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**THE FACTORS AFFECTING CUSTOMER
SATISFACTION AND LOYALTY IN E-
COMMERCE: THE EXAMPLE OF İZMİR¹**

E-TİCARETTE MÜŞTERİ MEMNUNİYETİ VE
SADAKATİNİ ETKİLEYEN FAKTÖRLER:
İZMİR İLİ ÖRNEĞİ

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Abstract

Nowadays, the widespread use of the internet due to constantly developing and changing technologies along with globalization has affected the way individuals and institutions do business. With the advancements in technology, e-commerce has gained importance and created a competitive environment for businesses. The ability of businesses to operate in a competitive environment is closely related to ensuring the satisfaction and loyalty of their customers. The aim of this study is to reveal the factors affecting customer satisfaction and loyalty in e-commerce. Survey technique was used as a data collection tool in the research. The data was obtained by random sampling method from 301 people who had previously shopped online in Izmir. The data obtained in the research were analyzed with structural equation modeling. As a result of the research, it was revealed that customer satisfaction increased as the perception of the company regarding apologies, explanations, follow-ups and courtesy behaviors towards its e-commerce customers increased. Additionally, as a result of the analysis, it was concluded that the company's perceptions of the explanation and follow-up behavior of its e-commerce customers increased customer loyalty, while the perception of apologies and courtesy did not directly affect customers' loyalty to the business. It has been determined that customers' perceptions of apologies, explanations, follow-ups, and showing courtesy indirectly affect loyalty through their satisfaction with the business. In this context, it has been revealed that while customers' satisfaction with the business increases, their loyalty to the business also increases.

Keywords: E-Commerce, Customer, Satisfaction, Loyalty

¹ It was produced from the Master's thesis titled "The Effect of Complaint Management Applications in E-Commerce on Customer Satisfaction and Loyalty" written by Egem Sıla Güler at Çanakkale Onsekiz Mart University Graduate Education Institute Master of Business Administration Program.

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Özet

Günümüzde küreselleşme ile birlikte sürekli gelişen, değişen teknolojilere bağlı olarak internet kullanımının yaygınlaşması bireylerin ve işletmelerin iş yapma yöntemlerini etkilemiştir. Teknolojideki ilerlemelerle birlikte e-ticaret önem kazanmış ve işletmeler açısından rekabet ortamı yaratmıştır. İşletmelerin rekabetçi bir ortamda faaliyet gösterebilmeleri müşterilerinin memnuniyetini ve sadakatini sağlamaları ile yakından ilgilidir. Bu çalışmanın amacı e-ticarette müşteri memnuniyetini ve sadakatini etkileyen faktörleri ortaya koymaktır. Bu çalışmada veriler anket yöntemiyle sağlanmıştır. Veriler kolayda örnekleme yöntemi ile İzmir ilinde daha önce online alışveriş yapmış 301 kişiden elde edilmiştir. Çalışmada elde edilen veriler yapısal eşitlik modellemesi ile analiz edilmiştir. Araştırma sonucunda işletmenin e- ticaret müşterilerine yönelik özür, açıklama, takip ve nezaket davranışlarına ilişkin algıları arttıkça müşteri memnuniyetinin arttığı ortaya konulmuştur. Ayrıca araştırma sonucunda işletmenin e-ticaret müşterilerine ilişkin açıklama ve takip etme davranışlarına yönelik algılamalarının müşteri sadakatini arttırdığı, özür ve nezaket gösterme algılamalarının ise müşterilerin işletmeye sadakatini direkt olarak etkilemediği sonucuna ulaşılmıştır. Müşterilerin özür, açıklama, takip, nezaket gösterme algılamalarının işletmeye olan memnuniyeti üzerinden sadakati dolaylı olarak etkilediği tespit edilmiştir. Bu bağlamda müşterilerin işletmeye olan memnuniyeti artarken işletmeye olan sadakatin de arttığı ortaya konulmuştur.

Anahtar Kelimeler: E-Ticaret, Müşteri, Memnuniyet, Sadakat

INTRODUCTION

According to the World Trade Organization (WTO), e-commerce; It is the realization of the production, promotion, sales and presentation of goods and services through the telecommunication network (Çak, 2002: 12). Constant change and technological products are effective in creating important developments in products and in the world. With technological developments, changes in the sales and marketing of economically produced goods and services, as well as changes in consumers' preferences and purchasing behaviors, are observed. One of the fastest growing of these changes has been e-commerce (Özdemir, 2019:1505). E-commerce offers opportunities such as offering a variety of goods and services to customers, allowing the comparison of goods and services, price diversity, no time and place limits, and ease of payment. Meeting increasing customer expectations as a result of the opportunities offered by e-commerce to customers creates an important competitive environment for businesses. In addition to the advantages of e-commerce, there are also some disadvantages. For example, a negative shopping experience can affect customers' perspectives on e-commerce.

Gaining the trust of customers in e-commerce is more difficult than in traditional commerce. It is very important for businesses to manage customers' complaints about the goods and services they receive. The reasons that negatively affect customer satisfaction and loyalty need to be resolved from the customers' perspective. In general, customers' expectations from businesses are to show courtesy towards complaints, to apologize, to make a statement on the issue, and to follow up on the complained issue by the business.

Courtesy is treating customers with consideration and respect. An apology is the business' apology for the inconvenience experienced by the customer as a result of the goods and services provided. Apologizing is a behavior aimed at restoring customers' positive perspective on the business. Disclosure means that the business provides clear information to customers about which deficiency or error caused the complaint, based on the complaint submitted by the customer as a result of the goods and services purchased. Making an explanation also guides the customer and shows that the business is striving for a solution and takes responsibility. Follow-up is the monitoring of the process to ensure that the customer complaint has been resolved. In other words, it is a process to understand customer satisfaction. Meeting these expectations has a positive impact on ensuring customer satisfaction. The main goal of complaint management is; The aim of the

company is to ensure that its customers are satisfied with as few complaints as possible and to increase the number of loyal customers by preventing complaints from other customers.

RESEARCH METHOD

The Model of the Research

In the research, factors affecting customer satisfaction and loyalty in e-commerce were investigated. The research tools consist of six dimensions. These dimensions consist of Apology, Explanation, Follow-up and Distance, and these dimensions show molded external latent variables. The research reveals two (internal) variables and these variables are customer satisfaction and loyalty latent variables. Effects between latent variables by Partial Least Squares Structural Equation Modeling.

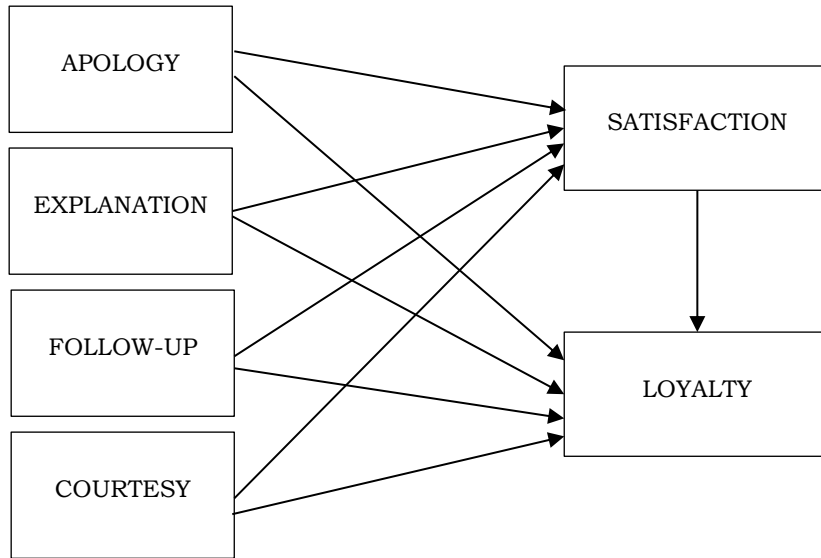


Figure 1: General Research Model

Hypotheses

In the structural model tested in the research, the factors affecting customer satisfaction and loyalty in e-commerce were investigated with the structural equation model. The hypotheses regarding the effects to be tested among the latent variables of the research are given below.

H₁: As customers' perception of apology towards the company increases, their satisfaction with the company increases.

H₂: As customers' perception of disclosure towards the company increases, their satisfaction with the company increases.

H₃: As customers' perception of following the company increases, their satisfaction with the company increases.

H₄: As customers' perception of courtesy behavior towards the company increases, their satisfaction with the company increases.

H₅: As customers' perception of apology towards the company increases, their loyalty to the company increases.

H₆: As customers' perception of disclosure towards the company increases, their loyalty to the company increases.

H₇: As customers' perception of following the company increases, their loyalty to the company increases.

H₈: As customers' perception of polite behavior towards the company increases, their loyalty to the company increases.

H₉: As customer satisfaction with the company increases, loyalty to the company increases.

Indirect effects were also examined in the research. Hypotheses for indirect effects are given below.

H_{DE1}: Customers' perception of apology towards the company indirectly affects loyalty through satisfaction with the company.

H_{DE2}: Customers' perception of disclosure towards the company indirectly affects loyalty through satisfaction with the company.

H_{DE3}: Customers' perception of following the company indirectly affects loyalty through satisfaction with the company.

H_{DE4}: Customers' perception of showing kindness towards the company indirectly affects loyalty through satisfaction with the company.

Development of Data Collection Tool

In the study, scales created by Liao (2007) were used to measure apology, explanation and courtesy, and the expressions were taken from the Cure scale developed by Mostafa et al. (2014). Similarly, the scale created by Mostafa et al. (2014) was used to measure follow-up. The scale developed by LUITEL (2015) was used to measure satisfaction, and the scale developed by Goyal et al. (2013) was used to measure loyalty. The scales were translated into Turkish and the data collection tool was finalized. In order to ensure grammatical validity, the expressions were edited by three researchers who are experts in their field. A total of six dimensions in the scale used in the research are listed in Table 1. The reliability of the scales for the factors was measured by Cronbach's Alpha, Composite Reliability and rho A value. All three reliability statistics were between 0.907 and 0.963 and were found to be reliable. The scales have a high level of reliability. Since the scales have a high level of validity and reliability in the field of investigation, they can be used safely in making scientific judgments (Özdamar 2005).

Table 1. Reliability Analysis

Reliability Coefficient	Explanation	Satisfaction	Courtesy	Loyalty	Follow-up	Apology
Cronbach's Alpha	0,926	0,907	0,931	0,953	0,921	0,927
rho_A	0,928	0,909	0,931	0,954	0,921	0,927
Composite Rreliability	0,947	0,942	0,951	0,963	0,944	0,948

Population and Sample

The population and sample of the research consists of 301 people who live in Izmir and have online shopping experience. The data was obtained using the survey technique with the convenience sampling method. The survey form was published online and the data obtained in the research were analyzed with structural equation modelling.

Partial Least Squares Structural Equation Modeling

SmartPLS ready-made software is one of the data analysis tools whose analysis logic is based on PLS-SEM. PLS-SEM is called variance-based structural equation modeling. PLS-SEM analysis methods use the least squares method such as regression as a prediction method. It is based on the estimation of the relationship coefficients that maximize the R² value of the dependent variable (Hair et al., 2014 p.174-177).

The method does not require larger samples as the model becomes more complex and the number of estimated parameters increases. In addition, the method does not require any distribution assumption in structural equation modeling and creates samples from the data set based on the bootstrap technique. It is a non-parametric method that deals with the parameters obtained from each sample (Civelek, 2018 p.109-115).

In order to ensure convergent validity of the partial least squares structural equation model, three basic criteria must be met. First, the standard factor loading of each observed variable belonging to the latent variables must be greater than 0.70 and less than 0.90 (Chin, 1998 p.295-336).

Secondly, for each construct, Composite Reliability (CR), Cronbach Alpha (CA), convergent validity and discriminant validity must be ensured and the values must be greater than 0.70 (Hair et al., 2017 p.111). -122). Finally, the Average Variance Extracted (AVE) value for each structure must be higher than 0.50 (Fornell and Larcker, 1981). Additionally, it should be $CR > AVE$ (Gürbüz, 2019 p.77-82).

In PLS-SEM, the predictive power of the model, R^2 , can be calculated. R^2 value gives the explanation ratio of exogenous variables on endogenous variables. In the research, R^2 values can be seen in latent variables.

SmartPLS looks at the SRMR (Standardized Root Mean Square Residual) value in the fit values of the tested model. The SRMR value is the standardized difference between the observed covariance and the predicted covariance. The fact that the value calculated as a result of the measurement is close to zero indicates perfect fit. Values calculated below 0.05 also indicate good fit (Bayram 2016 p.72). An SRMR value of less than 0.08 or less than 0.10 indicates that the model has an acceptable fit.

SmartPLS ready-made software gives the effect size of the structural model with the explanation ratio R^2 and f^2 . R^2 gives the explanation ratio of the exogenous variable to the endogenous variable in percentage terms. A ratio of 0.25 and above is considered a weak explanation, a ratio of 0.50 and above is considered a medium explanation, and a ratio of 0.75 and above is considered a strong explanation. The effect size coefficient is measured by f^2 and shows the shares of each exogenous variable in the explanation rate of the endogenous variable. The f^2 statistic indicates a low effect if $f^2 \geq 0.02$, a medium effect if $f^2 \geq 0.15$, and a high level of effect when $f^2 \geq 0.35$ (Hair et al. 2017). Another criterion for the model is the Q^2 criterion, which shows the power of the research model to predict endogenous variables. Q^2 statistic shows low predictive power if $Q^2 \geq 0.02$, medium if $Q^2 \geq 0.15$, and high predictive power when $Q^2 \geq 0.35$ (Hair et al. 2017).

Descriptive Findings

The research was conducted on 301 people. As can be seen in Table 2, 47.2% are women and 52.8% are men. While 59.1% of the individuals are married individuals, 40.9% are single individuals.

It was determined that 27.9% of the individuals were between the ages of 18-28, while 17.6% were between the ages of 29-35. While the proportion of individuals with an age distribution between 36-42 was calculated as 15.3%, 12.6% was calculated as having an age distribution between 43-49.

Individuals aged 50+ constitute 26.6% of the society. The rate of those with high school education or less was determined as 19.6%, while those with an associate degree was determined as 13.6%. Individuals with undergraduate education constitute 52.8% of the society. The rate of individuals with postgraduate education was determined as 13.0%.

Table 2. Characteristics and Distributions of Individuals

Variable	Feature	n	%
Gender	Woman	142	47,2
	Male	159	52,8
Marriage	Married	178	59,1
	Single	123	40,9
Age	18-28	84	27,9
	29-35	53	17,6
	36-42	46	15,3
	43-49	38	12,6
	50+	80	26,6
Education	Primary Education	10	3,3
	High School	49	16,3
	Associate Degree	41	13,6
	Bachelor Degree	159	52,8
	Master Degree	33	11,0
	PhD	9	3,0

Structural Equation Model Findings

In the model tested with SmartPLS, data for individuals engaged in e-commerce were used. In the tested model, standard factor loadings must be greater than 0.70 for convergent validity. In addition, VIF values, which are indicators of multicollinearity, should not be greater than 5. Since the VIF value in the observed variable MEM2 was calculated to be greater than 5, linear multicollinearity was encountered and was removed from the analysis. In the resulting model, factor loadings for all observed variables were determined to be higher than 0.70. Thus, convergent validity was achieved. Similarly, the AVE value for convergent validity in the constructs included in the study was calculated higher than the threshold value of 0.50 and convergent validity was achieved.

In the study, the discriminant validity of the structures was decided by looking at the Fornell-Larcker Criterion and HTMT statistics. It was determined that the Fornell-Larcker Criterion value was greater than 0.70 but smaller than the correlations between other dimensions. Thus, the Fornell-Larcker criterion is not met. It was determined that the variables observed in cross-loadings MEM1 and SDT7 were weighted in more than one structure and were removed from the analysis. The Fornell-Larcker Criterion was met in the resulting model.

In the HTMT statistic, which is another discriminant validity, the criterion value was taken as 0.900. In the study, the highest interdimensional correlation for HTMT was calculated as 0.894. Therefore, according to the HTMT statistics, discriminant validity of the structures was ensured. By looking at the cross-loads in the resulting model, it was determined that the load values of the observed variables were not weighted in more than one dimension.

In the study, internal consistency reliabilities for the structures in the model were examined. For internal consistency reliability, Cronbach Alpha, Henseler's rho A and Composite Reliability coefficient were examined. Since the internal consistency reliabilities of all structures were determined to be greater than the threshold value of 0.70, the internal consistency reliabilities of the structures were ensured.

For the model obtained in the research, the fit values of the model were decided by looking at the SRMR value and the SRMR value was calculated as 0.034. Therefore, it was decided that the fit of the model was appropriate. The results obtained are given in Table 3.

Table 3. Critical Values for the Model Where Emotional Exhaustion Is Internal

		E	S	C	L	F	A
Fornell-Larcker Kriteri	Explanation(E)	0,905	0,918				
	Satisfaction(S)	0,732	0,719				
	Courtesy(C)	0,656	0,832	0,911		0,899	
	Loyalty(L)	0,732	0,766	0,659	0,901	0,622	
	Follow-up(F)	0,755	0,675	0,669	0,772		
	Apology(A)	0,636	0,613	0,613	0,642		0,906
	AVE	0,818	0,843	0,829	0,811	0,808	0,820
Cronbach's Alpha		0,926	0,907	0,931	0,953	0,921	0,927
	rho_A	0,928	0,909	0,931	0,954	0,921	0,927
Composite Rreliability		0,947	0,942	0,951	0,963	0,944	0,948
HTMT	Explanation(E)	-----	-----	-----	-----	-----	-----
	Satisfaction(S)	0,798	-----	-----	-----	-----	-----
	Courtesy(C)	0,707	0,783	-----	-----	-----	-----
	Loyalty(L)	0,778	0,894	0,699	-----	-----	-----
	Follow-up(F)	0,817	0,838	0,722	0,823	-----	-----
	Apology(A)	0,688	0,736	0,660	0,683	0,672	-----
	Max. VIF		4,544				
SRMR		0,034					

In the study where the variables/factors affecting the loyalty of e-commerce customers/consumers to the company they purchase from and their satisfaction with the company were determined, the model for the effects was tested with SmartPLS and the figure for the model is given in Figure 2. The smallest t statistic for the paths between latent variables and observed variables in the model was calculated as $36.921 > 1.96$. Therefore, all paths, in other words factor loadings, were found to be statistically significant.

E-ticaret müşterilerin/tüketicilerin satın alım yaptığı firmaya bağlılığını ve firmadan olan memnuniyetlerine etki eden değişkenlerin/faktörlerin belirlendiği çalışmada etkilere yönelik model SmartPLS ile sınanmış ve modele yönelik şekil Şekil 2'de verilmiştir. Modelde latent değişkenlerle gözlenen değişkenler arasındaki yollara ait en küçük t istatistiği $36.921 > 1.96$ hesaplanmıştır. Dolayısıyla tüm yollar diğer bir ifadeyle faktör yükleri istatistiksel açıdan anlamlı bulunmuştur.

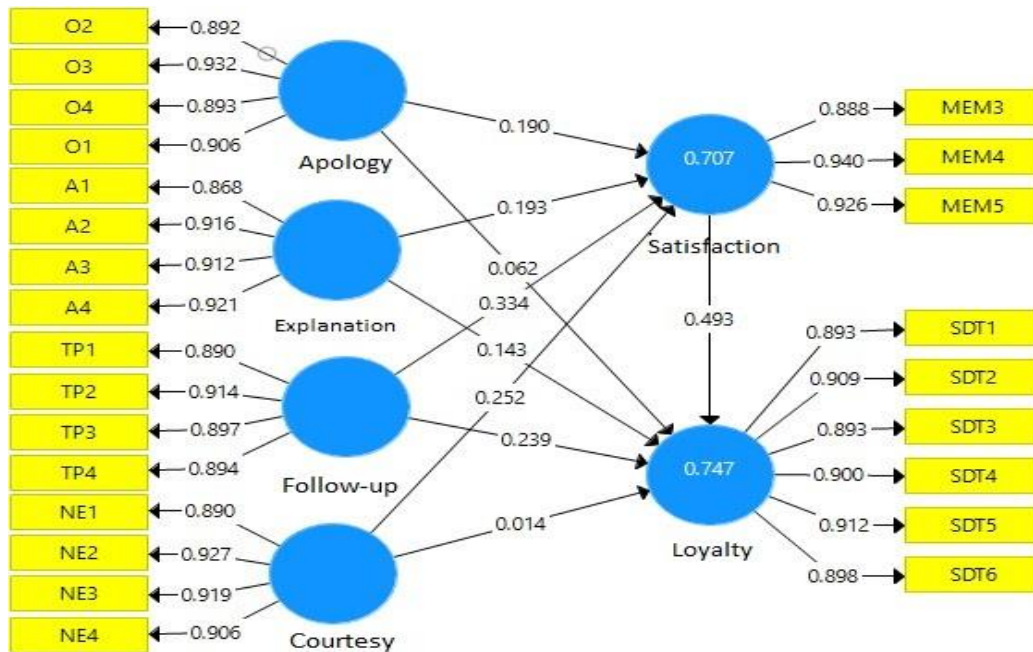


Figure 2. Pathways and Implications for the Research Model

According to Figure 2;

- It was determined that there was a significant $\beta=0.190$ unit effect in the same direction between the perspectives towards the company and their satisfaction with the company in e-commerce countries ($t=3.343$ $p=0.001$). According to these developments, while their understanding of the company in the e-commerce world increases, their satisfaction with the company also increases. Therefore, H1 was supported.
- It was determined that there was a statistically significant $\beta=0.193$ unit effect in the same direction between e-commerce customers' perception of disclosure towards the company and their satisfaction with the company ($t=2.996$ $p=0.003$). According to this determined effect, while e-commerce customers' perception of disclosure towards the company increases, their satisfaction with the company also increases. Therefore, H2 was supported.
- It was determined that there was a statistically significant $\beta=0.334$ unit effect in the same direction between e-commerce customers' perceptions of following the company and their satisfaction with the company ($t=5.722$ $p=0.000$). According to this determined effect, while e-commerce customers' perception of following the company increases, their satisfaction with the company also increases. Therefore, H3 was supported.
- It was determined that there was a statistically significant $\beta=0.252$ unit effect in the same direction between e-commerce customers' perceptions of polite behavior towards the company and their satisfaction with the company ($t=4.617$ $p=0.000$). According to this determined effect, while e-commerce customers' perceptions of politeness towards the company increase, their satisfaction with the company also increases. Therefore, H4 was supported.
- It was determined that there is a $\beta=0.062$ unit effect in the same direction between e-commerce customers' perception of apology towards the company and their loyalty to the company. This determined effect was not found to be statistically significant ($t=1.229$ $p=0.219$). Therefore, H5 was not supported.
- It was determined that there was a statistically significant $\beta=0.143$ unit effect in the same direction between e-commerce customers' perception of disclosure towards the company and their loyalty to the company ($t=2.518$ $p=0.012$). According to this determined effect, while e-commerce customers' perception of disclosure towards the company increases, loyalty to the company increases. Therefore, H6 was supported.
- It was determined that there was a statistically significant $\beta=0.239$ unit effect in the same direction between e-commerce customers' perceptions of following the company and their loyalty to the company ($t=4.008$ $p=0.000$). According to this determined effect, while e-commerce customers' perceptions of following the company increase, loyalty to the company increases. Therefore, H7 was supported.
- It has been determined that there is a $\beta=0.014$ unit effect in the same direction between e-commerce customers' perceptions of courtesy towards the company and their loyalty to the company. This effect was not found to be statistically significant ($t=0.264$ $p=0.792$). Therefore, H8 was not supported.
- It was determined that there was a statistically significant $\beta=0.493$ unit effect in the same direction between satisfaction with the company from which the purchase was made and loyalty to the company among e-commerce customers ($t=7.560$ $p=0.000$). According to this determined effect, while e-commerce customers' satisfaction with the company increases, loyalty to the company increases. Therefore, H9 was supported.

Findings regarding the significance of indirect effects are;

- It has been determined that e-commerce customers' perception of apology towards the company affects loyalty to the company by $\beta = 0.093$ units through satisfaction with the company. This determined effect was found to be statistically significant ($t=3.042$ $p=0.002$). According to this determined effect, HDE1 was supported.
- It has been determined that e-commerce customers' perception of disclosure towards the company affects loyalty to the company by $\beta = 0.095$ units through satisfaction with the company. This determined effect was found to be statistically significant ($t=2.844$ $p=0.004$). According to this determined effect, HDE2 was supported.
- It has been determined that e-commerce customers' perceptions of following the company affect loyalty to the company by $\beta = 0.164$ units through satisfaction with the company. This determined effect was found to be statistically significant ($t=4.291$ $p=0.000$). According to this determined effect, HDE3 was supported.
- It has been determined that e-commerce customers' perceptions of courtesy towards the company affect loyalty to the company by $\beta = 0.124$ units through satisfaction with the company. This effect was found to be statistically significant ($t=4.054$ $p=0.000$). According to this determined effect, HDE4 was supported. The results obtained are given in Table 4.

Table 4. Research Hypotheses and Results

	Direction of Hypotheses	β	St. D.	t	p	Hypotheses
H2	Explanation → Satisfaction	0,193	0,065	2,996	0,003	Supported
H6	Explanation → Loyalty	0,143	0,057	2,518	0,012	Supported
H9	Satisfaction → Loyalty	0,493	0,065	7,560	0,000	Supported
H4	Courtesy → Satisfaction	0,252	0,055	4,617	0,000	Supported
H8	Courtesy → Loyalty	0,014	0,052	0,264	0,792	Not supported
H3	Follow-up → Satisfaction	0,334	0,058	5,722	0,000	Supported
H7	Follow-up → Loyalty	0,239	0,060	4,008	0,000	Supported
H1	Apology → Satisfaction	0,190	0,057	3,343	0,001	Supported
H5	Apology → Loyalty	0,062	0,050	1,229	0,219	Not supported
DE1	Apology → Satisfaction → Loyalty	0,093	0,031	3,042	0,002	Supported
DE2	Explanation → Satisfaction → Loyalty	0,095	0,033	2,844	0,004	Supported
DE3	Follow-up → Satisfaction → Loyalty	0,164	0,038	4,291	0,000	Supported
DE4	Courtesy → Satisfaction → Loyalty	0,124	0,031	4,054	0,000	Supported

The predictive power of the first model tested was evaluated with corrected R^2 . R^2 values can be seen on the figure. According to Adjusted R^2 ;

- External variables in the model (Apology, Explanation, Follow-Up and Courtesy) explain 70.3% of the variation in the satisfaction variable.
- External variables in the model (Apology, Explanation, Follow-Up, Courtesy and Satisfaction) explain 74.3% of the change in the loyalty variable.

Effect sizes were measured with f^2 value and according to f^2 value;

- The effect size of the explanation variable in the satisfaction variable was found to be low, with the explanation rate $f^2=0.046$, and the effect size was found to be low in the loyalty variable, with the explanation rate $f^2=0.028$.
- It was determined that the effect size of the satisfaction variable in the loyalty variable was at a medium level with the explanation ratio $f^2 = 0.282$.

- The effect size was found to be low in the satisfaction variable of the follow-up variable, with an explanation rate of $f^2=0.138$, and a low effect size in the loyalty variable, with an explanation rate of $f^2=0.072$.
- It was determined that the effect size of the apology variable in the satisfaction variable was low, with the explanation ratio $f^2=0.063$.

The predictive power of the structural model for internal variables was measured with Q^2 , and it was determined that the structural model had a high level of predictive power in the satisfaction variable with $Q^2 = 0.589$. It was determined that the structural model had a high predictive power in explaining the loyalty variable with $Q^2 = 0.601$. The results obtained are given in Table 5.

Table 5. Effect and Power Statistics for the Model in which Satisfaction and Loyalty Variables Are Endogenous

	Satisfaction	Loyalty
Edited/Corrected R ²	0,703	0,743
Explanation	0,046	0,028
Satisfaction		0,282
f ²		
Courtesy	0,101	0,000
Follow-up	0,138	0,072
Apology	0,063	0,007
Q ²	0,589	0,601

CONCLUSION

Online shopping has ceased to be a secondary need and has become a primary need, as the effects of the coronavirus epidemic gradually disappear. While traditional trade decreased with the emergence of the Covid-19 pandemic in the world, e-commerce has become widespread and gained momentum.

The Covid-19 pandemic has been effective in traditional commerce businesses starting e-commerce. This situation has revealed how important digitalization is for businesses. For example, consumers who had to shop in a limited time and spend more time at home during the pandemic met their needs to continue their lives through online shopping.

The increasing and widespread use of online shopping has brought about some problems in e-commerce. In this context, the aim of the research is to determine the factors affecting customer satisfaction and loyalty to e-commerce. As a result of the research, it was revealed that as e-commerce customers' perceptions of apology, explanation, follow-up and courtesy behavior towards the business increased, satisfaction with the business increased.

It has been determined that customers' perceptions of apologies, explanations, follow-ups and courtesy indirectly affect loyalty through satisfaction with the business. For example, Gruber et al. (2009: 426), as a result of their study, explained that when the company apologizes and resolves the complaints quickly during the customer complaint process, the customers save both time and money, feel much better and their satisfaction increases. Similarly, Yavaş et al. (2004), in a study conducted on hotel guests in Northern Cyprus, revealed that the company's disclosure to the customer affected customer satisfaction.

When the data obtained from the research were evaluated, it was concluded that customers' perceptions of explanation and follow-up increased loyalty to the business, while perceptions of apology and courtesy did not directly affect customers' loyalty to the business. For example, Kurtoğlu et al. (2022) stated in their study that complaint tracking is important in ensuring customer loyalty.

Nowadays, where market requirements are changing regularly with the development of e-commerce, companies that take customer complaints into consideration and respond to these complaints will be able to adapt to the market as soon as possible and will also provide a competitive advantage. In cases where the company cannot create customer

satisfaction, it is inevitable that it will be exposed to different complaints. In this context, regularly monitoring customer complaints, apologizing to the customer, making explanations to the customer and showing courtesy will create customer satisfaction and loyalty towards the company, and the company will gain a competitive advantage and therefore its profitability will be positively affected.

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