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A Study on the Moderator Role of Vendor Trustworthiness on the Effect of perceived Usefulness and Ease of Use in Mobile Shopping on Purchasing Intention

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Abstract

This study examines the effects of users' perceived usefulness and ease of use of mobile sites in their mobile purchasing processes on customer satisfaction and purchase intentions, according to users' perceived trustworthiness towards the vendor with the Technology Acceptance Model perspective. As a result of the analysis made with the data obtained through the survey from 460 active mobile shopping participants over 18, it was concluded that the perceived usefulness and perceived ease of use affect the participants' satisfaction with the mobile site. This satisfaction has a positive effect on the purchase intentions of the customers. In addition, it was concluded that the perceived trustworthiness of the vendor has a moderating effect on the effect of the satisfaction of the participants from the use of the mobile site on their purchase intention. The positive relationship between participants' satisfaction with mobile site usage and purchase intentions is stronger under conditions of higher perceived trustworthiness towards the vendor.

Keywords: Mobile shopping, mobile commerce, technology acceptance model, purchase intention

JEL Code: M31

1. Introduction

With the widespread use of smartphones and high-speed internet connections, businesses have begun to focus on mobile marketing and sales activities carried out via mobile devices (Natarajan et al., 2017). Mobile marketing provides two- or multi-directional communication between a business and its customers using a mobile device, medium, or technology (Shankar & Balasubramanian, 2009). Various studies conducted in developed and developing countries reveal that adults spend a lot of time

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on their mobile devices, and most of this time is spent on mobile applications (Patel et al., 2020). According to Statista reports, by the first quarter of 2022, 73% of worldwide retail website visits and 63% of orders come from mobile devices. The global share of mobile commerce in e-commerce is approximately 73%. However, according to the report of Dynamic Yield, only 12% of consumers find shopping on the mobile web conveniently. According to the same report, 61% of consumers state that they have completed their purchase on a desktop computer. These statistics indicate areas that need improvement in the growing mobile commerce market. The literature on mobile commerce provides the basis for investigating outcomes such as purchase intention and behavior, customer satisfaction, customer engagement, and continuation from the perspective of the Theory of Reasoned Action, The Theory of Planned Behavior/Ajzen, 1991; Ajzen & Fisbein, 1980), and the Technology Acceptance Model (Davis et al., 1989) (Vahdat et al., 2021).

This study focuses on online shopping via mobile devices from the technology acceptance model (TAM) perspective. TAM explains many variances in customer behavior based on two key variables (perceived usefulness and perceived ease of use), specifically for technology use (S. C. Kim et al., 2016). In this context, in this study, the effects of the perceived usefulness and perceived ease of use that consumers get for the mobile websites they prefer for online shopping or branded mobile applications on their satisfaction levels are examined. In addition, the effect of customers' satisfaction with their mobile usage on their online purchase intentions was tested in terms of perceived trust levels towards the vendor.

2. Conceptual Framework

2.1.Mobile E-Shopping

Mobile commerce or mobile shopping refers to commerce carried out via mobile devices such as smartphones or tablets. In a broader definition, mobile commerce refers to "the online searching, browsing, comparing and purchasing of goods and services by consumers through wireless handheld, or mobile devices, in particular, smartphones and tablets" (Marriott et al., 2017). Consumers can access mobile stores from different touch points with mobile applications or mobile websites accessed through their browser (Sohn, 2017). Today, many companies focus on mobile commerce marketing strategies in their e-commerce activities (Musa et al., 2016). Mobile devices, which remove these limits by expanding the time-space paradigm of traditional marketing, are among the indispensable elements of modern marketing with the rapidly increasing number of users (Watson et al., 2002). Mobile marketing activities, which started marketing activities with SMS (Short Message Service) for advertising purposes, have turned into a mobile marketing platform known as "brand in hand" (Sultan & Rohn, 2005) with the exponential growth in mobile technologies.

In today's world, mobile devices function almost like an imaginary limbs that people, especially young people, never leave with them, that they constantly check, that they panic when they forget for a few hours (Persaud & Azhar, 2012, p. 418). Many online companies compete in this field by creating mobile applications or mobile-compatible websites. However, despite significant innovations and developments in mobile technologies, m-shopping rates remain relatively low in online shopping (Marriott et al., 2017). This indicates that more research should be done on the related literature. In a series of studies conducted to determine the behavioral tendencies of mobile shopping users, researchers concluded that the intention to use mobile devices for shopping mostly depends on factors such as perceived usefulness, perceived ease of use, and perceived enjoyment (Natarajan et al., 2017).

2.2. Perceived Usefulness and Perceived Ease Of Use

Perceived usefulness (operating as an extrinsic motivator) and perceived ease of use (operating as an intrinsic motivator) are the components that form the basis of the Technology Acceptance Model (Davis et al., 1989; Henderson & Divett, 2003; H. Kim & Song, 2010; Sohn, 2017). TAM is an information systems theory adapted from the Theory of Rational Action proposed by Ajzen and Fisbein (1977) to examine people's behavior towards technology acceptance by Davis (1989) and model how users accept and use technology (Lai & Zhaocheng Wang, 2012; Lim et al., 2016; Ovčjak et al., 2015). In the model, it is revealed that a person's perceived usefulness and perceived ease of use for a particular technology used affect the person's attitude towards using that technology, which in turn affects the behavioral intention to use it (Ha & Stoel, 2009). Although TAM was originally developed to predict the attitudes, intentions, and behaviors of employees towards technology acceptance and use in the business environment, it is widely used in the prediction of consumer behavior in the field of information technology, including e-commerce (H. Kim & Song, 2010; S. C. Kim et al., 2016; Pavlou, 2003).

Perceived usefulness is the subjective judgment that reflects the degree to which a person believes their job performance will increase or improve by using a particular system/technology (Davis et al., 1989). In this context, some researchers also call performance expectation perceptions (Sohn, 2017). In this study, perceived usefulness is used in the context of consumers' perceived usefulness in their mobile online shopping, to what extent mobile technologies add value and effectiveness to their shopping experience (Hu et al., 2009; Lai & Zhaocheng Wang, 2012; Lim et al., 2016; Patel et al., 2020; Sunday Adewale Olaleye et al., 2018). In this context, perceived usefulness represents the utilitarian value that mobile technologies provide to customers and is considered the precursor of online mobile purchase intention (Revels et al., 2010).

The perceived usefulness of online websites depends on the efficiency of technological features such as search, product comparison, content quality, and

personalization, which will help consumers make informed decisions by the service provider (H. Kim & Song, 2010; Lim et al., 2016). If users believe mobile technology use is beneficial and will meet their needs, they will develop a positive attitude towards it (Vahdat et al., 2021). Compared to buying from a traditional store, virtual purchasing has the advantages of reaching the products and services at the desired time, the low cost of searching and comparing, etc., benefits are factors that support perceived usefulness (Moslehpour et al., 2018). Previous research shows that the perceived usefulness of online shopping significantly influences consumer attitudes (Martins et al., 2019; Moslehpour et al., 2018; Peng Hongfeng et al., 2008; Sunday Adewale Olaleye et al., 2018).

Perceived ease of use refers to the degree to which an individual believes that using a system or technology will be effortless (Davis et al., 1989). It indicates the perceived ease of learning/use according to the level of physical and mental effort required to use the relevant system (S. C. Kim et al., 2016). User-friendly features in website interfaces are perceived as a quality features (Flavián et al., 2006; Tandon et al., 2016). When these definitions are considered in the context of online mobile consumer behavior, it can be expressed as the perception of the mobile Web interfaces used by consumers as easy to use by consumers in a way that facilitates transaction processes (Pavlou, 2003). Research shows that the usability of a website can affect shopping behavior (Flavián et al., 2006; J.-H. Wu & Wang, 2005).

According to TAM, there is a causal relationship between perceived usefulness and perceived ease of use. Accordingly, a positive effect of perceived ease of use on perceived usefulness was expected (Davis et al., 1989). Because other things are equal, the easier it is for the individual to use a system, the more beneficial it can be (Rezaei & Amin, 2013). In other words, an individual's opinion of how easy or difficult it is to use a system or technology will affect their perception of the perceived usefulness of the system (Davis et al., 1989; Vijayasarathy, 2004). Numerous empirical studies support this theory (Amin et al., 2014; Chen et al., 2002; J. B. Kim, 2012; M. Kim et al., 2015; T. Lee & Jun, 2007; Pavlou, 2003; Revels et al., 2010). In addition, in the model, it is predicted that perceived usefulness directly affects behavioral intention, while perceived ease of use indirectly affects behavioral intention through usefulness (Davis et al., 1989). According to the model, both perceived ease of use and perceived usefulness directly affect the attitude towards use. Attitude towards use also has a direct effect on the intention to use. Despite the robustness of TAM, results between perceived ease of use and attitude and/or intention have been inconsistent in various empirical studies (Vijayasarathy, 2004). While some studies support a positive and significant relationship between perceived ease of use and attitude towards behavior (e.g., Chen et al., 2002), some studies have concluded that there is no statistically significant relationship between the two variables (Ha & Stolen, 2009).

In this study, perceived ease of use is considered as the degree to which consumers believe that their mobile shopping with their mobile phones is effortless. It is essential for one to believe that online mobile shopping is effortless, as the simplicity

or complexity of using technology is thought to affect one's overall satisfaction (Revels et al., 2010). In the light of this information, the following hypothesis has been proposed:

H_1: There is a positive relationship between perceived usefulnes and perceived ease of use.

2.3.Mobile Users' Satisfaction And Purchase Intention

Customer satisfaction is essential in establishing long-term customer relationships and thus maintaining the business's profitability (McKinney et al., 2002). There is a reasonable consensus in the literature that customer satisfaction is the main determinant of customer retention (T. Lee & Jun, 2007). Satisfaction reflects a person's judgment of the performance of a particular product/service as a result of their experience about their expectations at various stages of purchase (arousal, information search, alternatives evaluation, purchase decision, and post-purchase behavior) (Kotler & Keller, 2016). In short, the difference between the consumer's expectations and wishes for the product/service and what s/he obtains will determine their satisfaction (Flavián et al., 2006). In this context, the extent to which consumers' general perceptions of their online shopping experience meet their expectations will determine one's satisfaction level. When consumers' expectations are met, they are highly satisfied and thus show a positive attitude, intention, or behavior towards online purchases (Li & Zhang, 2002).

In this study, the variable satisfaction was added to TAM by following Agrebi and Jallais (2015) and Natarajan et al. (2017) to take into account the emotional and cognitive response to users' mobile shopping experiences. Accordingly, it is estimated that users' perceived usefulness and ease of use in their purchases from mobile websites have a positive effect on their satisfaction judgments.

The mobile shopping experience is different from consumers' other e-commerce experiences. Mobile sites or mobile applications are simplified due to features such as small screens, limited processors, etc. (Agrebi & Jallais, 2015). Interfaces that are automatically adjusted according to the devices users use, ease of use, and user-customized elements that will save them time and money can affect the general satisfaction level of users with their mobile shopping. The perceived usefulness and ease of use of a mobile website may not always guarantee consumer satisfaction, as many factors affect consumers' satisfaction with their online mobile shopping. However, these variables are considered critical factors for gaining customers' trust and satisfaction (Flavián et al., 2006; Tandon et al., 2016). Based on this information:

H_2: There is a positive relationship between perceived usefulness and mobile user satisfaction.

H_3: There is a positive relationship between perceived ease of use and mobile user satisfaction.

Satisfaction is considered an essential determinant for behavioral variables such as purchase, repurchase intention, WOM recommendations, or loyalty (Amin et al., 2014; Tandon et al., 2016; Tsai & Huang, 2007). It is thought that when mobile commerce sites have a user-friendly and satisfactory mobile interface that saves users time, effort, and money, the probability of doing virtual shopping from mobile phones is higher. A number of studies in the literature reveal a direct relationship between customer satisfaction and behavioral intention (Gounaris et al., 2010; Tsai & Huang, 2007). Thus;

H_4: There is a positive relationship between mobile users' satisfaction and purchase intention.

2.4. Perceived Source Credibility, Vendor Trustworthiness

Source credibility refers to "the perceived ability and motivation of a message source to provide accurate and honest information (Li & Zhang, 2002, p. 240). It is defined as the degree to which a person perceives the information or message from a source as believable, accurate and factual (McKnight & Kacmar, 2006). Credible sources are generally considered to produce persuasive messages (Teng et al., 2014; P. C. S. Wu & Wang, 2011). In the literature, the concept of source credibility is generally examined with three dimensions: trustworthiness, expertness, and attractiveness (Teng et al., 2014; P. C. S. Wu & Wang, 2011; Yoon et al., 1998).

Trustworthiness is a person's degree of confidence and acceptance of the relevant resource (Ohanian, 1990). In this study, source credibility is considered the perceived trustworthiness dimension towards the vendor in mobile purchases and the reliability perceptions of the seller's sincerity, reliability, accuracy, and dependability of their commitments (Featherman et al., 2010). Previous research reveals that source credibility influences customers' attitudes (S. (Ally) Lee, 2018). Consumers find online shopping riskier than traditional shopping due to the lack of physical evidence (physical building, store, sales personnel, etc.) that creates trust (H. Kim & Song, 2010). Therefore, vendor trustworthiness in e-commerce and m-commerce is considered to have a significant impact on consumers' purchase intentions. High perceived trustworthiness positively affects mobile purchase intention as it reduces the risk consumers perceive in their mobile shopping (Featherman et al., 2010). In the light of this information, we predict that perceived trustworthiness has a moderating effect on the relationship between users' satisfaction with mobile commerce site use and purchase intentions.

H_5: The relationship between consumers' satisfaction with the mobile commerce site and their purchase intention will be moderated by perceived vendor trustworthiness, such that the positive relationship between satisfaction and purchase intention will be stronger under conditions of higher vendor trustworthiness (i.e., the moderator role of perceived vendor trustworthiness).

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3. Methodology

In this research, the effect of perceived usefulness and perceived ease of use on user satisfaction in online shopping via mobile devices and the effects of this satisfaction on mobile purchasing decisions are investigated.

İlaveten çalışmada tatmin ve satın alma niyeti arasındaki ilişkide tüketicilerin algıladıkları satıcı güveninin düzenleyici rolü test edilmektedir. In addition, the moderator role of consumers' perceived vendor trustworthiness in the relationship between satisfaction and purchase intention is tested. Regression analysis based on the bootstrap method was performed to test the moderator role of perceived vendor trustworthiness (5.000 sub-samples; Hayes, 2018).

3.1. Sample and Procedures

In the study, the cross-sectional survey method was used to examine the research model shown in Figure 1. The target participants of the study are people aged 18 and over who actively shop on their mobile devices. In the study, convenience sampling was preferred as the most appropriate sampling technique, considering the population's size (Jiménez-Castillo & Sánchez-Fernández, 2019).

An online self-administered questionnaire was used to collect data. Questionnaires were distributed to users through social networks, and screening questions were included to ensure that the users were suitable for the target audience. In order to create a snowball effect, users were asked to share the survey link on their own social networks. Thus, 474 survey data were obtained. An instructional manipulation check (IMC) was used to assess the participants' attention in the study (Oppenheimer et al., 2009). Accordingly, the statement "If you are reading this question, please leave it blank" was added to the questionnaire, and a five-point Likert-type scale was presented as an answer. The data of 14 participants who answered this question were not included in the analysis, and the analyzes were carried out on the data of 460 people. Table 1 shows the demographic information of the participants:

Table 1. Descriptive statistics of the sample

Gender	**n**	**(%)**
Female	228	49,6
Male	232	50,4
Age		
18-24	79	17,2
25-34	227	49,3
35-44	101	22,0
45 and above	53	11,5

Education Level		
Primary School	4	,9
High School	23	5,0
Associate degree	234	50,9
Bachelor's degree	175	38,0
Master's-PhD	24	5,2

3.2. Measures

In the study, scales approved in previous studies in the literature were used to measure the constructs in the research model. Perceived usefulness and ease of use were measured through the scales developed by Vahdat et. (2020). The measures of satisfaction were adapted from the study by Lee and Jun (2007), and the scales developed by Ohanian (1990) were used to measure vendor trustworthiness. All items used in the study were measured using a five-point Likert scale (1= strongly disagree to 5= strongly agree).

3.3. Results

In the study, first of all, the reliability of the research model was tested, and then hypothesis tests were carried out.

3.1.1. Reliability Analysis

The results of the reliability analysis of the scales used in the study are given in Table 2. Accordingly, it is seen that the internal consistency values of all scales are above the accepted limit of 0.70.

Table 2. Reliability Analysis

Variables	Number of questions	Cronbach's Alpha
Perceived Usefulness	3	0,923
Perceived Ease of Use	3	0,911
Perceived Vendor Trustworthiness	5	0,901
Satisfaction	3	0,765
Purchase Intention	3	0,893

3.1.2. Hypotheses Testing

In the study, the H_1, H_2, H_3, and H_4 hypotheses were analyzed using simple and multiple regression analyses, and the H_5 hypothesis was analyzed by the SPSS Process

Macro developed by Hayes (2018) based on the bootstrap method (Model 1: Simple Moderation Model).

Table 3 shows the regression analysis results showing the effect of perceived ease of use on perceived usefulness. Accordingly, it is observed that there is a statistically significant and positive relationship between the two variables. (F=301.206 p<0.001). H_1 hypothesis is supported.

Table 3. Regression Model Coefficients for the Effect of Perceived Ease of Use on Perceived Usefulness

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	Constant	1,617	,192		8,430	,000
	PEU	,579	,440	,522	13,108	,000
R=,522		***R^2=,273***			***F=171,827***	

PEU: Perceived Easy of Use

Table 4 shows the regression analysis results showing the effect of perceived usefulness and perceived ease of use on the satisfaction variable. Accordingly, there is a statistically significant and positive relationship between the perceived usefulness, perceived ease of use, and the satisfaction variable *(F=165.363 p<0.001)*. H_2 and H_3 hypotheses are supported.

Table 4. Regression Model Coefficients on the Effect of Perceived Ease of Use and Perceived Benefit on User Satisfaction

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	Constant	,978	,163		6,005	,000
	PU	,383	,037	,434	10,385	,000
	PEU	,299	,041	,305	7,307	,000
R=,648		***R^2=,420***			***F=165,363***	

PU: Perceived Usefulness
PEU: Perceived Easy of Use

Table 5 shows the regression analysis results for the effect of users' satisfaction with their mobile site usage on their purchase intentions. It is seen that the regression

model established according to the table is statistically significant. H_4 hypothesis is supported.

Table 5. Regression Model Coefficients on the Effect of Satisfaction with Mobile Site Usage on Purchasing Intention

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	Constant	-,665	,191		-3,486	,000
	SAT	,964	,490	,678	19,733	,000
R=,678		***R^2=,460***			***F=389,384***	

SAT: Satisfaction

A regression analysis based on the bootstrap method was conducted to test the moderator role of trust in the seller in the effect of users' satisfaction with mobile site usage on purchase intention. According to the results in Table 6, the interactional effect (moderation effect) of the variables of satisfaction and trust in the seller is significant (b=.149, p<.001). This supports hypothesis H_5. Figure 1 graphically illustrates these results. The effects of satisfaction with mobile site usage on purchase intention for various levels of perceived vendor trustworthiness (low, medium, and high), which are related moderator variables, are included. Accordingly, it can be said that the said effects are statistically significant at all three levels, but there is a stronger relationship between satisfaction and purchase intention under conditions of higher perceived seller reliability.

Table 6. Simple moderation model and unstandardized model coefficients

							95% CI	
		Coeff.	*SE*	*t*		*p*	LL	UL
Constant	i_Y	1,094	,402	2,720		,007	,304	1,884
Satisfaction (X)	b_1	,389	,114	3,413	<	,001	,165	,612
Vendor Trust. (W)	b_2	-,457	,121	-3,783	<	,001	-,694	-,220
(XW)	b_3	,149	,032	4,693	<	,001	,087	,212

R^2= 0, 509, MSE= 0,703

$F(3; 736)$= 254,083, p= < .001

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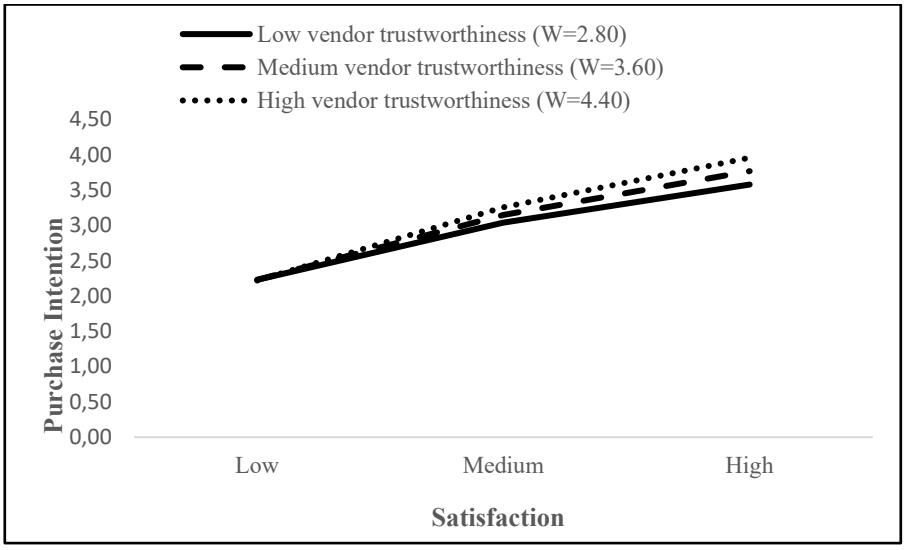
Figure 1. A visual depiction of the moderation of the effect of satisfaction on purchase intention by perceived vendor trustworthiness.



4. Discussion and Conclusion

In this study, the effects of perceived usefulness and perceived ease of use in mobile shopping on customers' satisfaction and the effects of customers' satisfaction with mobile site usage on purchase intention were examined. In addition, the moderator effect of perceived trustworthiness towards the seller on the effect of customers' satisfaction with mobile site usage on their purchase intentions was analyzed.

As a result of the analyzes made in the study, the perceived ease of use positively affects the perceived usefulness; It was concluded that perceived usefulness and perceived ease of use together affected the satisfaction of the participants statistically and positively. These results are consistent with previous studies in the literature (Agrebi & Jallais, 2015; Amin et al., 2014; Natarajan et al., 2017; Thong et al., 2006).

In this context, it can be said that in order to encourage consumers to engage in mobile commerce in their purchases, it is necessary to increase satisfaction with mobile site usage and to give importance to the perceived usefulness and perceived ease of use that contribute to this satisfaction. It will be important for mobile website or app developers to design user-friendly interfaces and for retailers to emphasize the benefits of mobile commerce, such as instant purchasing, ease of customization, and anytime and anywhere access to products and services (Agrebi & Jallais, 2015).

In addition, in this study, the effect of participants' satisfaction with mobile site usage on purchase intention and the moderation role of perceived trustworthiness in the seller in this relationship was tested. According to the results of the analysis, it was concluded that there is a positive effect between the satisfaction of the participants and their purchase intention, and this effect depends on the level of trust of the participants in the vendor. In online shopping, the perceived trustworthiness towards the vendors gains importance since consumers lack some physical evidence (store, sales personnel, etc.) and the products are received after payment, and payment transactions are carried out virtually (H. Kim & Song, 2010). Of course, mobile shopping has important advantages for consumers, such as being able to shop independently of time and place, benefiting from personalized assistant services of mobile sites, and offering a shopping experience according to their interests, preferences, and priorities (Yang, 2010). However, the users' negative experiences towards the mobile shopping site or the trust issues towards the seller may lead them to alternative searches and more detailed research in the purchasing process.

5. Limitations and Directions For Future Research

This study has several limitations that create the potential for future research. First, in this study, no distinction was made between mobile commerce sites, mobile applications, or mobile websites accessed by a browser. Comparative analysis of different mobile devices in future research will contribute to the literature. In addition, this study is limited to TAM variables. For example, in future research, participants' perceived risk levels for mobile commerce can be included in the model. Moreover, relationships between related variables can be tested on the basis of different product involvement levels. Analyzes can be diversified in terms of the moderator effect of different variables such as age, gender, income, product types, and device types

REFERENCES

Agrebi, S., & Jallais, J. (2015). Explain the intention to use smartphones for mobile shopping. *Journal of Retailing and Consumer Services*, *22*, 16–23. https://doi.org/10.1016/j.jretconser.2014.09.003

Amin, M., Rezaei, S., & Abolghasemi, M. (2014). User satisfaction with mobile websites: The impact of perceived usefulness (PU), perceived ease of use (PEOU) and trust. *Nankai Business Review International*, *5*(3), 258–274. https://doi.org/10.1108/NBRI-01-2014-0005

Chen, L., Gillenson, M. L., & Sherrell, D. L. (2002). Enticing online consumers: An extended technology acceptance perspective. *Information & Management*, *39*(8), 705–719. https://doi.org/10.1016/S0378-7206(01)00127-6

Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User Acceptance of Computer Technology: A Comparison of Two Theoretical Models. *Management Science*, *35*(8), 982–1003. https://doi.org/10.1287/mnsc.35.8.982

Featherman, M. S., Miyazaki, A. D., & Sprott, D. E. (2010). Reducing online privacy risk to facilitate e-service adoption: The influence of perceived ease of use and corporate credibility. *Journal of Services Marketing*, *24*(3), 219–229. https://doi.org/10.1108/08876041011040622

Flavián, C., Guinalíu, M., & Gurrea, R. (2006). The role played by perceived usability, satisfaction and consumer trust on website loyalty. *Information & Management*, *43*(1), 1–14. https://doi.org/10.1016/j.im.2005.01.002

Gounaris, S., Dimitriadis, S., & Stathakopoulos, V. (2010). An examination of the effects of service quality and satisfaction on customers' behavioral intentions in e-shopping. *Journal of Services Marketing*, *24*(2), 142–156. https://doi.org/10.1108/08876041011031118

Henderson, R., & Divett, M. J. (2003). Perceived usefulness, ease of use and electronic supermarket use. *International Journal of Human-Computer Studies*, *59*(3), 383–395. https://doi.org/10.1016/S1071-5819(03)00079-X

Hu, Y., Sun, X., Zhang, J., Zhang, X., Luo, F., & Huang, L. (2009). A University Student Behavioral Intention Model of Online Shopping. *2009 International Conference on Information Management, Innovation Management and Industrial Engineering*, 625–628. https://doi.org/10.1109/ICIII.2009.156

Jiménez-Castillo, D., & Sánchez-Fernández, R. (2019). The role of digital influencers in brand recommendation: Examining their impact on engagement, expected value and purchase intention. *International Journal of Information Management*, *49*, 366–376. https://doi.org/10.1016/j.ijinfomgt.2019.07.009

Kim, H., & Song, J. (2010). The quality of word-of-mouth in the online shopping mall. *Journal of Research in Interactive Marketing*, *4*(4), 376–390. https://doi.org/10.1108/17505931011092844

Kim, J. B. (2012). An empirical study on consumer first purchase intention in online shopping: Integrating initial trust and TAM. *Electronic Commerce Research*, *12*(2), 125–150. https://doi.org/10.1007/s10660-012-9089-5

Kim, M., Chang, Y., Park, M.-C., & Lee, J. (2015). The effects of service interactivity on the satisfaction and the loyalty of smartphone users. *Telematics and Informatics*, *32*(4), 949–960. https://doi.org/10.1016/j.tele.2015.05.003

Kim, S. C., Yoon, D., & Han, E. K. (2016). Antecedents of mobile app usage among smartphone users. *Journal of Marketing Communications*, *22*(6), 653–670. https://doi.org/10.1080/13527266.2014.951065

Kotler, P., & Keller, K. L. (2016). *Marketing management* (15 [edition]). Pearson.

Lai, E. & Zhaocheng Wang. (2012). An empirical research on factors affecting customer purchasing behavior tendency during online shopping. *2012 IEEE International Conference on Computer Science and Automation Engineering*, 583–586. https://doi.org/10.1109/ICSESS.2012.6269534

Lee, S. (Ally). (2018). Enhancing customers' continued mobile app use in the service industry. *Journal of Services Marketing*, *32*(6), 680–691. https://doi.org/10.1108/JSM-01-2017-0015

Lee, T., & Jun, J. (2007). Contextual perceived value?: Investigating the role of contextual marketing for customer relationship management in a mobile

commerce context. *Business Process Management Journal*, *13*(6), 798–814. https://doi.org/10.1108/14637150710834569

Li, N., & Zhang, P. (2002). *Consumer Online Shopping Attitudes and Behavior: An Assessment of Research*. 42.

Lim, Y. J., Osman, A., Salahuddin, S. N., Romle, A. R., & Abdullah, S. (2016). Factors Influencing Online Shopping Behavior: The Mediating Role of Purchase Intention. *Procedia Economics and Finance*, *35*, 401–410. https://doi.org/10.1016/S2212-5671(16)00050-2

Marriott, H. R., Williams, M. D., & Dwivedi, Y. K. (2017). What do we know about consumer m-shopping behaviour? *International Journal of Retail & Distribution Management*, *45*(6), 568–586. https://doi.org/10.1108/IJRDM-09-2016-0164

Martins, J., Costa, C., Oliveira, T., Gonçalves, R., & Branco, F. (2019). How smartphone advertising influences consumers' purchase intention. *Journal of Business Research*, *94*, 378–387. https://doi.org/10.1016/j.jbusres.2017.12.047

McKinney, V., Yoon, K., & Zahedi, F. "Mariam." (2002). The Measurement of Web-Customer Satisfaction: An Expectation and Disconfirmation Approach. *Information Systems Research*, *13*(3), 296–315. https://doi.org/10.1287/isre.13.3.296.76

McKnight, H., & Kacmar, C. (2006). Factors of Information Credibility for an Internet Advice Site. *Proceedings of the 39th Annual Hawaii International Conference on System Sciences (HICSS'06)*, 113b–113b. https://doi.org/10.1109/HICSS.2006.181

Moslehpour, M., Pham, V., Wong, W.-K., & Bilgiçli, İ. (2018). e-Purchase Intention of Taiwanese Consumers: Sustainable Mediation of Perceived Usefulness and Perceived Ease of Use. *Sustainability*, *10*(1), 234. https://doi.org/10.3390/su10010234

Musa, R., Saidon, J., Harun, M. H. M., Adam, A. A., Dzahar, D. F., Haussain, S. S., & Lokman, W. M. W. (2016). The Predictors and Consequences of Consumers' Attitude Towards Mobile Shopping Application. *Procedia Economics and Finance*, *37*, 447–452. https://doi.org/10.1016/S2212-5671(16)30150-2

Natarajan, T., Balasubramanian, S. A., & Kasilingam, D. L. (2017). Understanding the intention to use mobile shopping applications and its influence on price sensitivity. *Journal of Retailing and Consumer Services*, *37*, 8–22. https://doi.org/10.1016/j.jretconser.2017.02.010

Ohanian, R. (1990). Construction and Validation of a Scale to Measure Celebrity Endorsers' Perceived Expertise, Trustworthiness, and Attractiveness. *Journal of Advertising*, *19*(3), 39–52. https://doi.org/10.1080/00913367.1990.10673191

Oppenheimer, D. M., Meyvis, T., & Davidenko, N. (2009). Instructional manipulation checks: Detecting satisficing to increase statistical power. *Journal of Experimental Social Psychology*, *45*(4), 867–872. https://doi.org/10.1016/j.jesp.2009.03.009

Ovčjak, B., Heričko, M., & Polančič, G. (2015). Factors impacting the acceptance of mobile data services – A systematic literature review. *Computers in Human Behavior*, *53*, 24–47. https://doi.org/10.1016/j.chb.2015.06.013

Patel, V., Das, K., Chatterjee, R., & Shukla, Y. (2020). Does the Interface Quality of Mobile Shopping Apps Affect Purchase Intention? An Empirical Study. *Australasian Marketing Journal*, *28*(4), 300–309. https://doi.org/10.1016/j.ausmj.2020.08.004

Pavlou, P. (2003). Consumer Acceptance of Electronic Commerce: Integrating Trust and Risk with the Technology Acceptance Model. *International Journal of Electronic Commerce*, *7*(3), 101–134. https://doi.org/10.1080/10864415.2003.11044275

Peng Hongfeng, Wang Chunjing, & Cai Jie. (2008). An Empirical Investigation on the Adoption of Online Shopping of University Students in China. *2008 International Seminar on Business and Information Management*, 498–501. https://doi.org/10.1109/ISBIM.2008.26

Persaud, A., & Azhar, I. (2012). Innovative mobile marketing via smartphones: Are consumers ready? *Marketing Intelligence & Planning*, *30*(4), 418–443. https://doi.org/10.1108/02634501211231883

Revels, J., Tojib, D., & Tsarenko, Y. (2010). Understanding Consumer Intention to Use Mobile Services. *Australasian Marketing Journal*, *18*(2), 74–80. https://doi.org/10.1016/j.ausmj.2010.02.002

Rezaei, S., & Amin, M. (2013). Exploring online repurchase behavioural intention of university students in Malaysia. *J. for Global Business Advancement*, *6*(2), 92. https://doi.org/10.1504/JGBA.2013.053561

Shankar, V., & Balasubramanian, S. (2009). Mobile Marketing: A Synthesis and Prognosis. *Journal of Interactive Marketing*, *23*(2), 118–129. https://doi.org/10.1016/j.intmar.2009.02.002

Sohn, S. (2017). A contextual perspective on consumers' perceived usefulness: The case of mobile online shopping. *Journal of Retailing and Consumer Services*, *38*, 22–33. https://doi.org/10.1016/j.jretconser.2017.05.002

Sunday Adewale Olaleye, Salo, J., Sanusi, I. T., & Okunoye, A. O. (2018). Retailing Mobile App Usefulness: Customer Perception of Performance, Trust and Tension Free. *International Journal of E-Services and Mobile Applications*, *10*(4), 1–17. https://doi.org/10.4018/IJESMA.2018100101

Tandon, U., Kiran, R., & Sah, A. N. (2016). Analysing the complexities of website functionality, perceived ease of use and perceived usefulness on customer satisfaction of online shoppers in India. *International Journal of Electronic Marketing and Retailing*, *7*(2), 115. https://doi.org/10.1504/IJEMR.2016.077118

Teng, S., Wei Khong, K., Wei Goh, W., & Yee Loong Chong, A. (2014). Examining the antecedents of persuasive eWOM messages in social media. *Online Information Review*, *38*(6), 746–768. https://doi.org/10.1108/OIR-04-2014-0089

Thong, J. Y. L., Hong, S.-J., & Tam, K. Y. (2006). The effects of post-adoption beliefs on the expectation-confirmation model for information technology continuance. *International Journal of Human-Computer Studies*, *64*(9), 799–810. https://doi.org/10.1016/j.ijhcs.2006.05.001

Tsai, H.-T., & Huang, H.-C. (2007). Determinants of e-repurchase intentions: An integrative model of quadruple retention drivers. *Information & Management*, *44*(3), 231–239. https://doi.org/10.1016/j.im.2006.11.006

Vahdat, A., Alizadeh, A., Quach, S., & Hamelin, N. (2021). Would you like to shop via mobile app technology? The technology acceptance model, social factors and purchase intention. *Australasian Marketing Journal*, *29*(2), 187–197. https://doi.org/10.1016/j.ausmj.2020.01.002

Vijayasarathy, L. R. (2004). Predicting consumer intentions to use on-line shopping: The case for an augmented technology acceptance model. *Information & Management*, *41*(6), 747–762. https://doi.org/10.1016/j.im.2003.08.011

Watson, R. T., Pitt, L. F., Berthon, P., & Zinkhan, G. M. (2002). U-Commerce: Expanding the Universe of Marketing. *Journal of the Academy of Marketing Science*, *30*(4), 333–347. https://doi.org/10.1177/009207002236909

Wu, J.-H., & Wang, S.-C. (2005). What drives mobile commerce? *Information & Management*, *42*(5), 719–729. https://doi.org/10.1016/j.im.2004.07.001

Wu, P. C. S., & Wang, Y. (2011). The influences of electronic word-of-mouth message appeal and message source credibility on brand attitude. *Asia Pacific Journal of Marketing and Logistics*, *23*(4), 448–472. https://doi.org/10.1108/13555851111165020

Yang, K. (2010). Determinants of US consumer mobile shopping services adoption: Implications for designing mobile shopping services. *Journal of Consumer Marketing*, *27*(3), 262–270. https://doi.org/10.1108/07363761011038338

Yoon, K., Kim, C. H., & Kim, M.-S. (1998). A Cross-Cultural Comparison of the Effects of Source Credibility on Attitudes and Behavioral Intentions. *Mass Communication and Society*, *1*(3–4), 153–173. https://doi.org/10.1080/15205436.1998.9677854