are reluctant to give up existing capabilities. In other words, it can be stated that businesses do not consent to losing current capabilities when implementing service innovation. The approach that Chandy and Tellis (1998: 475) expresses as being willing to destroy the longstanding is an important approach in businesses. The fact that businesses that do not have this attitude and are reluctant to give up their current profits explains the result of this hypothesis.

When the literature is examined, it is seen that the new service development dynamics consist of the interactions between the business and the customer (Weerawardena and Kennedy, 2002: 14; Stuart and Tax, 2004: 610; Smith and Fischbacher, 2005: 1025; Stevens and Dimitriadis, 2005: 191). Similarly, when the consumer knowledge of employees is taken into consideration, the importance of the feedback received from the employees in innovation studies is relatively high (Jong et al., 2003: 45; Cheung and To, 2010: 259; Cheng et al., 2012: 446; Karlsson and Skålen, 2015: 1359). When we look at the collaboration of the partners, which is the last part of the collaboration dimension, it is stated that the collaboration between the partners and the businesses increase the performance of the companies (Papadakis and Bourantas, 1998: 10; Ritter and Gemünden, 2004: 548; Froehle and Roth, 2007: 173; Yen et al., 2012: 816; Sergeeva, 2016: 4). However, according to the results obtained in this study, the collaboration dimension did not significantly impact new service performance. This result indicates that the effective mechanisms in innovation studies in businesses arise not from the

employees but from the senior managers who observe them. Business management' efforts to innovate beyond customers' expectations can be seen as an explanation for the negative impact of this collaboration. Besides, at the point of collaboration with partners, it can be thought that businesses only send requests to the partners instead of waiting for innovation from the partners.

Cohen and Levinthal (1990: 131); Garud and Nayyar (1994: 372) stated that past information experiences help make new decisions more effectively and from this emerge more successful ideas. Also, it is seen that the number of innovations of businesses has a positive impact on business performance (Gürkan and Gürkan, 2017: 224). In many studies in the literature, it has been stated that service innovation experience contributes significantly to service innovation (Pennings and Harianto, 1992: 356; Syson and Perks, 2004: 262; Patrício et al., 2008: 319). The result of this study is in line with the literature. In other words, the service innovation experience of e-commerce businesses has been found to have a positive effect on new service performance.

It is stated in many studies that information technologies owned by businesses are an integral part of service innovations and affect the quality and performance of service innovations (Okunoye et al., 2007: 7; Borges et al., 2009: 885; Peters, 2009: 41; Ghani and Said., 2011: 66; Löbler and Lusch, 2014: 192). Especially in an area where information technologies are used more intensely, such as e-commerce, the innovation of services depends more on information technology (Zhu and Kraemer, 2002: 291; Boateng et al., 2011: 4). In this study, supporting the literature, information technology experience has found a positive and significant effect on the new service performance of e-commerce businesses.

Nowadays, consumer demands have become more in a position to direct the markets. Accurate analysis of this changing demand structure contributes considerably to businesses in planning service innovations and new service performance (Alam and Perry, 2002: 518; Hillebrand et al., 2011: 67; Kindström et al., 2013: 1070; Thakur and Hale, 2013: 1111; Morganti et al., 2014: 183). According to the results obtained in this study, contrary to the relevant literature, it was found that consumer demands do not have a significant impact on the new service performance of e-commerce businesses. As Thakur and Hale (2013: 1110) stated, businesses with a market-pull strategy support service innovations based on consumer demand. However, the fact that businesses that adopt a push-to-market strategy aim to go beyond consumer demand explains the fact that this hypothesis is not supported.

When the relevant literature is examined, it is seen in many studies that the competitive environment of e-commerce businesses provides a strong incentive for innovation studies and plays an essential role in affecting innovation performance (Huse et al., 2005: 319; Majeed, 2011: 193; Hartley et al., 2013: 828). This study's results support the literature and found that the competitive environment has a significant and positive effect on the new service performance of e-commerce businesses.

When the relevant literature is examined, it is seen that new service performance is a dimension that affects the marketing performance of businesses and provides a considerable competitive advantage (Berry et al., 2006: 56; Grawe et al., 2009: 293; McDermott and Prajogo, 2011: 231; Thakur and Hale, 2012: 8; Hussain et al., 2016: 37). Many studies show that when service innovation capabilities are offered, especially in e-commerce, they contribute to the marketing performance of businesses (Eisingerich et al., 2009: 353; Grawe et al., 2009: 294; Kostopoulos et al., 2011: 1337; Shaukat et al., 2013: 249; Chen et al., 2016: 55; Chong et al., 2016: 172). In this study, in line with the information in the literature, it was found that the new service performance of e-commerce businesses has a significant and positive effect on marketing performance.

Service innovation is seen as one factor that brings businesses one-step ahead or differentiates them from their competitors in a highly competitive market environment. Therefore, it is seen that service innovation provides advantages to businesses when strategic investments are evaluated correctly by

analyzing the competitive environment with the experiences gained from the existing service processes and information technologies of the companies. For this reason, it is seen that the plans made to leave competitors behind with service innovation developments contribute positively to the businesses.

6. CONCLUSION

In today's dynamic competitive environment, businesses need innovations in their value proposition or the services they offer (Lusch et al., 2007: 9). Especially with computer technology development, more highly personalized services have begun to be provided to consumers (Chen et al., 2012: 559). E-commerce has become a platform that offers new and unique services that are not available in the physical world today (Laudon and Traver, 2016: 7). Today, the development of e-commerce and competition intensity create difficulties for businesses to provide a sustainable, competitive advantage. At this point, it is necessary to understand better, how consumers perceive the services offered by e-commerce businesses and how they react to them (Gounaris et al., 2010: 148).

7. LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH

As with many studies, this study has its limitations. The use of convenience sampling is the first of these limitations. Another limitation of this study is the lack of sector-specific research. These limitations negatively affect the generalization of research results.

After the evaluations discussed above, the following suggestions can be offered to researchers for future research on this subject. The first suggestion is if future researchers analyze through a larger sample, they may conclude that more hypotheses can be accepted. Secondly, this study discusses antecedents used in the model. Seven independent variables that are considered to affect the new service performance are used. If different new service performance antecedents are added to the model in future studies, it will increase its explanatory power. In this study, data were collected from businesses engaged in e-commerce but operating in more than one sector. In order to obtain more specific results, the research area can be narrowed to particular industries. In addition to suggestions, the answers were collected from only one representative of each business. However, future researchers may consider obtaining more than one response from each sample business, considering that the answers may differ. Besides, before quantitative research, variables can be determined again by conducting qualitative research.

REFERENCES

- Alam, I., & Perry, C. (2002). A customer-oriented new service development process. *Journal of Services Marketing*, 16(6), 515-534.
- Alam, S. S., Arumugam, V., Nor, N. G. M., Kaliappan, P., & Fang, L. S. (2013). Relationships between innovation capabilities, business performance, marketing performance and financial performance: A literature review. *Business and Management Horizons*, 1(1), 59-73.
- Ali, F., Amin, M., & Cobanoglu, C. (2016). An integrated model of service experience, emotions, satisfaction, and price acceptance: an empirical analysis in the Chinese hospitality industry. *Journal of Hospitality Marketing & Management*, 25(4), 449-475.
- Alkaraan, F., & Northcott, D. (2007). Strategic investment decision making: the influence of pre-decision control mechanisms. *Qualitative Research in Accounting & Management*, 4(2), 133-150.
- Antonites, A. J., & Wordsworth, R. (2009). Risk tolerance: A perspective on entrepreneurship education. *Southern African Business Review*, 13(3), 69-85.
- Aurich, J. C., Mannweiler, C., & Schweitzer, E. (2010). How to design and offer services successfully. *CIRP Journal of Manufacturing Science and Technology*, 2(3), 136-143.
- Avlonitis, G. J., & Gounaris, S. P. (1999). Marketing orientation and its determinants: An empirical analysis. *European Journal of Marketing*, 33(11/12), 1003-1037.
- Banjongprasert, J. (2017). An assessment of change-readiness capabilities and service innovation readiness and innovation performance: Empirical evidence from MICE Venues. *International Journal of Economics & Management*, 11, 1-17.
- Barrett, M., Davidson, E., Prabhu, J., & Vargo, S. L. (2015). Service innovation in the digital age: Key contributions and future directions. *MIS Quarterly*, 39(1), 135-154.
- Benson, G. S., Kimmel, M., & Lawler III, E. E. (2013). Adoption of employee involvement practices: Organizational change issues and insights. *Organizational Change and Development*, 21, 233-257.
- Berry, L. L., Wall, E. A., & Carbone, L. P. (2006). Service clues and customer assessment of the service experience: Lessons from marketing. *Academy of Management Perspectives*, 20(2), 43-57.
- Boateng, R., Heeks, R., Molla, A., & Hinson, R. (2011). Advancing e-commerce beyond readiness in a developing country: Experiences of Ghanaian firms. *Journal of Electronic Commerce in Organizations (JECO)*, 9(1), 1-16.
- Borges, M., Hoppen, N., & Luce, F. B. (2009). Information technology impact on market orientation in e-business. *Journal of Business Research*, 62(9), 883-890.
- Bu, L., & Liang, Y. (2011). Research on the risks of e-commerce mode. *International Conference on Management and Service Science, IEEE*, 1-4.
- Chandy, R. K., & Tellis, G. J. (1998). Organizing for radical product innovation: The overlooked role of willingness to cannibalize. *Journal of Marketing Research*, 35(4), 474-487.
- Chen, J., Yuan, L., & Mingins, C. (2012). NeSD: Towards a new e-services development framework. In *WHICEB*, 555-562.
- Chen, K. H., Wang, C. H., Huang, S. Z., & Shen, G. C. (2016). Service innovation and new product performance: The influence of market linking capabilities and market turbulence. *International Journal of Production Economics*, 172, 54-64.

- Cheng, C. C., Chen, J. S., & Tai Tsou, H. (2012). Market creating service innovation: Verification and its associations with new service development and customer involvement. *Journal of Services Marketing*, 26(6), 444-457.
- Cheung, M. F., & To, W. M. (2010). Management commitment to service quality and organizational outcomes. *Managing Service Quality*, 20(3), 259-272.
- Chong, W. K., Bian, D., & Zhang, N. (2016). E-marketing services and e-marketing performance: The roles of innovation, knowledge complexity, and environmental turbulence in influencing the relationship. *Journal of Marketing Management*, 32(1-2), 149-178.
- Coelho, P. S., & Henseler, J. (2012). Creating customer loyalty through service customization. *European Journal of Marketing*, 46(3/4), 331-356.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*, 2nd ed., Lawrence Erlbaum Associates, USA.
- Cornett, M. M., Erhemjamts, O., & Tehranian, H. (2019). Competitive environment and innovation intensity. *Global Finance Journal*, 41, 44-59.
- Eberle, L., Milan, G. S., De Toni, D., & Lazzari, F. (2018). New services development: A study in the context of a health organization. *International Journal of Quality and Service Sciences*, 10(4), 366-383.
- Eisingerich, A. B., Rubera, G., & Seifert, M. (2009). Managing service innovation and interorganizational relationships for firm performance: To commit or diversify?. *Journal of Service Research*, 11(4), 344-356.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 39-50.
- Froehle, C. M., & Roth, A. V. (2007). A resource-process framework of new service development. *Production and Operations Management*, 16(2), 169-188.
- Garud, R., & Nayyar, P. (1994). Transformative capacity: Continual structuring by intertemporal technology transfer. *Strategic Management Journal*, 15, 365-385.
- Ghani, E. K., & Said, J. (2011). Effect of information technology capabilities on e-services among Malaysian local authorities. *International Journal of Public Information Systems*, 7(2), 65-78.
- Gounaris, S., Dimitriadis, S., & Stathakopoulos, V. (2010). An examination of the effects of service quality and satisfaction on customers' behavioral intentions in e-shopping. *Journal of Services Marketing*, 24(2), 142-156.
- Grawe, S. J., Chen, H., & Daugherty, P. J. (2009). The relationship between strategic orientation, service innovation, and performance. *International Journal of Physical Distribution & Logistics Management*, 39(4), 282-300.
- Gürkan, N., & Gürkan, S. (2017). Yenilikçilik kavramının işletmelerin finansal performansı üzerindeki etkisi. *Uluslararası Yönetim İktisat ve İşletme Dergisi*, 13(5), 213-226.
- Hair, J. F., Ringle, C.M. and Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet, *Journal of Marketing Theory and Practice*, 19(2), 139-152.
- Hair, J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM). *European Business Review*, 26(2), 106-121.

- Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., & Thiele, K. O. (2017). Mirror, mirror on the wall: A comparative evaluation of composite-based structural equation modeling methods. *Journal of the Academy of Marketing Science*, 45(5), 616-632.
- Hamid, M. R. Ab, Sami, W., & Sidek, M. M. (2017). Discriminant validity assessment: Use of Fornell & Larcker criterion versus HTMT criterion. In *Journal of Physics: Conference Series*, 890(1), 1-5.
- Hartley, J., Sørensen, E., & Torfing, J. (2013). Collaborative innovation: A viable alternative to market competition and organizational entrepreneurship. *Public Administration Review*, 73(6), 821-830.
- Henriques, I., & Sadorsky, P. (2011). The effect of oil price volatility on strategic investment. *Energy Economics*, 33(1), 79-87.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115-135.
- Hillebrand, B., Kemp, R. G., & Nijssen, E. J. (2011). Customer orientation and future market focus in NSD. *Journal of Service Management*, 22(1), 67-84.
- Hofacker, C. F., Goldsmith, R. E., Bridges, E., & Swilley, E. (2007). E-services: A synthesis and research agenda. In *E-Services*, 1-53.
- Huse, M., Neubaum, D. O., & Gabrielsson, J. (2005). Corporate innovation and competitive environment. *The International Entrepreneurship and Management Journal*, 1(3), 313-333.
- Hussain, K., Konar, R., & Ali, F. (2016). Measuring service innovation performance through team culture and knowledge sharing behaviour in hotel services: A PLS approach. *Procedia-Social and Behavioral Sciences*, 224(15), 35-43.
- Johne, A., & Storey, C. (1998). New service development: a review of the literature and annotated bibliography. *European Journal of Marketing*, 32(3/4), 184-251.
- Jong, J. P., Bruins, A., Dolfsma, W., & Meijaard, J. (2003). Innovation in service firms explored: what, how and why?. Strategic Study B200205, EIM Business & Policy Research, Zoetermeer, the Netherlands.
- Jong, J. P., & Vermeulen, P. A. (2003). Organizing successful new service development: a literature review. *Management Decision*, 41(9), 844-858.
- Karlsson, J., & Skålén, P. (2015). Exploring front-line employee contributions to service innovation. *European Journal of Marketing*, 49(9/10), 1346-1365.
- Kindström, D., Kowalkowski, C., & Sandberg, E. (2013). Enabling service innovation: A dynamic capabilities approach. *Journal of Business Research*, 66(8), 1063-1073.
- Kostopoulos, K., Papalexandris, A., Papachroni, M., & Ioannou, G. (2011). Absorptive capacity, innovation, and financial performance. *Journal of Business Research*, 64(12), 1335-1343.
- Kwak, Y. H., & LaPlace, K. S. (2005). Examining risk tolerance in project-driven organization. *Technovation*, 25(6), 691-695.
- Lamberti, L., & Noci, G. (2010). Marketing strategy and marketing performance measurement system: Exploring the relationship. *European Management Journal*, 28(2), 139-152.
- Laudon, K.C. and Traver, C.G. (2016). *E-commerce: Business, technology, society*. Pearson Education Limited, 12th edition, England.

- Lee, G. G., & Lin, H. F. (2005). Customer perceptions of e-service quality in çevrim içi shopping. *International Journal of Retail & Distribution Management*, 33(2), 161-176.
- Love, J. H., Roper, S., & Hewitt-Dundas, N. (2010). Service innovation, embeddedness and business performance: Evidence from Northern Ireland. *Regional Studies*, 44(8), 983-1004.
- Löbler, H., & Lusch, R. F. (2014). Signs and practices as resources in IT-related service innovation. *Service Science*, 6(3), 190-205.
- Lusch, R. F., Vargo, S. L., & O'brien, M. (2007). Competing through service: Insights from service dominant logic. *Journal of Retailing*, 83(1), 5-18.
- Majeed, S. (2011). The impact of competitive advantage on organizational performance. *European Journal of Business and Management*, 3(4), 191-196.
- McDermott, C. M., & Prajogo, D. I. (2012). Service innovation and performance in SMEs. *International Journal of Operations & Production Management*, 32(2), 216-237.
- Miozzo, M., Desyllas, P., Lee, H. F., & Miles, I. (2016). Innovation collaboration and appropriability by knowledge-intensive business services firms. *Research Policy*, 45(7), 1337-1351.
- Morganti, E., Seidel, S., Blanquart, C., Dablanc, L., & Lenz, B. (2014). The impact of e-commerce on final deliveries: Alternative parcel delivery services in France and Germany. *Transportation Research Procedia*, 4, 178-190.
- Nickels, D., & Kwun, O. (2006). The relationship between e-commerce adoption and organizational culture. *AMCIS, Proceedings*, 42.
- Okunoye, A., Bada, A. O., & Frolick, M. (2007). IT innovations and e-service delivery: An exploratory study. In *Proceedings of the 9th International Conference on Social Implications of Computers in Developing Countries*, São Paulo, Brazil. 1-8.
- Özdemir, E. "Hizmet tasarımı ve yeni hizmetler", *Hizmet pazarlaması ve stratejileri*, ed. Altunışık, R, Beta Basım A.Ş., İstanbul: 2015, ss 139-178.
- Papadakis, V., & Bourantas, D. (1998). The chief executive officer as corporate champion of technological innovation: aii empirical investigation. *Technology Analysis & Strategic Management*, 10(1), 89-110.
- Parks, J. B., Shewokis, P. A., & Costa, C. A. (1999). Using statistical power analysis in sport management research. *Journal of Sport Management*, 13(2), 139-147.
- Patrício, L., Fisk, R. P., & Falcão e Cunha, J. (2008). Designing multi-interface service experiences: The service experience blueprint. *Journal of Service Research*, 10(4), 318-334.
- Pennings, J. M., & Harianto, F. (1992). Technological networking and innovation implementation. *Organization Science*, 3(3), 356-382.
- Peters, B. (2009). Persistence of innovation: Stylised facts and panel data evidence. *The Journal of Technology Transfer*, 34(2), 226-243.
- Ritter, T., & Gemünden, H. G. (2004). The impact of a company's business strategy on its technological competence, network competence and innovation success. *Journal of Business Research*, 57(5), 548-556.
- Sarstedt, M., Ringle, C. M., & Hair, J. F. (2017). Partial least squares structural equation modeling. *Handbook of market research*, 26, 1-40.
- Sergeeva, N. (2016). What makes an "innovation champion"?. *European Journal of Innovation Management*, 19(1), 72-89.

- Shaukat, S., Nawaz, M. S., & Naz, S. (2013). Effects of innovation types on firm performance: An empirical study on Pakistan's manufacturing sector. *Pakistan Journal of Commerce and Social Sciences (PJCSS)*, 7(2), 243-262.
- Smith, A. M., & Fischbacher, M. (2005). New service development: A stakeholder perspective. *European Journal of Marketing*, 39(9/10), 1025-1048.
- Stevens, E., & Dimitriadis, S. (2005). Managing the new service development process: Towards a systemic model. *European Journal of Marketing*, 39(1/2), 175-198.
- Stuart, F. I., & Tax, S. (2004). Toward an integrative approach to designing service experiences: lessons learned from the theatre. *Journal of Operations Management*, 22(6), 609-627.
- Syson, F., & Perks, H. (2004). New service development: A network perspective. *Journal of Services Marketing*, 18(4), 255-266.
- Thakur, R., & Hale, D. (2013). Service innovation: A comparative study of US and Indian service firms. *Journal of Business Research*, 66(8), 1108-1123.
- TÜBİSAD Yayınları, (2020). Türkiye'de E-Ticaret Pazar Büyüklüğü. http://www.tubisad.org.tr/tr/images/pdf/tubisad_eticaret_2019_pazar_buyuklugu_raporu.pdf, Erişim Tarihi 25.05.2020.
- Vakulenko, Y., Shams, P., Hellström, D., & Hjort, K. (2019). Service innovation in e-commerce last mile delivery: Mapping the e-customer journey. *Journal of Business Research*, 101, 461-468.
- Wang, W., Hsu, H. S., Yen, H. R., Chiu, H. C., & Wei, C. P. (2010). Developing and validating service innovation readiness. In *PACIS*, (71), 146-155.
- Weerawardena, J., & McColl-Kennedy, J. R. (2002). New service development and competitive advantage: A conceptual model. *Australasian Marketing Journal (AMJ)*, 10(1), 13-23.
- Yen, H. R., Wang, W., Wei, C. P., Hsu, S. H. Y., & Chiu, H. C. (2012). Service innovation readiness: Dimensions and performance outcome. *Decision Support Systems*, 53(4), 813-824.
- Zach, F. (2012). Partners and innovation in American destination marketing organizations. *Journal of Travel Research*, 51(4), 412-425.
- Zhang, X., & Tang, Y. (2006). Customer perceived e-service quality in çevrim içi shopping. Lulea University of Technology. M.A. Thesis, Sweden.
- Zhao, Q., Zhang, Y., Friedman, D., & Tan, F. (2015). E-commerce recommendation with personalized promotion. In *Proceedings of the 9th ACM Conference on Recommender Systems*, 219-226.
- Zhu, K., & Kraemer, K. L. (2002). E-commerce metrics for net enhanced organizations: Assessing the value of e-commerce to firm performance in the manufacturing sector. *Information Systems Research*, 13(3), 275-295.

APPENDIX:

Ölçek Boyutları	İfade Sayısı	Yararlanılan Kaynaklar
Stratejik Yatırım	5	Yen vd., 2012
Risk Toleransı	5	Yen vd., 2012
Müşteri İşbirliği	5	Cui ve Fu, 2012; Carbonell vd., 2009
Çalışan İşbirliği	3	Yen vd., 2012
Partner İşbirliği	4	Yen vd., 2012
Hizmet Yeniliği Deneyimi	7	Yen vd., 2012
Bilgi Teknolojileri Deneyimi	4	Yen vd., 2012
Tüketici Talebi	5	Anning-Dorson, 2016; Thakur ve Hale, 2012
Rekabet Ortamı	6	Sørensen, 2008; Lewrick vd., 2011; Jin vd., 2012
Yeni Hizmet Performansı	4	Yen vd., 2012
Pazarlama Performansı	6	Grawe vd., 2009; Daugherty vd. 2011; Yazar tarafından eklenen
Ters Soru	1	Yazar tarafından eklendi



© Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution (CC BY NC) license.
(<https://creativecommons.org/licenses/by-nc/4.0/>).