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## THE EFFECT OF ON-TIME DELIVERY ON CUSTOMER SATISFACTION AND LOYALTY IN CHANNEL INTEGRATION<sup>1</sup>

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### ABSTRACT

#### Keywords:

Electronic commerce,  
Channel Integration,  
On-time Delivery,  
Customer Satisfaction,  
Customer Loyalty

#### JEL Codes:

M11, M30, M31

*In this study, creating customer satisfaction and customer loyalty by channel integration with on-time delivery was examined as a result of using physical and online channels together in order to investigate whether the goals of businesses and consumers were compatible. 436 consumers in Konya benefiting from the online shopping service were surveyed online by simple random sampling, and the data obtained were analyzed through the SPSS 23.0 package program. The relationships between the variables in the study were analyzed with the help of multiple regression analysis. In the study, channel integration was determined to have a positive and statistically significant effect on on-time delivery. It was also concluded that channel integration and on-time delivery had a positive and statistically significant effect on customer satisfaction and loyalty.*

## KANAL ENTEGRASYONUNDA ZAMANINDA TESLİMATIN MÜŞTERİ MEMNUNİYETİ VE SADAKATİNE ETKİSİ

### ÖZ

**Anahtar Kelimeler:**  
Elektronik Ticaret,  
Kanal Entegrasyonu,  
Zamanında Teslimat,  
Müşteri Memnuniyeti,  
Müşteri Sadakati

#### JEL Kodları:

M11, M30, M31

*İşletmeler ve tüketicilerin amaçlarının uyumlu hale gelip gelmediğini araştırmak amacıyla bu çalışmada fiziksel ve çevrimiçi kanalların birlikte kullanılması sonucunda kanal entegrasyonunun zamanında teslimat ile müşteri memnuniyeti ve müşteri sadakati oluşturması incelenmiştir. Çevrimiçi alışveriş hizmetinden yararlanan Konya'da 436 tüketiciye basit tesadüfi örnekleme yoluyla online ortamda anket uygulaması yapılmış ve elde edilen veriler SPSS 23.0 paket programı aracılığıyla analiz edilmiştir. Araştırmaya konu olan değişkenler arasındaki ilişkiler çoklu regresyon analizi yardımıyla analiz edilmiştir. Araştırmada kanal entegrasyonunun zamanında teslimat üzerinde pozitif yönlü ve istatistiksel bakımdan anlamlı bir etkisi olduğu tespit edilmiştir. Ayrıca kanal entegrasyonu ve zamanında teslimatın müşteri memnuniyeti ve sadakati üzerinde de pozitif yönlü ve istatistiksel bakımdan anlamlı bir etkisi olduğu sonucuna ulaşılmıştır.*

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## **1. INTRODUCTION**

The innovations emerging in internet technology in recent years bring about changes in the retailing sector. In addition to the many advantages, the internet offers to businesses, the use of online channels by consumers increases and leads to its adoption. This creates a rivalry between physical and online stores. The competition also causes a change in consumer behaviour and consumers trying to benefit from this competition in a positive manner start using one channel for different purposes during a purchasing behaviour and making purchases from the other channel. This new competitive environment and changes in consumer behaviour force retailers to operate simultaneously on many channels. This necessity is felt more during the campaign periods like Black Friday etc. While businesses offer advantages such as product variety and price through online channels during campaign periods, they can deliver some products to consumers in a month or later since the logistics services are insufficient due to sales density.

On the contrary, while businesses can deliver instantly from physical stores, they can offer less variety and price advantages compared to online channels. In both cases, customer satisfaction is not sufficient. Therefore, in order to survive in the competition, many businesses start operating on more than one channel at the same time. In this multi-channel and competitive environment, retailers are becoming more innovative in delivering products and services via channel integration. Today, large retailers such as Walmart, Best Buy and Gap offer their customers services such as delivery and returns of products purchased through online channels from physical stores (Gallino et al., 2017). Thus, retailers combine the strengths of each channel with channel integration and gain a competitive advantage by reducing their weaknesses.

Due to the competitive advantages mentioned above, channel integration seems to be an essential strategy for business development for retailers, but its effects on the customer remain uncertain (Herhausen et al., 2015). Based on this uncertainty, the purpose of this study is to reveal whether retailers operating in both physical and online stores create customer satisfaction and loyalty by applying a channel

integration strategy through logistics outputs such as on-time delivery of products offered to consumers.

## 2. CONCEPTUAL FRAMEWORK

Businesses need distribution channels to market their products to consumers, and a channel's performance is associated with increased product sales, market share and adequate customer service support. As businesses have the option of performing their distribution functions, channel integration is a matter that can directly affect the performance of businesses (Aulakh and Kotabe, 1997). There has been an extraordinary growth in electronic commerce from business to consumer (B2C) with the commercialization of the internet since the early 1990s (Ranganathan and Ganapathy, 2002). Businesses operating traditionally have also begun to offer online services through the internet, which has led to increased competition between online and physical stores. Thus, businesses have started to provide high-quality products to customers by creating customer service and online information systems such as supply, order, payment, after-sales service requests as well as affordable prices (Yang et al., 2003).

On the other hand, the proliferation of channels causes a change in consumer behaviour. At this point, two behaviours arise showrooming and webrooming. Showrooming is defined as the fact that some customers who cannot physically see the product in online channels see the product in physical stores and make their purchases in online channels (Neslin et al., 2014). In this way of behaviour, the consumer eliminates the disadvantages of online channels on his/her behalf, and benefits from the advantages offered by these channels, incredibly low prices etc. Unlike showrooming, webrooming is to use online channels to collect information about the product and to make purchases from physical stores (Flavián et al., 2016). In this way, the consumer uses online channels to compare products, reducing the time he/she will waste in physical stores and can receive the product immediately after purchasing it from the physical store.

With the growth of retailers offering only online service in recent years, the retail sector seems to be divided into two as physical merchandising and online

merchandising. However, the “brick-and-click” business model, which means that an online service retailer opens a physical store, has gained importance. In this business model, by integrating its service processes into multiple channels, the retailer can use the strengths of each channel and offer its customers multiple channel access and innovative services (Oh et al., 2012). With channel integration, businesses can get the opportunity to present their products to consumers on the internet or in online stores, and the integration can occur from the store to the internet or from the internet to the store (Herhausen et al., 2015). Channel integration is a challenging process as it requires unification in activities such as marketing, ordering, stock and return management. However, when integration is achieved through unification, operations and logistics efforts will be facilitated by marketing activities (Mollenkopf et al., 2007).

On the other hand, by creating synergy between the distribution channels, the selection of target channels and the successful coordination of the distribution process with the design of the channels also provide some customer-oriented advantages to the businesses. These advantages include increasing consumer trust and loyalty, creating opportunities for cross-selling and providing higher customer and market share (Cao and Li, 2015). For example, in studies conducted by shop.org and Greenfield Online, it has been determined that consumers using multiple channels have higher customer loyalty and spend more than other consumers, and that channel integration supports customer service management (Goersch, 2002). Thus, retail businesses will simultaneously ensure multi-channel system integration of processes and achieve customer loyalty (Schramm-Klein et al., 2011).

While marketing activities raise awareness about products and create price mechanisms where shopping transactions between the buyer and seller can take place, logistics activities assure that the products offered for sale are delivered to the customer in the right place, at the time the customer wants, without damage and in the right way. Therefore, logistics activities ensure the availability of the product, the accuracy of the order and the on-time delivery (Emerson and Grimm, 1996). Logistics service quality is closely related to the efficiency of the process, capacity utilization, logistics costs and on-time delivery. Measuring the quality performances of logistic

processes and products enables the improvement of processes and the increase in the satisfaction levels of customers (Garcia et al., 2012). Physical distribution research, such as on-time delivery, accuracy and delivery status of the order, are critical aspects of logistics service quality (Mentzer et al., 2001). Besides, logistics service quality has mechanisms such as order confirmation quantity, order procedures, order accuracy, personnel contact quality, information quality and timely execution of logistics activities (Stank et al., 2017). Logistics and marketing activities are critical in providing customer services to consumers, as well as ensuring coordination between these functions. As a result of logistics and marketing activities that are not implemented successfully, businesses may encounter consequences such as the increase of dissatisfied customers and loss of customers when customer expectations cannot be met (Emerson and Grimm, 1996). The online purchase that satisfies the customer will ensure repurchase and customer loyalty (Ranganathan and Ganapathy, 2002).

Customer loyalty refers to a customer's overall commitment to a product, service or brand. Customers need to be provided with values for continued customer loyalty. Customer value is defined as the difference between benefit obtained and the cost incurred (Lam et al., 2004). Businesses are seeking new ways to create competitive advantage through logistics management and are starting to offer unique types of customer value. Customer value can be created with the elements of logistics customer service such as ease of order, product availability, on-time delivery and consistency (Langley Jr and Holcomb, 1992). Relationship continuity and customer loyalty arise when the value customers get from one supplier are higher than the value they get from another supplier. Customer loyalty is considered as an individual's attitude towards being connected to a product or service. It is also defined as continuing to buy a product or service from the same supplier, increasing the frequency and volume of purchasing or recommending it to its environment (Hallowell, 1996).

### **3. LITERATURE REVIEW**

Today, businesses prefer to sell their products by using online channels as well as traditional channels. This causes the delivery time to become an essential factor in addition to product quality and price. For this reason, in their studies, Hua et al. (2010) analyzed delivery time and prices, and the effects of delivery time on customer acceptance in the multi-channel supply chain and found that delivery time strongly influenced the pricing and profit of the business. Berman and Thelen (2004) stated that a retailer implementing a channel integration strategy could provide an increased customer base and higher market share. Iyer et al. (2004) investigated the relationship of time-based distribution performance with environmental uncertainty and organizational structure in business-to-business (B2B) e-commerce, in the supply chain and found that B2B e-commerce increased time-based distribution performance. Wallace et al. (2004) determined that multi-channel retail strategies improve the outcomes of the service offered to customers, therefore increasing customer satisfaction and providing loyalty between the retailer and the customer. Agatz et al. (2008) suggested that thanks to multi-channel distribution, different types of consumers can be served, scale economies can be used with the synergy to be obtained. That synergy may increase even more between product presentations, sales and operational decisions with after-sales services and on-time delivery. By suggesting the integration of physical and online retail channels to create more customer value, Oh and Teo (2010) found that product, price, promotion and transaction information increase the quality of the information in integration, and information access, order fulfilment and customer service increase ease of service delivery. Oh et al. (2012) argued that with the widespread use of information technologies, integrating business processes in physical and online channels will provide businesses with an increase in productivity and a strategy of being innovative to present new offers to consumers in the future. Fairchild (2014) suggested that third-party logistics partners should be included in multi-channel trade and that logistics partners can help retailers to decide on product delivery. Herhausen et al. (2015) argued that channel integration is a good strategy for businesses, but the effects of retailers on customers in different channels remain

uncertain; therefore, they analyzed the effects of customers' online shopping experience in channel integration, perceived service quality and perceived risk in the online store on customers' purchase intentions and willingness to pay. Wen et al. (2015) aimed to develop appropriate strategies for a multi-channel retailer that sells products through channel integration and investigated how the variables of customers' perspectives of the online channel and customer complaints in the physical channel are affected in this strategy. Modak (2017) stated that the delivery time is also a decision variable in addition to the price and stocking decisions in physical and online channels, and determined that long delivery time causes customers to stop using the online channel and reduces customer loyalty.

By determining the factors affecting customer satisfaction in the services of two cargo companies, Li et al. (2006) investigated the service quality that will ensure customer satisfaction. In their study, Lee and Joshi (2007) determined that delivery performance is an essential factor affecting customer satisfaction by developing a customer satisfaction model with the service provided using technology. Čater and Čater (2009) determined that customer satisfaction can be affected by factors such as product quality, price, delivery performance, service in a customer-supplier relationship, and found that customer satisfaction is positively affected by price, delivery performance, supplier information and personal interaction. In their study, to determine customer satisfaction with online stores before and after ordering, Dholakia and Zhao (2010) found that especially on-time delivery has a significant impact on customer satisfaction. Fan (2011) argued that reducing the distance travelled by the distribution vehicles and increasing the service quality will maximize the level of customer satisfaction in order to reduce costs in terms of transportation and delivery problems. Lin et al. (2011) found that satisfaction of online consumers was positively affected by the product, information, system, service, delivery quality and perceived price level. They also stated that it is necessary to cooperate with suppliers in order to provide high-quality services such as proper order, on-time and safe delivery. Jie et al. (2015) stated what e-retailers dealing with innovative products thanks to the Internet of Things should pay

attention when choosing delivery service providers to ensure on-time and efficient delivery of customers' orders, and made suggestions to improve these relationships.

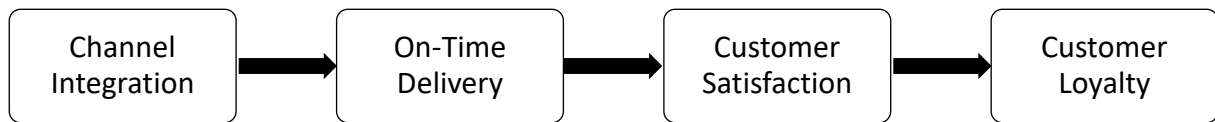
Andreassen (1994) argued that customer satisfaction was influenced by expectations and perceived service quality, and customer satisfaction and loyalty became an indicator of customer focus. In their study, considering that personal characteristics were neglected in the relationship of customer satisfaction and loyalty, Homburg and Giering (2001) found that personal characteristics strongly affected the relationship between customer satisfaction and loyalty. Mägi (2003) examined the effects of consumer characteristics on customer share as well as customer satisfaction and loyalty programs and found that customer satisfaction had a positive effect on the customer share achieved. In their study, Lam et al. (2004) emphasized that the relationship between customer satisfaction and loyalty is generally examined in terms of consumer markets (B2C), and they determined that customer satisfaction mediates the relationship between customer value and customer loyalty in the service environment of the industrial market (B2B). There is a significant relationship between satisfaction and loyalty. Singh (2006) identified a positive relationship between customer satisfaction, loyalty and retention, and emphasized the importance of the relationship between these concepts for an organization to be successful. By establishing a structural equation modelling between customer satisfaction and loyalty, Suh and Youjae (2006) investigated the effect of product participation on this relationship and determined the effect of customer satisfaction on loyalty. Bodet (2008) discussed customer loyalty with its attitudinal and behavioural dimensions and determined the effect of customer satisfaction on attitudinal loyalty.

#### **4. METHODOLOGY**

As a result of the literature research, it is seen that studies are investigating the effect of channel integration on on-time delivery (Modak, 2017), the effect of on-time delivery on customer satisfaction (Lee and Joshi, 2017; Dholakia and Zhao, 2010) and the effect of customer satisfaction on customer loyalty (Singh, 2006; Bodet, 2008). The studies in which the two effects between the three variables are discussed together



are limited (Iyer et al., 2004; Wallace et al., 2004; Oh and Teo, 2010, YuSheng and Ibrahim, 2019). Based on the existing literature, this study has been developed as a conceptual model, as shown in Figure 1. Accordingly, the hypotheses of the research are given below in order to investigate the effect of each variable with multiple regression analysis.



**Figure 1.** Research Model

The present study aims to determine whether the products offered to consumers through physical and online stores by the businesses that carry out channel integration create customer satisfaction and customer loyalty with on-time delivery. In this context, research hypotheses are as follows:

*H<sub>1</sub>: Channel integration has a positive and statistically significant effect on on-time delivery.*

*H<sub>2</sub>: On-time delivery has a positive and statistically significant effect on customer satisfaction.*

*H<sub>3</sub>: Customer satisfaction has a positive and statistically significant effect on customer loyalty.*

In this study, in which quantitative research method was adopted, the SPSS 23.0 package program was used to analyze the data. The population of the study consists of consumers in Konya. According to Sekaran (2003: 294), in cases where the size of the population cannot be estimated, a sample of 384 people has the ability to represent the population of 100,000 people with a difference of +/- 0.05 in the sampling error. For this reason, in December 2019, a survey was conducted on 500 consumers in Konya through simple random sampling (also, since the survey was conducted in 2019, permission from the Ethics Committee is not required). 436 questionnaires were taken into consideration from the questionnaire sent to 500 consumers. The return rate of the survey is 87.2%.

In the study, variables used in the research are taken from four scales, and the variables are channel integration, on-time delivery, customer satisfaction and customer loyalty. Measurement scales were shown in Table 1.

**Table 1.** Measurement Scales

Scale	Items	Reference(s)
Channel Integration	8	Oh and Teo, 2010; Oh et al., 2012.
On-Time Delivery	3	Mentzer et al., 2001; Collier and Bienstock. 2006.
Customer Satisfaction	4	Oliver, 1980; Parasuraman et al., 1988; Özgül et al., 2017.
Customer Loyalty	6	Rizka and Widji, 2013; Izogo and Okba, 2015; Murfield et al., 2017.

After the data were obtained in the research, they were analyzed with SPSS 23.0 and SPSS AMOS 22.0 programs. First of all, the validity and reliability analysis was performed. The mean, standard deviation and factor loadings of the items in the scale are shown. Confirmatory factor analysis was performed using SPSS AMOS 22.0 program to find factor loadings. Some statistical analyses such as confirmatory factor analysis assumed that linearly between each variable in the research model. So that Pearson Correlations Analysis was used in this research (Schumacker and Lomax, 2004: 27). The exploratory factor analysis results of research variables were analyzed in KMO and Barlett's Test. And then, correlation analysis was conducted to determine the relationship between research variables. Finally, regression analysis (simple linear regression) was applied to determine the effects of research variables on each other.

## 5. FINDINGS

In this section, results of respondents' demographic characteristics, validity and reliability analysis, mean, standard deviation and factor loadings values, correlation and regression analysis are included.

In this research 436 respondents participated; 52.1% are male, 51.8% are married, 44.7% are between the ages of 18-25, 63.5% are university graduates, and 43.8% have a monthly income of 2.000 TL and more.

**Table 2.** Validity and Reliability Analysis, Mean, Standard Deviation

Scale	Cronbach's Alpha ( $\alpha$ )	Factor Loadings				Mean	Std. Deviation
		1	2	3	4		
<b>All Variables</b>	<b>0,940</b>						
<b>Channel Integration (CI) (1)</b>	<b>0,888</b>						
CI1		0,740				3,516	0,804
CI2		0,825				3,484	0,845
CI3		0,838				3,429	0,832
CI4		0,810				3,436	0,824
CI5		0,709				3,431	0,837
CI6		0,536				3,706	0,842
CI7		0,621				3,326	0,907
CI8		0,555				3,500	0,867
<b>On-time Delivery (OTD) (2)</b>	<b>0,757</b>						
OTD1			0,494			3,404	0,950
OTD2			0,892			3,454	0,879
OTD3			0,797			3,521	0,906
<b>Customer Satisfaction (CS) (3)</b>	<b>0,841</b>						
CS1				0,701		3,686	0,770
CS2				0,707		3,498	0,775
CS3				0,768		3,395	0,773
CS4				0,846		3,470	0,738
<b>Customer Loyalty (4)</b>	<b>0,867</b>						
CL1					0,647	3,369	0,813
CL2					0,678	3,372	0,897
CL3					0,821	3,479	0,815
CL4					0,704	3,704	0,774
CL5					0,726	3,628	0,802
CL6					0,760	3,479	0,906

Cronbach's Alpha ( $\alpha$ ) values were calculated within the scope of the reliability analysis results of the variables, and it was concluded that channel integration (0,888), on-time delivery (0,757), customer satisfaction (0,841) and customer loyalty (0,867) scales were highly reliable ( $0,60 < \alpha < 0,80$ ) (Coşkun et al., 2015). According to Floyd and Widaman (2015), factor loadings should be above 0,30 or 0,40. As a result of the confirmatory factor analysis, factor loadings were found between 0,494 and 0,838. Also, a four-dimensional structure was obtained as a result of factor analysis.

Exploratory factor analysis was conducted to examine the validity of the scales used within the scope of the research. The factor analysis results for each research variables are shown in Table 3.

**Table 3.** The Results of Exploratory Factor Analysis

	<b>Channel Integration</b>	<b>On-time Delivery</b>	<b>Customer Satisfaction</b>	<b>Customer Loyalty</b>
	0,882	0,630	0,812	0,852
<b>KMO and Barlett's Test</b>	$\chi^2=1788,151$ (p < 0,001)	$\chi^2=404,538$ (p < 0,001)	$\chi^2=685,863$ (p < 0,001)	$\chi^2=1141,778$ (p < 0,001)
<b>Number of Factors and Total Disclosed Variance by Factor Loads</b>	8 Items 56,808	3 Items 68,120	4 Items 67,817	6 Items 60,307

When the exploratory factor analysis results of the scales used in the research were evaluated, the construct validity of the scales was found to be compatible with the structure suggested in the literature. When the KMO values of the scales were examined, channel integration (0,882), on-time delivery (0,630), customer satisfaction (0,812) and customer loyalty (0,852) scales were found. Descriptive statistics (mean and standard deviation) and correlation analysis results of the variables are given in Table 4.

**Table 4.** Mean, Standard Deviation and Correlation Values of Variables

<b>Variables</b>	<b>X</b>	<b>SD</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
Channel Integration (1)	3,48	0,63	1			
On-time Delivery (2)	3,46	0,75	0,541**	1		
Customer Satisfaction (3)	3,51	0,63	0,675**	0,609**	1	
Customer Loyalty (4)	3,51	0,65	0,667**	0,567**	0,823**	1

Notes: (i) n=436, (ii) \*\*p<0,001, \*p<0,05

Considering the mean and standard deviation values of the research variables, it was concluded that the respondents agreed with the statements of channel integration (M.=3,48; SD=0,63), on-time delivery (M.=3,46; SD=0,75), customer satisfaction (M.=3,51; SD=0,63) and customer loyalty (M.=3,51; SD=0,65). When Pearson correlation analysis results were analyzed, it was determined that there was a moderately positive and significant relationship between channel integration and on-time delivery (r=0,541; p<0,01), there was a moderately positive and significant relationship between channel integration and customer satisfaction (r=0,675; p<0,01) and there was a moderately positive and significant relationship between channel

integration and customer loyalty ( $r=0,667$ ;  $p<0,01$ ). A moderately positive and significant relationship was found between on-time delivery and customer satisfaction ( $r=0,609$ ;  $p<0,01$ ) and customer loyalty ( $r=0,567$ ;  $p<0,01$ ). A highly positive and significant relationship was found between customer satisfaction and customer loyalty ( $r=0,823$ ;  $p<0,01$ ). In order to test the research hypotheses, simple linear regression analysis was used, and the results of the analysis are presented in Table 5.

**Table 5.** The Effect of Channel Integration on On-time Delivery

Variables	B	SE	$\beta$
Channel Integration	0,640	0,048	0,541
Constant	1,232	0,169	

Adj.  $R^2 = 0,292$ ,  $F = 180,051$ ,  $p=0,000$ .

As a result of the simple linear regression model, it was concluded that channel integration ( $\beta=0,541$ ;  $p<0,05$ ) had a positive and statistically significant effect on on-time delivery. It was seen that the channel integration, which was the explanatory variables in the model, explained 29.2% of the variance in on-time delivery, which was the dependent variable ( $R^2=0,292$ ;  $F=180,051$ ). According to these findings, the  $H_1$  hypothesis of the research was supported. A regression equation was determined as below;

$$\text{On-Time Delivery} = 1,232 + (0,169 * \text{Channel Integration})$$

In order to test the second hypothesis of the study, similarly simple linear regression was performed. The results of the analysis are presented in Table 6.

**Table 6.** Effect of On-time Delivery on Customer Satisfaction

Variables	B	SE	$\beta$
On-time Delivery	0,511	0,032	0,609
Constant	1,744	0,113	

Adj.  $R^2 = 0,369$ ,  $F = 225,415$ ,  $p=0,000$ ,

As a result of the analysis, it was determined that timely delivery ( $\beta=0,609$ ;  $p<0,05$ ) had a positive and statistically significant effect on customer satisfaction. It was seen that on-time delivery, which was the explanatory variables in the model,

explained 36,9% of the variance in customer satisfaction, which was the dependent variable ( $R^2=0,36$ ;  $F=225,415$ ). According to these findings, the  $H_2$  hypothesis of the research was supported. A regression equation was determined as below;

$$\text{Customer Satisfaction} = 1,744 + (0,511 * \text{On-time Delivery})$$

Regression analysis results for examining the relationship between customer satisfaction and customer loyalty are given in Table 7.

**Table 7.** The Effect of Customer Satisfaction on Customer Loyalty

Variables	B	SE	$\beta$
Customer Satisfaction	0,848	0,028	0,823
Constant	0,526	0,100	

Adj.  $R^2 = 0,677$ ,  $F = 914,406$ ,  $p=0,000$ .

According to the regression analysis conducted to examine the effect of customer satisfaction on customer loyalty, customer satisfaction was found to have a positive and statistically significant effect on customer loyalty ( $\beta=0,677$ ;  $p<0,05$ ). It was seen that customer satisfaction, which was the explanatory variables in the model, explained 67,7% of the variance in customer loyalty, which was the dependent variable ( $R^2=0,677$ ;  $F=914,406$ ). According to these findings, the  $H_3$  hypothesis of the research was supported. A regression equation was determined as below;

$$\text{Customer Loyalty} = 0,526 + (0,848 * \text{Customer Satisfaction})$$

## 6. CONCLUSION

With the developments in information technologies, businesses applying traditional marketing activities have taken the opportunity to offer their products and services to consumers by performing channel integration through physical and online stores. With channel integration, it is essential to offer products and services to consumers at the desired time and place and to deliver them on time. The primary purpose of businesses meeting the demands and needs of consumers with physical and online stores through channel integration is to create customer loyalty by satisfying customers and increasing sales and profitability.

Accordingly, a survey was applied to consumers, and according to the data obtained, the purpose and hypotheses of the research were tested in order to determine whether the products offered to consumers through physical and online stores by the businesses that carry out channel integration create customer satisfaction and customer loyalty with on-time delivery. According to the findings obtained in the study;

- It was concluded that there was a moderately positive and significant relationship ( $R^2=0,292$ ;  $F=180,051$ ) between channel integration and on-time delivery ( $r=0,541$ ;  $p<0,01$ ). With the findings obtained in the studies of Wallace et al. (2004), Oh and Teo (2010) and Modak (2017), the  $H_1$  hypothesis was supported, in which a positive and statistically significant effect of channel integration on on-time delivery was tested.
- It was determined that there was a moderately positive and significant relationship ( $R^2=0,369$ ;  $F=225,415$ ) between on-time delivery and customer satisfaction ( $r=0,609$ ;  $p<0,01$ ). With the findings obtained in the studies of Lee and Joshi (2007), Čater and Čater (2009), Dholakia and Zhao (2010) and Lin et al. (2011),  $H_2$  hypothesis was supported, in which a positive and statistically significant effect of on-time delivery on customer satisfaction was tested.
- It was determined that there was a highly positive and significant relationship ( $R^2=0,677$ ;  $F=914,406$ ) between customer satisfaction and customer loyalty ( $r=0,823$ ;  $p<0,01$ ). With the findings obtained in the studies of Mägi (2003) and Singh (2006),  $H_3$  hypothesis was supported, in which a positive and statistically significant effect of customer satisfaction on customer loyalty was tested.

It should be remembered that businesses performing channel integration in line with the findings of the study should pay attention to the distribution and logistics activities of the products offered by physical and online stores. Customer satisfaction and customer loyalty will be achieved by delivering the purchased products accurately and on time. Present study findings supported limited existing

literature (Iyer et al., 2004; Wallace et al., 2004; Oh and Teo, 2010; YuSheng and Ibrahim, 2019).

The results obtained in this study, which supports the studies in the literature, show that it will not be enough for businesses to keep up with technological developments. Accordingly, it now requires businesses to display activities that will improve their service quality. With the channel integration, it provides the opportunity to put on and sell its products to more customers, especially with webrooming and showrooming, in order to ensure customer satisfaction of businesses that have the purpose of selling to both present customers and potential customers. At this point, the importance of logistics and distribution activities is gradually increasing. For this reason, businesses need to review the distribution processes and make more comprehensive agreements with the companies from which they purchase logistics services, in order to ensure that the products meet the customers on time through their logistics activities. Thus, businesses that aim to sell more to more customers will increase their profitability by ensuring customer satisfaction.

Additionally, this research has several limitations. The first one is that the design of this research was cross-sectional. Therefore, different results can be obtained in different sample size and time interval. For this reason, studies can be conducted in order to determine the level of influence of consumers on the service quality of businesses in different periods, such as campaign periods, in sales activities. Another limitation of the research is that covariance-based regression analysis has been applied in this study, and it is recommended to use variance-based approaches (such as Smart PLS) in explaining customer satisfaction and loyalty in future researches. Apart from the research variables used in this study, future studies can be conducted in which mediating and moderating effects will be investigated by including other variables such as different logistics outputs.



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