

Impact of Social Network Use in Turkey on E-commerce Based on Facebook Case

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Abstract –In this study, the data set consisting of the 1412 surveys sampling the whole population of Turkey was examined using regression analysis to determine the impact of social networks in e-commerce. In the research, Facebook was used as the social network. As a result of the analysis, it has been revealed that there is a significant relationship between Facebook's Information and Frequency of Usage dimensions, the level of education of the person and the person's use of LinkedIn and the e-commerce habits of the person. Similarly, there is a significant relationship between e-commerce habits and the attitude towards online shopping, the pleasure of online shopping and the ease of use of the shopping site. According to another result, the number of people tagged on Facebook is positively associated with the number of posts. Briefly, the study demonstrated that there is a relationship between social networks and online shopping from various perspectives.

Keywords – Social Network, Social Media, Facebook, e-commerce, Turkey

I. LITERATUR REVIEW

In 2002, Deiss defined electronic commerce as the exchange of products and services via computer networks such as the Internet. During this process, payment and / or delivery of the product does not necessarily have to be through this network. Payment can be made by electronic methods such as online credit card and EFT, or by means of payment in person during delivery of the product. Product can as well be delivered online as online music and e-book or the physical product can be delivered via cargo.

According to Hernandez et. al (2009) benefit and convenience of e-commerce perceived by the consumer affects individuals' approach towards e-commerce which designate and determine their future purchasing intentions. According to another study, the user's ease of use of the site, entertaining aspect of the site and sense of the security of the site affect the overall perception of the site's usefulness in the consumer eye which eventually paves the way for electronic shopping (Lim, Lim and Heinrichs, 2005). Research has shown that the reasons that affect Internet users' decisions the most are privacy concerns along with perceived risk and confidence (Culnan&Bies, 2003; Dinev& Hart, 2003). According to Dinev et al. (2006), Internet privacy concerns affect confidence laid on the Internet, which together with the interest in the Internet, changes the tendency to provide personal information over the Internet.

Social networking sites are Internet-based services that allow individuals to create profiles that are open to all or part of the users in a restricted system, create a list of other users with whom they share links, and view and review the list of users who share links with them (Boyd and Ellison, 2008). Downes (2005) calls this the combination of personal connections which are brought and bundled together. The most popular example of these sites in the world is Facebook, as can be seen in Table 1.

Facebook was a social networking site dedicated to Harvard University, which was able to be subscribed only with the "harvard.edu" email extension in 2004 (Cassidy, 2006), and its purpose was to keep Harvard students and their alumni in touch. Afterwards, the site was opened to other universities, and the users here became a member of the site with their university e-mails as in Harvard. In this way, the community was intended to remain private. The most important innovation brought by Facebook, which had been opened to high schools and institutions since September 2005, provided that the institutional e-mail address was used, and everyone's service after 2006, was that users could benefit from software specially prepared for the Facebook platform by third party software developers.

In his research at the end of 2019, Abrams found that 77.0 percent of the total Internet users in the world have logged into a social network account at least once a month. In the same research, it is stated that there are 2.95 billion social media users in the world. While the ratio of total population using social media in 2019 is 42% of the population worldwide, this proportion rises to 53% in Turkey (WeAreSocial¹, 2019). In a 2010 study, a significant relationship was found between the frequency of Internet use and the use of social networks, and these statistics are suitable for that study (Vural, Akıncı, & Batb, 2010). According to the 2019 data of WeAreSocial company, the number of active user accounts in the world can be seen in Fig. 1.

¹It is a digital agency specializing in social media, providing service with 550 employees in ten offices around the world.

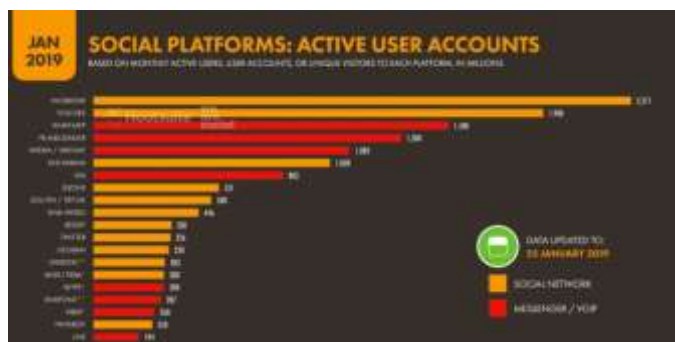


Fig. 1 World wide social network active user statistics in January 2019, according to WeAre Social (WeAreSocial, 2019)

In their study in 2008, Constantinides and Fountain stated that social network users increased their dissimilarities by communicating with different people and that they were informed about different products in e-commerce. Social media helps develop trust and desire for e-commerce thanks to the rankings, reviews and comments that occur here (Safia et al., 2019). In 2015, Hajli reported that social media increased customer confidence through ratings, reviews, suggestions and referrals, thus affecting the purchasing decisions of the customer. According to Baptista and Oliviera, when customers become members of large online groups, they tend to believe in people in the group and accept and adopt new products that are positively rated (2016). In cases where some vendors using the e-commerce platform do not provide sufficient information and documents about the product, social media sites close this vital gap and affect sales through reviews and comments (Safia et al., 2019).

Zhang et al. found out that in 2017, people's occupation with e-commerce is related to the continuous use of social networks, more importantly, they showed that they do not need to be exposed to the marketing of companies on social networks. In addition, Smaoui claimed that in 2017, the collage of picture publications offered to consumers through social networks increased the sales of online stores. According to the study by Rachbini and Agustina in 2019, it is shown that the consumer style and manner consisting of brand, price and innovation consciousness, plays an important role in getting opinions through electronic word of mouth marketing and Facebook users' approach towards online shopping. In the study of Safia et al. in 2019, it was observed that there is a relationship between the use of social media and e-commerce, and social media users mostly shop online.

In many studies, the relationship between social commerce and e-commerce has been examined (Huang and Benyoucef, 2013) and has been increasingly examined since 2009 (Javid, Nazari and Ghaeli, 2019), but in the literature, there are very few empirical studies on the impact of social media on e-commerce, especially in developing countries (Safia et al., 2019). In general, dimensions such as privacy, information, security, and pleasure are valid in both social network and e-commerce.

II. METHODOLOGY

Conducting a research on the four social networking sites shown in Table 1 which are all ranked in top 50 in Turkey would lead to vast consumption of sources in terms of time and such a research would be broad in scope, thus we have decided to pick one out of these four sites and examine social network use in detailed. Habits and patterns of use and popularity in Turkey were considered during the site selection, approximately 20 experts were consulted in person. Finally, considering the fact that it is the oldest among popular social networks and has 3 times more visitors than its closest followers, Facebook site was chosen.

TABLE I
ALEXARANKING OF SOCIAL NETWORKS INTURKEY(ALEXA, 2015)

Social Network Site	Turkey Ranking	Global Ranking	USARanking
facebook	2	2	2
twitter	8	7	7
instagram	22	30	16
linkedin	31	11	8

Research has been decided to be carried out with a survey applied throughout Turkey. First, sample size was calculated and this survey sample size to be held across Turkey (with 3% margin of error) was decided to be at least 1067 as a requirement (Yazicioglu and Erdogan, 2004). Designed and created by the Ministry of Economy, Turkey has been divided into six regions of investment incentives taking into account the level of development, so these regions will be considered by sampling the population.

When it comes to determining the size of the universe, considering that the entire population is not connected to the Internet, it is not considered correct to predicate on the total population. Instead, the research is based on the total number of broadband Internet subscribers (mobile and fixed) by the end of 2014, which was announced by Information and Communication Technologies Authority (BTK, 2015). The main reason for this is that although there are no statistics on the basis of provinces regarding using Facebook or shopping on the Internet, it is foreseen that both groups are internet subscribers, without prejudice to exceptions. The total number of broadband subscribers in Turkey is large enough considering that according to data from the end of 2014 the revealed number is 41,200,771. Table 3 shows the regions where the research will be implemented, the total number of broadband Internet subscribers in the regions, and the proportion of surveys that should be applied in each region.

It was decided that the questionnaire, which will form the basis of the research, consists of Demographic Information, Facebook dimension, Internet Shopping dimension and e-commerce dimension. The sources where questions about these dimensions are adapted are shown in Table 2.

TABLE II
SOURCES OF DIMENSIONS RELATED QUESTIONS

FB Information	Bonds-Raacke, Raacke (2010),Subrahmanyam(2008)
FB Privacy	Pempek, YermolayevaveCalvert(2009),Ross vd(2009)
FB Network	Bonds-Raacke, Raacke (2010), Subrahmanyam (2008), Vural, AkinciveBatb (2010), Pempek, Yermolayevave Calvert (2009)
FB Opinion	Ross vd (2009)
FB Frequency of Usage	Pempek, Yermolayevave Calvert (2009), Subrahmanyam (2008)
OSPerception of Ease of Use	Lim, LimveHeinrichs (2005)
IA Perception of Benefit	Lim, Lim veHeinrichs (2005)
OSAttitudes towards Online Shopping	Hernandez, Jimenez veMartin (2009)
OSPerception of Pleasure	Lim, Lim veHeinrichs (2005)
OSPerception of Security	Lim, Lim veHeinrichs (2005)
Online Buying Behavior(eCommerce)	-

The online tool called Google Docs was used to collect the data, and analyzes were done through MS Excel and SPSS programs.

This study is aimed at people who live in Turkey and who shops online as well as uses Facebook. The selected random sampling method from Turkey were aimed to cover all of Turkey. Those with incomplete and inconsistent values were excluded from the 2006 questionnaires at hand. The remaining surveys have been reduced to 1412 by random screening to fit the regional distribution rates. Accordingly, the number of surveys shown in Table 3has been reached.

TABLE III
QUESTIONNAIRE – REGIONALDISTRIBUTION

Region	Total Number of Broadband Internet Subscribers (Total Percentage of Broadband Internet Subscribers)	Number of Surveys
1	21 185 148 (51.42 %)	726
2	5 642 774 (13.70 %)	193
3	4 702 481 (11.41 %)	161
4	3 726 267 (9.04 %)	128
5	2 829 932 (6.87 %)	97
6	3 114 169 (7.56 %)	107
Total	41 200 771 (100 %)	1412

III. RESULTS AND FINDINGS

Demographic data are shown in Table 4. The fact that the standard deviations are too high is due to the large number of outliers, so the impression is that the median values represent the mean more precisely.

TABLE IV
GENDER, AGE, INCOME, EDUCATION, MARITALSTATUSSTATISTICS(n=1412)

Variable	%	Variable	Mean	Med.	St. Dev.
Gender		Phone Bill	57.35	40	51.18
Woman	47.5	Number of Friends	478.66	350	508.95
Man	52.5	Number of Posts	25.82	10	74.70
Age		Tagged	12.84	5	40.01
<= 23	48.3	Blocked	12.85	5	23.13
>= 24	51.7	eCommerce Number Monthly	3.93	2	11.31
Income		eCommerce Amount Monthly	219.34	145	292.74
<= TL 1000	49.4	Education			
> TL 1000	50.6	Associate and below	55.4		
Education		Undergraduate and above	44.6		
Marital Status		Single	72.9		
Single	72.9	Married, widowed, and divorced	27.1		
Married, widowed, and divorced	27.1				

The social networks used can be accessed from Table 5.

TABLE V
DISTRIBUTIONBYUSE OF SOCIAL NETWORKS (n=1412)

		Percent		Percent	
Facebook	No	2,5	LinkedIn	No	77,5
	Yes	97,5		Yes	22,5
	Total	100,0		Total	100,0
Twitter	No	45,0	Instagram	No	30,5
	Yes	55,0		Yes	69,5
	Total	100,0		Total	100,0

To measure the reliability of the scales, cronbach alpha analysis was applied to all Facebook, Online shopping and e-commerce dimensions. The results of this analysis are shown in Table 6.

TABLE VI
CRONBACH ALPHA RELIABILITY ANALYSIS

Dimension	No of items	Cronbach alpha	Cronbach alpha standardized
Facebook – Information	10	0.844	0.845
Facebook – Privacy	9	0.832	0.840
Facebook – Network	9	0.825	0.824
Facebook – Opinion	6	0.884	0.883
Facebook – Frequency of Usage	16	0.917	0.919
Online Shopping – Ease of Use	5	0.865	0.879

Online Shopping – Benefit	6	0.872	0.873
Online Shopping– Behavior	5	0.922	0.923
Online Shopping– Pleasure	5	0.925	0.926
Online Shopping– Security	5	0.946	0.947
eCommerce	4	0.804	0.821

Having Cronbach alpha value over 0.70 is sufficient for the reliability of a dimension (Kiran, Yılmaz and Emre, 2019). As can be seen in Table 6, all alpha values are above 0.80, which means that all variables pass the reliability analysis. Analyzes were done on the average of these scales. Apart from these, quantitative variables are also included in the model and following hypotheses are generated.

Hypothesis 1: The manner of using social network, demographic features and popular social networks used affect the perception of shopping on the Internet.

Hypothesis 2: The perspective of online shopping affects shopping over the Internet.

Hypothesis 3: The plurality of posts made by the person in social networks increases the visibility of the person in the posts of others.

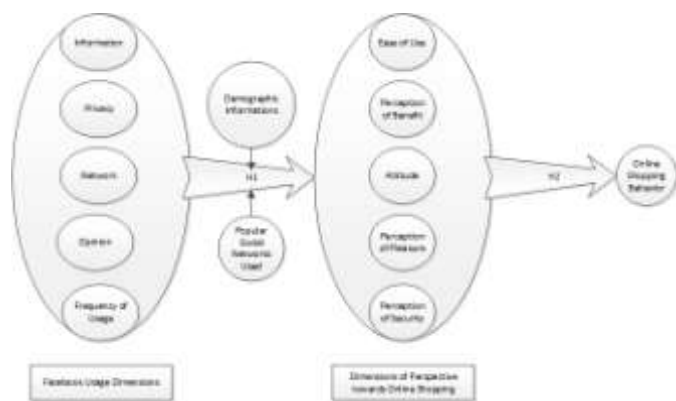


Fig. 2Hypotheses

Simple linear and multiple regression methods are foreseen to be used in the test of hypotheses. Assumptions were tested before all regression analyzes and data sets were found to be suitable for regression analysis.

An analysis was carried out using the “Stepwise” method by taking the quantitative variables such as Facebook usage dimensions, Internet perspective dimensions, demographic data, and number of friends and having account on other social networks other than Facebook. As a result of the analysis Facebook Information and Frequency of Usage dimensions were added to the model as well as the educational information levels of individuals, and whether they use LinkedIn or not, because they gave meaningful results.

First, descriptive statistics including the mean, standard deviation and observation numbers of all variables are given in Table 7.

TABLE VII
DESCRIPTIVE STATISTICS

Descriptive Statistics		
	Mean	Std. Deviation
Perception of Online Shopping	3.793038	.6450840
FB_Information	3.398584	.7489928
FB_Privacy	2.959789	.6921784
FB_Network	2.914227	.7528870
FB_Opinion	2.613905	.9210881
FB_Frequency_of_Usage	2.844414	.7281828
D_Gender	.5255	.49953
D_Age	.5170	.49989
D_Income	.5057	.50015
D_Education	.4462	.49727
D_Marital_Status	.2712	.44476
U_twitter	.55	.498
U_instagram	.69	.461
U_linkedin	.23	.418
Number of Friends	478.66	508.951
Number of Posts	25.82	74.699
Posts tagged	12.84	40.012
Blocked	12.85	23.130

When we look at the summary table of the regression model, it is seen that the R coefficient, which shows the relation between dependent and independent variables, is 0.319, and R², which indicates the part of the shopping dependent variable that can be explained by the Facebook variables, is 0.102. Since the R value is between 0.20 and 0.40 and the R² value is less than 0.35, the relationship between the dependent and independent variables has been considered weak (Jost, 2015). The results can be seen in Table 8.

TABLE VIII
SUMMARY TABLE

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
4	0.319	0.102	0.099	0.6123071

The significance level is important for these data to be valid. When the ANOVA table (Table 9) is examined, it is seen that the significance level of the F value of the analysis is at the level of 1.34×10^{-31} . This shows that the H₀ hypothesis is rejected at the level of significance of 1% and there is a significant relationship between independent and dependent variables.

TABLE IX
ANOVA TABLE

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	59.652	4	14.913	39.776	.000
Residual	527.512	1407	.375		
Total	587.164	1411			

Since the model is meaningful and independent variables explain the dependent variable, albeit weak, it is the turn for the equation of this connection. Looking at the coefficients table (Table 10), online shopping perception = 0.165 *FB_Information + 0.136 *FB_Usage_frequency + 0.107 * D_Education + 0.098 * LinkedIn + 2.776, this result explains the shopping from the Internet at a rate of 9.9%. In this context, although all dimensions of Facebook are not effective, Hypothesis 1 has been partially accepted.

TABLE X
COEFFICIENTS TABLE

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2,776	,084		33,079	,000
FB_Information	,165	,025	,192	6,532	,000
FB_Frequency_of_Usage	,136	,026	,154	5,218	,000
D_Education	,107	,035	,082	3,019	,003
LinkedIn	,098	,042	,063	2,328	,020

In order to examine the accuracy of the hypothesis that the perspective of online shopping affects e-commerce, the dimensions the perspective of online shopping will be put into regression analysis by e-commerce using the “Stepwise” method. It was understood that regression analysis could be initiated since all assumptions were provided. First, descriptive statistics including the mean, standard deviation and observation numbers of all variables are given in Table 11.

TABLE XI
DESCRIPTIVE STATISTICS

	Mean	Std. Deviation
eCommerce	2,7350	,65731
OS_Ease_of_Use	3,796090	,7362380
OS_Benefit	3,702506	,6954607
OS_Attitude	3,715940	,7758983
OS_Pleasure	3,439098	,8456354
OS_Security	4,452782	,7692817

When we look at the summary table of the regression model, it is seen that the R coefficient, which shows the relation between dependent and independent variables, is 0.705, and R², which indicates the part of the shopping dependent variable that can be explained by the Perception of Online Shopping variables, is 0.497. Since the R value is between 0.60 and 0.80 and the R² value is greater than 0.35, the relationship between the dependent and independent variables has been considered strong (Jost, 2015). The results can be seen in Table 12.

TABLE XII
SUMMARY TABLE

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
3	0.705	0.497	0.496	0.46671

The significance level is important for these data to be valid. When the ANOVA table is analyzed, it is seen that the significance level of the F value of the analysis is 2.89 x 10⁻¹⁹⁷. This indicates that the H₀ hypothesis was rejected at the significance level of 1% and there was a significant relationship between independent and dependent variables. ANOVA table is shown in Table 13.

TABLE XIII
ANOVA TABLE

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	285.368	3	95.123	436.700	.000
Residual	288.831	1326	0.218		
Total	574.199	1329			

Since the model is meaningful and independent variables explain the dependent variable strongly, it is the turn for the equation of this connection. Considering the coefficients table (Table 14), this result, which can be expressed as e-Commerce = 0.297 *OS_Attitude + 0.220 * OS_Pleasure + 0.147 * IA_Ease of Use + 0.316, explains e-Commerce (% 5 significance level) by 49.7%. Although not all dimensions are effective, Hypothesis 2 has been accepted as partial, there is a strong link between the perspective of online shopping and e-Commerce.

TABLE XIV
COEFFICIENTS TABLE

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.316	.072		4.416	.000
OS_Attitude	.297	.026	.351	11.304	.000
OS_Pleasure	.220	.021	.283	10.242	.000
OS_Ease_of_Use	.147	.024	.165	6.244	.000

For the acceptance of the last hypothesis, it was tested whether the number of posts made by the respondents increased the number of number of tagging them in the posts made by others. This test was done by linear regression method.

It was understood that regression analysis could be initiated since all assumptions were provided. When we look at the summary table of the regression model, it is seen that the R coefficient, which shows the relation between dependent and independent variables, is 0.615, and R² value, which indicates part of the number of tagging dependent variable that can be explained by the number of posts, is 0.378. Since the R value is between 0.60 and 0.80 and the R² value is greater than 0.35, the relationship between dependent and independent variables has been considered strong. The results can be seen in Table 15.

TABLE XV
SUMMARY TABLE

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.615	0.378	0.378	31.565

The significance level is important for these data to be valid. When the ANOVA table is analyzed, it is seen that the F value of the analysis is 857.176 and the significance level is 1.32×10^{-147} . This indicates that the H₀ hypothesis was rejected at the significance level of 1% and there was a significant relationship between independent and dependent variables. ANOVA table is shown in Table 16.

TABLE XVI
ANOVA TABLE

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	854061.847	1	854061.847	857.176	.000
Residual	1404877.980	1410	996.367		
Total	2258939.827	1411			

Since the model is meaningful and independent variables explain the dependent variable strongly, it is the turn for the equation of this connection. Considering the coefficients table (Table 17), this result, which can be expressed as $Post_Tagging = 0.329 * Post_Number + 4.337$, strongly explains the number of tagging (at the 5% significance level) at a rate of 37.8% (Jost, 2015). For this reason, Hypothesis 3 has been accepted.

TABLE XVII
COEFFICIENTS TABLE

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4.337	.889		4.879	.000
Number of Posts	.329	.011	.615	29.278	.000

IV. CONCLUSION

In Turkey, as a consequence of the test of the first hypothesis claiming that the manner of use of social networking, demographic characteristics and use of popular social networks affect perception of online shopping, it has been found that use of social networks is partially effective on e-commerce. The reason why the privacy dimension is left out during this test may be that people's understanding of confidentiality and privacy may be different and this is not a behavior developed only against Facebook. The main reason for the network size to be disabled may be that this concern is a thing of the past. When Facebook first came out, people were joining here to find their old friends and get in touch. Now, when people meet new people, thanks to many technological innovations such as social networks and mobile phones, they establish a network that will not break off easily, so they do not need Facebook to refresh the relationship, yet Facebook is still valuable for not to break off the relationship. These issues should be explored in detail by researchers in the future. As for the opinion aspect, people in general use Facebook intensively yet in the meantime they want to get rid of it. This is in line with the result of the increase in life satisfaction when users stop using Facebook, which emerged in 2016 by Tromholt's research.

It may be the motivation for people to use the Internet for their needs behind the dimension of Information, which measures how people use Facebook to share and receive information about themselves, activities and interests with others. On the other hand, it is not surprising that the frequency of using Facebook affects online shopping. As mentioned earlier, many studies have shown that the more people use the Internet, the more they use social networks and e-commerce. It was not surprising that the Education Level variable was added to the Information and Frequency of Use dimensions. The positive effect of education levels of people on e-commerce has already been stated in many studies. Although shopping on the Internet is not a new concept, it still has not been able to fully replace conventional commerce. Therefore, it is an expected result to be accepted by higher educated people first. From another point of view, there are also students with low education level who have not gained their financial freedom. Considering that students are not able to shop as much as adults, this variable can be understood better. The fourth variable that is included in the model is whether the person has a LinkedIn account. LinkedIn members are composed of more educated people with higher income groups. In this context, it is normal that LinkedIn members are included in the model.

The underlying reason that benefit dimension is excluded in the test of the second hypothesis claiming that the perspective of online shopping affects e-commerce may be due to consumers' preference of physical shopping more useful. The easy return and reimbursement system created by sites like Trendyol is not known much and takes a lot of time. The fact that it is not very convenient in terms of price, as when

shopping over the Internet first appeared, causes the benefit dimension to lose its importance. The security aspect has been seen to be internalized by all users unlike the other dimensions. Compared to other questions, the highest answers were given to this question and the highest averages were found in this question (the lowest out of 5 was 4.27, the overall average was 4.43). Naturally, this dimension did not add a statistical meaning to the analysis. The security problem created as the biggest obstacle to e-commerce for a long time has led to consumer awareness and will probably be one of the major driving forces of e-commerce in the near future.

From the analysis, the attitude towards shopping on the Internet has emerged as the most determining factor. The attitudes of individuals towards using the Internet for shopping naturally reflect on their shopping. The person who thinks that electronic purchasing is positive, buys something more or less regardless of income, and the individual who has a negative perception also resists even the most suitable offer. The joy and pleasure of electronic shopping affects the online shopping behavior. It seems that the desire of people to do what they enjoy is reflected here as well. Finally, as stated in many studies, the indispensable condition for the realization of e-commerce is that shopping sites must be easy to use. Today, it is estimated that the reason for all shopping processes evolving to shopping systems with baskets, as described earlier, is to create this ease of use and accustom people to similar processes.

A stronger relationship was seen in the third hypothesis which is purported to test the psychological dimension of social network use. As a result of this analysis, the model was found to be meaningful, people are tagged in about a third of their posts. That means for example, if they share 60 posts in a month, their friends share approximately 20 posts tagging them. This situation can be summarized as, what is visible can be remembered more easily. People become visible as they post on the social network and cause people to want to communicate with them. In fact, this also explains why social networks are so popular. In this understanding, where content is created entirely by users, one of the main factors that determine the motivation of people to create content is the desire to be noticed. On the one hand, shared posts give people popularity and enable others to talk about them.

The biggest difficulty encountered during the study was the completion of the questionnaires. In particular, retrieval and collection of data from the eastern part of Turkey has been a challenging process. The study showed that there is a relationship between social networks and online shopping from various perspectives, so it is very important for businesses to update their online marketing strategies regularly according to the frequently changing needs of social media users. Likewise, sellers and vendors can use social media as a means of building confidence and motivation for new customers. In addition, managers of new companies should use social media as a marketing tool to assist customers in developing brand image in developing countries.

E-commerce firms should pay more attention to the information aspects that help users make the right decisions on social media.

What needs to be done in the future is to test this relationship through different social networks. Apart from that, the effect of social trade on these relationships can also be included in the analysis. Today, with rapidly changing technology, there is no guarantee that any electronic institution will exist for a long time, and the history of the Internet is full of examples of how the biggest players disappeared in a few years. In this context, it is obvious that the concept of social network will change and develop.

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