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# Undestanding The Factors That Influence Mobile Buying Behavior Of Young Turkish Consumers: An Empirical Investigation

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#### **ABSTRACT**

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While the number of internet users is increasing nowadays; businesses are also developing new online technologies to deliver their products and services to consumers through these channels. According to TUIK's 2016 data 96% of the household in our country have mobile phones or smart phones. The widespread use of smartphones has introduced consumers new concepts such as "mobile application" in which consumers have shown great interest. A survey shows that the number of downloads of Apple's applications has been 100 billion since 2008. These applications, has also changed the direction of businesses' marketing strategies since the rate of individuals who use the Internet for purchasing or purchasing goods or services for personal use over the internet has increased by 1 percentage point to 2015 and is 34.1%. This is mainly due to the fact that mobile applications provide more economical and practical solutions for users. Consumers may save time and energy by accessing the products and services and making comparisons more easily. Mobile applications alleviate their burdens by not only saving consumers but also businesses from extra costs. Considering these current situations, mobile shopping practices have been introduced by businesses to potential consumers and users as new products to create more shopping opportunities with mobile devices that are using new devices. Innovative businesses have an exciting opportunity to reach consumers through a new communication channel. The determination of the basic dynamics of consumer behavior in purchases made through mobile applications is important for the development of accurate marketing strategies.

#### INTRODUCTION

There are some researches done in our country in this regard. For example, the study of Nart and Okutan focused on how to motivate consumers to mobile shopping. As a result of the research, it was concluded that innovation and social effect were influencial in accepting mobile technologies. (Nart & Okutan, 2015, s. 16) In Uğur and Turan's study which investigates the acceptance and use of university students' mobile applications revealed that it is important to understand the connection of university students with mobile technology in determining the variables that influence the acceptance of mobile applications. (Uğur & Turan, 2015, s. 75) Similarly, Tatlı and Korkut, examined the effects of virtual shopping on the internet using students between the ages of 18-25. (Tatlı & Korkut, 2015, s. 63)However there are still room for furthers studies that extend the scientific knowledge regarding the factors that effects Turkish consumers tendecy to shop via mobile applicaions. In this context this research aims to investigate the factors that influence shopping on mobile application. More spesifically, the relative effects of user experience, perceived risk, perceived benefit, situational factors and intention on mobile shopping were examined.

# **l.Mobile Application**

"Smart mobile applications are software applications that are designed to run on smart phones, tablets, and other mobile device". (Siuhia & Mwakalonge, 2016, s. 582-592) These applications are apps that people build after they download them to their devices and use them for a variety of purposes. (Islam et all, 2010, s. 72)User-specific portals are available and users can easily access these applications using a specific operating system. (Einarsen, 2012, s. 3) They are similar to a website but are more practical. For this reason, mobile applications have become an important platform for communication between consumers and businesses. Besides, mobile applications are used for purchasing purposes. Technological developments and the widespread use of the internet have defined a new type of consumer, namely online consumer. Mobile devices has become increasingly important with each passing day in the academic area as well as the business and industrial world. (Harrison et all, 2013, s. 1-43)According to a research consucted on 25 countries using smartphones, Turkey ranks 15th. (Emarketer, 2016) As a result, organizations benefit mobile applications to facilate the connection with consumers. On the other side, mobile applications provide a lot of advantages for consumers. With these applications, shopping lists are prepared, bills are paid, many shopping related works such as travel plans and hotel reservations are made. Consumers are convinced that these applications increases efficiency because they allow them to be faster. (Watson, 2013, s. 840)

## 1.1. Mobile Application Usage

Mobile Applications facilitate many applications that are pivotal in modem society including communication, education, business, entertainment, medical, finance, travel, utilities, social, and transportation (Siuhia & Mwakalonge, 2016, s. 582-592). For example, in the tourism sector, both mobile devices and mobile applications have a significant impact. The possibilities provided by developing technology have greatly changed consumers' travel planning. (Ayeh et al., 2013, s. 439)It is a well accepted fact that the shared knowledge created by users is an important source of decision- making for travellers. (Filho & Correa, Online Travel Reviews on Mobile Applications when making travel plans: Uses and Gratifications perspectives", e-Review of Tourism, , 2013) This is probably because mobile applications provide convenience for booking. Users can easily reserve a hotel room and check the location of the hotel. (Kim, 2012, s. 3) From the business perspective, mobile booking provides the opportunity to increase revenues with sustainable competitive advantage and rapid growth. (Wang, 2010, s. 603)In the online booking report, it is stated that the profitability of the enterprises with mobile application is higher. (Kim, 2012)Use of mobile applications reduces the use of technical personnel or tools and thus reduces the costs of the organization. Also mobile hotel booking hotel owners and operators marketing as part of its strategy, helps to raise awareness among consumers. (Anuar et al, 2014, s. 556)

Another popular mobile application usage area is health. Mobile health; is a promising subset of health information that is accessed using various wireless technologies to provide health-related information and services with various mobile devices. (Mecheal, 2013, s. 105) The goal of mobile health applications is to provide individuals with important health information related to global widespread diseases. In addition to this, applications can also measure the pulse rate of the pulse as well as how many steps are taken in the day thanks to the existing sensors. (The Future of Mobile Health ADHD Applications Projecting WHAAM application on Future Mobile Health, s. 3)People may not get caught unprepared when they get this information. In this way, diseases are prevented by early diagnosis (Moghaddasi et al, s. 2). There has been an increase in the number of mobile health applications since most of the patients recently used their smartphones.

Mobile applications are also frequently used for food ordering purposes. Ordering the restaurant; is a system where mobile applications are designed to be used in any restaurant. (Ihsan, 2016, s. 2)It is understood that the concept of space and time is not important because of these applications which are developed to deliver cheaper and more delicious food to a larger number of consumers. Problems such as the limited number of restaurants land and the necessity of serving a certain number of customers at a certain time are being tried to be solved by mobile food ordering applications (Fan, 2013, s. 59) Consumer mobile applications are also used for education and training purposes. Mobile applications developed for learning strategies are combined with a close connection with the new generation of these devices, providing an independent learning experience from time and space. (Leng, 2013, s. 3)Through these applications, students can reach the questions, they can study a lesson again and even participate in live classes. Mobile learning apps provide the link between technology and education. (Sarrab, 2012, s. 35)

Consumers often use mobile apps for clothing shopping, and they use their mobile devices whenever shopping online anytime and anywhere. These applications allow the consumer to examine the desired product and easily purchase it. (Hyben, 2016) This application, which removed the problem of time and space, has given a new perspective to marketing.

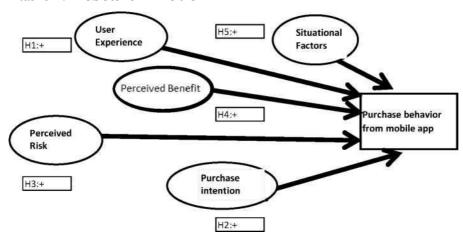
Banks also benefit from this advantage provided by the mobile application. Mobile banking; has offered its customers the ability to meet demands without regard to time and location, thanks to the functionality of mobile devices. (Vasco, 2016)It has become widespread to make mobile payments for goods and services purchases and to make money transfers through mobile applications. Increasing use of technology and the proliferation of options have increased consumer acceptance of mobile financial services. According to a research conducted in 2016; 43% of smartphone users use mobile banking applications. This rate, which increased every year, rose to around 52% in 2017. (Consumer usage of Financial services, 2016, s. 9) This situation has led to many changes such as reaching more potential customers, deeper analysis of customer data, opening up of new services, and providing extra revenues to corporations. (Pau, 2015, s. 2)

## 2. Theoretical Framework And Research Hypotheses

With the increase in the number of consumers using mobile applications, researches on mobile commerce have been conducted to undestand the basic dynamics of it. Research in the international literatüre presents important findings about the factors affecting the behavior of mobile consumers. For example, Anders Haslinger (Hasslinger, 2007, s. 63)et al. have identified the safety factor as an important factor in the study of online consumer behaviors. 30% of the respondents stated that they care to feel safe when shopping online. Adil Bashir (Bashir, 2013, s. 51), in his work in 2013, explored the importance of ease of use and time saving for online shopping for consumers. 25% of respondents stated that ease of use and time savings were important. Matthew S. Eastin (Eastin, 2002, s. 55) has also found that perceived benefit is an important factor in making online shopping decisions, and that perceived utility includes Financial benefits, ease of use, and understandability of the interface. A similar finding has been reported by Shahzad Ahmad Khan (Khan et al, 2015) and his colleagues. As a result of the online shopping decision, 43% of the consumers had been affected from the perceived benefit factor. According to the findings of Haslinda (Musa et al, 2016)his friends, user experience is

an effective factor in online shopping. The hypotheses set out in the literature in conjunction with the findings and shown in figure 1 are:

Table 1: Research Model



## 2.1 Adoption and Use of Technology

There are various approaches in the literature. When examined in general, the following variables are the result of adopting innovations in the technology and affect consumers' decision to use them. (Hassenzahl, 2017)

### 2.1.1. User Experience

Hassenzahl indicates that good industrial design is not about multi-touch or fantasy interfaces, it is about overcoming the material and creating an experience through a device (Melis et al, 2015, s. 215)If consumers are shopping from a physical store of a brand previously, it would be easier for them to shop at the same store's online store. Rose et al. have found that consumers prefer not to be tied up with physical stores for purchases as they gain experience with online channels. Taking into consideration the findings in the literature, our hypothesis on the effect of consumer experience is as follows:

H1: When shopping from mobile app, user experience influences purchasing behavior from mobile app..

## 2.1.2. Purchase Intention

The Theory of Planned Behaviour (TPB) is an extension of the Theory of Reasoned Action (TRA) (Ajzen, 1980)suggests that consumers behaviors are predictend by their intention to perform the behavior. Consistently, buying intetion is one of the basic inputs that marketing managers use to predict future sales, which will affect consumers' buying behaviors in order to determine their actions.¹ So in many reserach influencial factors are investeigated as related with intention instead of actual behavior, probaly also because it is more convenient. However in this study we focus on actual mobile buying behavior and propose intentions an important antecedent There are some ideas about consumer's attitudes affect online shopping intention. (Vicki Morwitz, 2012)

H2: The intention to buy while shopping from a mobile application affects the purchasing behavior of the consumer.

#### 2.1.3. Perceived Risk

The risk that is seen as the main determinant and the primary factor in the consumer behavior which was first indroduced by Bareun at the beginning of the 1960s. Risk has been also found to be a significant concern in online shopping. A Variety of problems that consumers encounter when purchasing a product are defined as risk. (Karson and Korgaonkar, 2007, s. 56) Baruen has caught the attention of several researchers when trying to define the concept of risk in

marketing. Since then, researches on the subject has been going on. (Cabanero and Cerman, 2008, s. 184)Many factors influence risk perception; such as demographic characteristics, product characteristics, cultural and social characteristics. From time to time, other studies analyze the relationship between risk and consumer behavior. (Utpal Dholakia, 2001, s. 135)Some features, such as high prices and durability, can also increase the risk perception, indicating that the consumer will also influence the attitude of shopping. (Gilles Laurent and Kapferer, 1985)Jarvenpaa and Todd in the study, the existing attitudes of consumers during shopping on the internet, as well as performance, social, physical privacy, and the effect of risk perceptions was also investigated. (Lowengart and Tractinsky, 2001, s. 143)The study has found significant evidence that risk perception reduces online purchase. Consistentluy, we form the hypothesis on the effect of risk perception as follows.;

H<sub>3</sub>: The perceived risk when shopping from a mobile app affects the purchasing behavior of the consumer.

### 2.1.4. Perceived Benefit

Perceived benefit is defined as belief that using a particular system would enhance performance (Davis and Fred, 1983, s. 319) The perceived benefit may be physiological, psychological, or sociological (Gutman, 1982, s. 63)The benefit consumers perceive in the online shopping context is the sum of online shopping advantages or satisfaction that will meet their needs or desires. (Shwugu-ın Wu, 2003, s. 40)Perceived benefit according to Forsythe; What consumers gaing at online shopping is a concept that can be measured and win customer satisfaction via product. (Sandra Forsyth et al, 2006)And product selection is related to features such as easy accessibility, convenience of shopping, speed. The hypothesis on the effect of perceived benefit was established as follows.

H4: The perceived benefit when shopping from a mobile app affects the purchasing behavior of the consumer.

# 2.1.5. Situational Factor

The current conditions of the consumer are influenced by the fact that they prefer to shop online. The factors such as the distance from the consumer to the shopping center, the shortage of time or the low cost of online purchases can be expressed as situational factors. (Tanadi, 2015, s. 229)People tend to shop online because of the many situations they are in. Situational variables such as how the store environment is, especially the social environment, time constraints, the amount of products purchased affect the choice of online shopping. (Anic et al, 2006, s. 732) Situational factors leave a systematic and demonstrable impact on people's purchasing preferences. (Mihic and Kursan, 2010)The hypothesis on the effect of situational factor is as follows:

H 5: Situational factors affect consumer's purchasing behavior when shopping from mobile application.

## 3. Methodology

The data required for the test of the research hypotheses was collected by the questionnaire method. Data was collected from 300 undegraduate and graduate students studying in Istanbul. Participants were sellected through convenience sampling method. 176 (58.7%) of the university students participating in the survey were female, 124 (41.3) were male. 41.3% of the students are in the age range of 18-24, 41.6% are in the range of 25-30, 13.6%, 31-35, and 3.3% are in the age range of 36-39 years. 177 (59%) graduate students, 75 (25%) faculty students, 40 (13,3%) vocational high school students and 8 (2,7%) doctoral students. Of the students have income who participated in the survey, 92 (30,7) TL 3.000,00TL and below, 99 (33%) TL 3.001,00TL-TL 5.000,00, 60 (20%) TL 5.001,00 and TL 7.000,00, (9.7%) has 7.001,00 TL-10.000,00 TL, 20 (6.7%) has 10.001,00 TL and monthly income level.

#### 3.1. Measurement Instrument

Survey was used to collect data. The scales used in the literature were used for the measurement of the variables. 5-point Likert-type were employed (1 = Strongly Disagree 5 = Strongly Disagree 5)

Strongly Agree). Items for measuring Perceived risk (Ene, 2006, s. 180) perceived benefit (Ene, 2006, s. 180), intent to buy (Yılmaz and Tümtürk,, 2015, s. 374), mobile purchase (Ene, 2006, s. 180) and user experience (Ene, 2006, s. 180) were translated in Turkish by the second author of this reseach. In the first stage, a pretest was conducted on to students which showed that there were no unclear or incomplete questions.

## 3.2. Validity and Reliability Analysis of the Scale

To test the validity of the scales, an exploratory factor analysis was conducted using principal component analysis, Whether the data set was appropriate for factor analysis was measured by 'Kaiser-Meyer-Olkin (KMO) sample adequacy test revelaed that data was suitable for Factor Analysis (KMO value=0.92) Besides, the results of the Barlett Globality Test [KIkare (1225) = 9222,161, p <0.01] signal the suitability of factor analysis. As a result of the factor analysis, 5 factors with more than one eigenvalue appeared and those factors explained 55.77% of the total variance. These factors was congruent with the theoretical expectations and labeled as perceived benefit, perceived risk, user experience, purchasing from mobile app and intention factors. Factor loadings of the items are presented in Table 1.

### **Table-2 Factor Analysis**

ITEMS WHICH BELONG TO VARIABLE OF PERCEIVED BENEF Factor Loads	TTS (Alpha	0.893)
- Easy access to products and Services	0,456	
- It's the fastest way to access information.	0,721	
-I can compare distinct brand and product features.	0,668	
- It's the easiest way to access information.	0,679	
- I can access the information without making any effort .	0,667	
- I can make the price comparisons as soon as possible.	0,658	
- I can quickly learn new products and services.	0,502	
-I can easily reach the experiences with the social communities.	0,589	
ITEMS WHICH BELONG TO VARIABLE OF PERCEIVED RIS	SK (Alpha ctor Loads	0.892)
- Relying on product delivery conditions has positive effects on buying.	0,645	
-It will reduce the risk of information that I will get from other mobile applic	ation users.	0,436
-The safety of payment systems in mobile application has positive effect on s	hopping.	0,600
-Not trusting the privacy of private information in mobile applications		
has a negative effect on buying decision .	0,496	
ITEMS WHICH BELONG TO VARIABLE OF USER EXPERIENCE (A Loads	Alpha 0.891)	) Factor
-The positive virtual atmosphere experience I experience in mobile appshopping experience.	plication exte 0,312	ends my
-The design of the mobile application has a positive effect on my shopping.	0,530	
-The fast communication provided by the operator to the user		
positive effects using mobile app.	0,623	
-The communication provided by the operator to the user		
positive effects using mobile app.	0,523	
-The aesthetic appearance of the mobile application is effective.	0,486	
-Mobile applications to be easily accessible, effective positive my shopping.	0,630	
-The connection to mobile application is fast, it has positive effect on my use	. 0,713	
-The speed of page links in mobile application has a positive effect on my usa	age. 0,707	

0,565
ffect on the site 0,580
ORS (Alpha 0.891)
I do not 1,73
0,367
0,445
0,382
ION (Alpha o.886)
0,600
0,687
I will use mobile 0,682
0,658
0.585
OM MOBILE APP
0,512
0,515
0,605
0,691
0,559
0,613
0,582
0,452
0,442
0,461

To evaluate the relalibility of the scales Cronbach's alpha coefficients were calculated and given in table 2.

# Reliability Analysis Table

FACTORS Cronbach's Alpha		Total Number of Variables		
F1. Mobile Purchasing , 820		11		
F2. Perceived Benefit , 893 F3. Perceived Risk	, 892	7	10	
F.User Experience F5. Situational Factors , 745	,891	7	9	
F6. Intention to Purchase	, 886		5	

# **Hypothesis Testing**

Hypotheses were tested using multiple regression analysis. Results revealed that regression model was significant at p = .01 level. Independent variables included in the model explains

25% of the variance in the behavior of buying via mobile applications. Table 5 presents regression analysis results. Accordingly, user experience had a significant promoting influence on mobile buying behavior (B=0.223 P<0.01) supporting H1. We also found that intention had a positive affect on behavior of purchasing through mobile application (B=0,197 P<0.01) which confirmed the H2. Results showed that perceived benefit had a an encouraging impact on mobile purchasing (B=0.182

P<0.01). However, situational factors and percieved risk were found to have no significant influence on mobile buying behavior. So, H<sub>3</sub> and H<sub>5</sub> could not find any support. In a general evaluation, user experience had the most intensive incluence on the mobile shopping behavior.

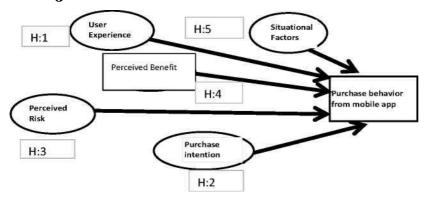
Table 3

					Situational Factor	Intention
Mobile Application	1					
Perceived Benefit	,403**	1				
Perceived Risk	,353**	,630**	1			
User Exprience	,431**	,562**	,687**	1		
Situational Factor	,335**	,465**	,418**	,488**	1	
Intention	,416**	,469**	,465**	,519**	,579**	1

**Table 4: Multiple Regression Analysis** 

Model		o co		Standardized Coefficients		g:_
		В	Std. Error	Beta	T	Sig.
1	(Constant)	0,687	0,29		2,374	0,018
	Perceived Benefit	0,206	0,078	0,181	2,639	0,009
	Perceived Risk	-0,017	0,095	-0,014	-0,183	0,855
	User Exprience	0,281	0,095	0,223	2,967	0,003
	Situational Factor	0,036	0,065	0,036	0,555	0,579
	Intention	0,209	0,071	0,197	2,957	0,003

Table 5: Research model



#### **CONCLUSION**

With the widespread use of Internet, the way companies do business and the shopping habits of consumers have changed drastically. Marketing activities on the mobile application have increased dizzily. Organizations need to closely monitor changing consumer behaviors and innovations and changes in the market in order to be able to adapt to change with innovations in technology. Research about consumer behaviors in the monitoring of innovations are an important guide for companies operating in mobile applications. Identification of the profiles of consumers who make purchases through mobile applications, analysis of their behaviors, determination of reasons for choosing or not to buy, and determination of demand and expectations are important for promoting the behavior of purchasing products or services through mobile applications. In this research, user experience, perceived benefits and intentions were found significantly promote mobile buying of Turkish consumeres. More spesifically, consistent with the Theory of Reasoned Action (TRA) (Ajzen, I, & Fishbein, 1980)intention is a significant indicator of the purchasing behavior through mobile channels. So its strategic to maintain, and encourage the intention of potantial user to maintain sustainable competitive advantage. The point that needs to be taken into consideration here is to meet the needs of the consumer at the maximum point and support the re-purchase intention.

However results showed that user experience is a stronger promoter for mobile buying. It appeares that factors such as the positive virtual atmosphere, design and aesthetic appearance of the mobile application, the speed of page links in mobile application are the most cricual factors for users. Finally perceived benefit is another encouraging factor that enable mobile buying. It is clear that consumer chooses mobile shopping for many reasons. Results showed that consumers are more likely to buy through mobile applications becouse it is easy and fast to access to products, services, information, social communities without making any effort, ant its possible to compare distinct brand and product features. Presenting solutions that make life more practical nowadays that we compete with time can contribute to organizations. Factors such as the place where the consumers live, the product delivery speed, the guarantee conditions, as well as the comments on the mobile shopping made before, are factors that affect the consumer's choice.

Surprisingly, effect of the perceived risk was found to be unsignificant. Probably the effect of the other variables dominate the risk which provide the evidence regarding the critical roles of promoting factors.

Finally it is important to note the limitation of the study which is mainly depends on small and homogenous sample which consists university students in one city, İstanbul. In addition, the study did not cover the sociological and psychological negative aspects of mobile applications while talking about the positive contributions of mobile applications to identify the problems consumers are experiencing while shopping on mobile applications, to define whether consumers make purchases over mobile applications according to socio-economic factors and to detect consumers' perception in shopping through mobile application.

#### **REFERENCES**

- Yılmaz and Tümtürk,. (2015). İnternet Üzerinden Alışveriş Niyetini Etkileyen Faktörlerin Genişletilmiş Teknoloji Kabul Modeli Kullanarak İncelenmesi Ve Bir Model Önerisi. *Yönetim ve Ekonomi*, 374.
- 2-Billion-Consumers-Worldwide-Smartphones. (2016, 08 02). Emarketer:
  - <u>www.emarketer.com/Article/2-Billion-Consumers-Worldwide-Smartphones-by2016/101169</u> adresinden alınmıştır
- Ajzen, I, & Fishbein. (1980). *Understanding attitudes and predicting social behavior*. Englewood Cliffs, NJ: Prentice-Hall.
- Ajzen, I. &. (1980). Understanding attitudes and predicting social behavior. Prentice -Hall.
- Anic et al. (2006). Ivan-The Impact of Situational Factors on Purchasing Outcomes In The Croatian Hypermarket. *Ekonomiski Pregled*, 732.
- Anuar et al. (2014). Smartphone's Application Adoption Benefits Using Mobile Hotel Reservation System (MHRS) among 3 to 5-star City hotels in Malaysia. *Procedia Social and Behavioral Sciences*.
- Ayeh et al. (2013). Do We Believe in TripAdvisor?" Examining Credibility Perceptions and Online Travelers' Attitude toward Using User-Generated Content. *Jornal Of Travel Research*.
- Bashir. (2013). Consumer Behavior towards online shopping of electronics in Pakistan. *Consumer Behavior towards online shopping of electronics in Pakistan.*
- Cabanero and Cerman. (2008). Perceived risk on goods and service purchases. *Perez-Cabanero and Carmen, Esic Market*, 184.
- Consumer usage of financialservices. (2016). Consumer usage of financial services: Consumer usage <a href="https://www.statista.com/statistics/638850/consumer-usage-of-financial-services-usa/">https://www.statista.com/statistics/638850/consumer-usage-of-financial-services-usa/</a> adresinden alınmıştır
- Consumers and Mobile Financial Services. (2015). Consumers and Mobile Financial Services 2015, Board of Governos Of The Federal Reverse System,.
- Davis and Fred. (1983). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, 319-400.
- Development of a scale to measure the perceived benefits and risk of online shopping. (2006). *Journal of Interactive Marketing*,, 60.
- Eastin. (2002). Diffusion of e-commerce: an analysis of the adoption of four e-commerce activities. *Telematics and Informatics*.
- Einarsen, B. (2012). What consumer really want. The Technology Performance Company,
  - $\frac{http://www.datamanager.it/white-papers/hardware/mobile-apps-what-consumers-really-need-and-want.}$
- Emarketer. (2016, 08 02). 2-Billion-Consumers-Worldwide-Smartphones: <a href="https://www.emarketer.com/Article/2-Billion-Consumers-Worldwide-Smartphones-by2016/1011694">www.emarketer.com/Article/2-Billion-Consumers-Worldwide-Smartphones-by2016/1011694</a> adresinden alınmıştır
- Ene. (2006). İnternet Üzerinden Alışverişte Tüketici Davranışlarını Etkileyen Faktörler. İnternet Üzerinden Alışverişte Tüketici Davranışlarını Etkileyen Faktörler.
- Fan. (2013). Mobile Food Ordering Application"". ," Vaasan Ammattikarkoekoulu University of applied Sciences Information Technology.
- Filho, & Correa. (2013). Online Travel Reviews on Mobile Applications when making travel

- plans: Uses and Gratifications perspectives", e-Review of Tourism,. Researchgate: Research, https://www.researchgate.net/publication/286926158 (Erişim Tarihi: 18.08.2016) adresinden alınmıştır
- Filho, & Correa. (tarih yok). Online Travel Reviews on Mobile Applications when making travelplans: Uses and Gratifications perspectives. Researcgate. adresinden alınmıştır
- Gilles Laurent and Kapferer. (1985). Measuring consumer involvement profiles. *Journal of Marketing Research*, 44.
- Gutman. (1982). A means-end chain model based on consumer categorisation processes. *Journal of Marketing*, 63.
- Harrison et all. (2013). Usability Of Mobile Applications: Literature Review And Rationale For A New Usability Model. *Journal of Interaction*.
- Hassenzahl. (2017). *User Experience and Experience*. www.researchgate.net: <a href="https://www.researchgate.net/publication/259823352">https://www.researchgate.net/publication/259823352</a> User <a href="https://www.researchgate.net/publication/259823352">Experience and Experience</a> december of the property of th
- Hasslinger. (2007). Consumer Behaviour in Online shopping. *Kristians and University of Deparmant of Bussines*.
- Hyben. (2016). Branislav Hyben, "Consumer acceptance on mobile shopping oftextile goods in Austria: modelling an empirical study. Branislav Hyben, "Consumer acceptance on mobile shopping oftextile goods in Austria: modelling an empirical swww.researchgate.net: Branislav Hyben, "Consumer acceptance on mobile shopping oftextile ghttps://www.researchgate.net/publication/286964496 (Erişim Tarihi:02.09.2016) adresinden alınmıştır
- Ihsan. (2016). Restaurant Ordering System Using Mobile Apps",. ""Faculty of Computer System & Software Engineering Universiti Malaysia Pahang.
- Islam et all. (2010). Mobile Application and Itts Globa Impact. *International Journal of Engineering& Technology*.
- Karson and Korgaonkar. (2007). The Influence of Perceived Product Risk on Consumers. *Journal of Bussines and Psychology*, 56.
- Khan et al. (2015). Shahzad Ahmad Khan et all/'An Empirical Study of Perceived Factors *Affecting Customer Satisfaction to Re-Purchase Intention in Online Stores in China*. Shahzad Ahmad Khan et all,"An Empirical Study of Perceived Factors Affecting Customer Satisfaction to Re-Purchase Intention in OnlinJournal of Service Science and Management, 300.
- Kim. (2012). Smartphone application effecting potential increase of hotel business revenue and guest satisfaction. *Smartphone application effecting potential increase of hotel business revenue and guest satisfaction*. Las Vegas.
- Leng. (2013). ,"The Add-on Impact of Mobile Applications in Learning Strategies: A Review Study. *Educational Technology & Societ*,, 3.
- Lowengart and Tractinsky. (2001). Differential Effects of Product Categoty on Shoppers' Selection of Web Based Stories: A Probabilistics Modelling Approach. *Journal of Electronic Commerce Research*, 143.
- Mecheal. (2013). The Case form Health in Developing Countries". ,Innovations Technology Governance Globalization, 105.
- Melis et al. (2015). Kristina Melis at all,"The Impact of the Multi-channel Retail Mix on Online Store Choice: Does Online Experience Matter? , *Journal of Retailing*,.
- Mihic and Kursan. (2010). Assessing the situational factors and impulsive buying behaviour: Market segmentation approach. Mirela Mihic, and Ivana Kursan/'Assessing the situational factors and impulsive buying behaviour: Market segmentManagement:

- Journal of Contemporary Management Issue, 49.
- Moghaddasi et al. (tarih yok). Mobile Health: An Efficient Service to Promote Self-care among People Introducing e-selfcare. *Journal of Health& Medical Informatics*.
- Musa et al. (2016). Factors Affecting Customer Satisfaction towards Online Shopping. Haslinda Musa et all," Factors Affecting Customer Satisfaction towardFakulti Pengurusan Teknologi dan Teknousahawanan, 10.
- Nart, & Okutan. (2015). Yeniliklere Uyum ve Mobil Ticaret: Tüketicilerin Mobil a. *Bartın Üniversitesi İİBF Dergisi*, 163-180.
- Pau. (2015). Gianni Fenu and Pier Luigi Pau/' An Analysis of Features and Tendencies in Mobile Banking Apps. "Procedia Computer Science", 2.
- Sandra Forsyth et al. (2006). Development of a scale to measure the perceived benefits and risk of online shopping. *Journal of Interactive Marketing*, 60.
- Sarrab. (2012). Mohamed Sarrab,""M-learning and Educational Environtments",International Journal of Distributed and Parallel Systems (IJDPS),2012. 2012, 35.
- Shwugu-in Wu . (2003). The relationship between consumer characteristics and attitude toward onlineshopping. *Marketing Intelligence & Planning*, 40.
- Siuhia, & Mwakalonge. (2016). Oportunities and Challenges Of Smart Mobile Application In Transportation. *Journal of Traffic and Transportation Engineering*.
- Tanadi. (2015). The Impact of Perceived Risks and Perceived Benefits to Improve an Online Intention among Generation-Y in Malaysia. *Asian SocialScience*, 229.
- Tatlı, & Korkut. (2015). Sanal Alışverişte Tüketici Davranışlarını Etkileyen Faktörler: Bingöl Üniversitesi Öğrencileri Üzerinde Bir Uygulama. *Erzincan Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 63-78.
- The Case for mHealth in Developing Countries", Innovations Technology Governance Globalization. (tarih yok). *Innovations Technology Governance Globalization*.
- The Future of Mobile Health ADHD Applications Projecting WHAAM application on Future Mobile Health. (2016). <a href="www.researchgate.net/publication/301197670">www.researchgate.net</a>: <a href="https://www.researchgate.net/publication/301197670">https://www.researchgate.net/publication/301197670</a> (Erişim Tarihi: 22.08.2016 adresinden alınmıştır
- Uğur, & Turan. (2015). Üniversite Öğrencilerinin Mobil Uygulamarı Kabulü ve Kullanımı:Sakarya Üniversitesi Örneği. İnternet Uygulamaları ve Yönetimi, 63-79.
- Utpal Dholakia. (2001). A motivational process model of product involvement and consumer risk perception. 135.
- Vasco. (2016). *MobileBankingApplications*, <a href="https://www.vasco.com/">https://www.vasco.com/</a>. Vasco: <a href="https://www.vasco.com/images/Mobile%20Banking%20Application">https://www.vasco.com/images/Mobile%20Banking%20Application</a> s%20White%20Paper\_redux\_MondayApril4\_tcm42-46736.pdf (Erişim Tarihi:02.09.2016) adresinden alınmıştır
- Vicki Morwitz. (2012). *Consumer s Purchase Intentions And Their Behavior*. New York: Now Publishers Inc.
- Wang. (2010). Shwu-Huey WangPredicting mobile hotel reservation adoption: Insight from a perceived value standpoint. *International Jornal Of Hospitality Management* .
- Watson. (2013). Consumer attitudes towards mobile marketing in the smart phone era. *International Jornual Information Management*.