

Volume 25, Special Issue

Print ISSN: 1099-9264

Online ISSN: 1939-4675

DETERMINING FACTORS THAT INFLUENCE SMARTPHONES PURCHASING INTENTION IN THE UNITED ARAB EMIRATES (UAE): EMPIRICAL RESEARCH

Nasser A. Saif Almuraqab, University of Dubai
Wathiq Mansoor, University of Dubai

ABSTRACT

This research aims to look at the variables that affect UAE customers' purchasing intention for smartphones, including brand image, pricing concerns, product features, and social influence. The data was gathered using a convenience sample technique and a self-administered internet questionnaire. A total of 175 samples were analyzed using a PLS-SEM method. The results showed strong connections between all factors and purchasing intention, namely brand image, social influence, product features, and pricing concern, all affect smartphone purchasing decisions. This study is critical for smartphone producers, managers, advertisers, and decision-makers to understand better how consumers got influenced in order to purchase their smartphones. Due to the fact that UAE is leading in ICT development among Middle East Arab nations and has a very high smartphone penetration rate among its citizens. Consequently, this is important for smartphone manufacturers. This research offers a verified framework based on existing literature that may have an effect on smartphone purchasing intention among consumers in the United Arab Emirates.

Keywords: Smartphone, Purchasing Intention, UAE, Brand Image, Social Influence, Product Features, Price Concern

INTRODUCTION

A smartphone phone is a portable electronic device that may be used for more than just making and receiving phone texts, calls, and voice mail messages. The ability to access internet is a fundamental function of smartphones. It can also support viewing, listening to, and watching digital material such as pictures, music, and videos. In addition, a smartphone must be able to run tiny computer programs known as apps or applications (Weinberg, 2012).

The growth of digital media may also be linked to the growing number of people who possess smartphones, or vice versa. The rise of digital media might be related to the growing number of smartphone users. According to reports, 78 percent of individuals in the United Arab Emirates possess at least one cellphone, with many more having multiples (Almuraqab, 2020). Even though the UAE has not adopted smartphone use and digitalization as quickly as other western nations such as the United States and the United Kingdom, UAE citizens have a penetration rate of 85 percent, compared to 75 percent for other nationalities (Trost, 2014). This is because Emiratis are known for being early adopters as well as trendsetters in the Arab world. In addition, there are more than 200 nationalities living and working in the UAE (UAE Government portal: www.u.ae).

In reality, with a well-developed and technologically sophisticated telecom industry and high mobile and broadband adoption levels, the United Arab Emirates (UAE) usually tops the Middle East Arab nations in ICT rankings (Almuraqab, 2020). According to a survey released by the World Economic Forum in 2020, the UAE ranks first in the Arab area in terms of the preparedness of its telecommunications networks and 26th worldwide among 139 nations, as per the Global Information Technology Report (2018). The network readiness index assesses an economy's opportunity to benefit from information and communication technology to boost competitiveness and growth. The UAE has the most significant smartphone penetration rates in the developed world, according to (GSMA 2018) 83 percent. Correspondingly, Shabeeh (2015) argued that out of all Internet users in the UAE, "52 per cent use social media apps, while 45 per cent regularly watch videos on their mobile phones. The percentage of the population who play games on their mobile phones stands at 33 percent, and nearly 31 per cent use mobile banking services". Apple, Samsung, Huawei, Motorola, Xiaomi, LG, and Nokia are some of the most popular Smartphone brands in the United Arab Emirates (UAE). Samsung Galaxy and Apple iPhone are the most rivalry in the market between all these Smartphone manufacturers. According to a Canalys (2020) study, Samsung successfully overtook Huawei, Xiaomi, and Apple in the third quarter of the worldwide Smartphone market in 2020.

Furthermore, the mobile phone business has always seen dramatic and enormous changes or growth in the communications market. New smartphone models are introduced to the market regularly in order to maintain a competitive edge. In terms of motivations and choices behind the smartphone purchasing decision process, the development of the smartphone market has impacted consumers, particularly the younger generation. Several studies have looked into the variables that influence the adoption and usage of specific mobile applications, such as social media, smart government apps, android banking apps, and other research that looked at mobile phones, (Aboelmaged & Gebba, 2013; Ryalat, 2017), mobile government (Almuraqab, 2017; Almuraqab et al., 2021); mobile learning (Shorfuzzaman & Alhoussein, 2016), Smartphone adoption and its impact on the youth (Ameen & Wills, 2018; Aljenaibi, 2020), social media using *via* smartphones (Ayyad 2019) However, there is a vacuum in the literature, in the Arab world, particularly in the UAE, when it comes to researching smartphone buying intentions. Although in different nations, recent research in this area, such as (Lay-Yee et al., 2013; Malviya et al., 2013; Rahim et al., 2015), and smart watches buying intention (Almuraqab, 2021). With so many factors that may influence a consumer's choice to buy a smartphone, marketers must understand which factors have an effect on that decision. Furthermore, based on the literature survey, we couldn't find any empirical study for the UAE context, therefore, this considered the first empirical study filling the literature gap, and answering the following question. Which variables have the most influence on consumer purchasing decisions in the UAE?

LITERATURE REVIEW

The study's goal is to identify the variables that have the most impact on a buyer's choice to purchase a Smartphone. Different variables have been discovered by researching related literature, depending on which the buyer selects the Smartphone. Earlier studies (Malviya et al., 2013; Lay-Yee et al., 2013; Rahim et al., 2016) provide a variety of factors that influence purchase decisions. By merging so many dominant variables, specific relevant aspects (Brand image, Product feature, Cost concern, and social influence) can be described.

In 2021, the global mobile phone market will have delivered 1.35 billion units, up 5.5 percent from the 1.28 billion units sold in 2020. Following that, in 2025, the last year of our projection period, shipments will reach 1.53 billion units, resulting in a Corundum Growth Rate (CAGR) of 3.6 percent (IDC.com, 2021).

In today's world, the smartphones changed the way we live, due to the amazing role of these devices. In fact, today's smartphone performs as a computer, allowing users to do more tasks with this small handheld tool. It may be used for various things, including exchanging information, paying for products/services, exploring, and shopping. Today, almost every activity has its own smartphone application (Mackenzie, 2006; Malviya et al., 2013). In today's world, brand plays an important part in customer purchasing decisions. While most customers prefer a well-known brand, the idea of brand elevation has developed beyond a trademark or a name. The term "brand" refers to a lot more than just a logo. Numerous dominant variables affecting a consumer's purchasing choice for a smartphone may be drafted depending on different journals, research, and publications. Product features, brand image, pricing concern, and social influence are among the factors discussed in this study.

Hypotheses Development and Research Model

Purchasing Intention (PI)

The intention of buying is planned in advance to acquire specific products or services in the future and does not necessarily rely on the capacity of the individual to execute the sale (Rahim et al., 2016). The other scholars argued that customers go through the process of recognizing the item for sale and then locating the product information, analyzing it, buying it, and providing feedback. Because of this, people will buy a product after doing initial research to ensure that they acquire the right thing that meets their requirements and desires (Rahim et al., 2016).

There are several smartphones manufacturers to choose from in order to meet the requirements and desires of consumers. As a result, various customers' opinions and preferences will vary. Buyers' purchasing behavior is therefore influenced by their qualities such as brand name, cost, attributes, and other options, as well as impulsiveness (Leo et al., 2005). As a result, it's vital to look at the variables that influence a customer's choice to buy a mobile phone. This research aims to look at how factors such as product characteristics, brand name, social impact, and price affect consumers' buying intentions in the UAE.

Brand Image (BI)

Companies will always look for strategies to set themselves apart from the competition, particularly in the smartphone market, where innovation is always changing. Companies must develop modern technology that is not presented on the market in order to satisfy consumers' needs. The distinctiveness and exclusivity of a company's brand name may be reflected in the name. A brand name may be anything from a name to a slogan to a logo to a design that helps to differentiate a business from its competitors. According to Cornelis (2010), most businesses place a high value on their brand name, which may be a significant asset for their products and services. This may provide the business with a competitive edge. Users nowadays choose mobile phones with unique characteristics such as a clean graphical interface for touch screen interactions and the ability to rapidly show content with minimum frustration (Norazah, 2013). Users often buy mobile phones from Samsung, BlackBerry, Apple, Huawei, Nokia, and LG. According to Change Wave research (2010), Apple's mobile phone brand has a large number of loyal consumers since the company differentiates between various kinds of clients by offering multiple models with varying amounts of storage capacity and color variations at varying price ranges. According to a prior study, the brand name of a product has an impact on the user's assessment and purchasing choice (Khasawneh & Hasouneh, 2010). This is also confirmed by previous studies (Norazah, 2013; Lay-Yee et al., 2013;

Rahim et al., 2016), which showed that brand name substantially impacts the smartphone's demand. Hence it is hypothesized that:

H1: Brand Image (BI) will have positive impact on Smart phone Purchasing Intention (PI).

Price Concern (PC)

The cost of a product is the sum of the values that consumers exchange in return for the advantages of having the product (Kotler & Armstrong, 2010). Cost is simply the sum of money a customer is prepared to pay for goods and/or services that they believe are worthwhile. Money has various meanings for different with individuals. Some may consider it beneficial despite the high expense, while others will think it is not worth the money.

Target-return pricing, markup pricing, going rate pricing, perceived-value pricing, and sales promotion are just a few examples of pricing strategies (Kotler & Keller, 2012). If the discount rate is low, it should be given in numbers; if the discount rate is large, it must be represented in proportions so that consumers are more likely to buy (Isabella, 2012). One of the variables studied to determine the impact on smartphones demand is the cost issue (Chow, 2011). Many studies have shown that pricing substantially affects smartphone buying intent (Chew, 2012; Malviya et al., 2013; Lay-Yee et al., 2013). So, it is hypothesized that:

H2: Price Concern (PC) will have positive impact on Smart phone Purchasing Intention (PI).

Product Features (PF)

A feature is an aspect of a product that helps it fulfill the requirements and preferences of users by allowing them to own, and use the product (Malviya et al., 2013; Lay-Yee et al., 2013; Rahim et al., 2016). Product features can also be described as the characteristics of a product that can fulfill customers' expectations through having, using, or applying the product (Kotler & Armstrong, 2007). In today's marketplace, mobile phones come with a variety of high-tech capabilities. As a result, various individuals will select phone functionalities that best suit their requirements and preferences. Mobile phones nowadays have a built-in web browser, wireless connectivity, full programmability, application installation, multimedia presentation a file management system, and several gigabytes of storage, capture, high-resolution displays, and location and movement sensors, according to Oulasvirta, et al., (2011).

According to prior research, users preferred five features of mobile phones: color screen, camera, and internet surfing, voice-activated dialing, and wireless connection (Ling et al., 2006). Agreeing to the results of a study performed by the same researcher, respondents, who are mainly college students, chose to purchase a mobile phone-based on the physical appearance, size, and menu layout of the smartphone. Correspondingly, with Lay-Yee, et al., (2013), hardware is the physical surface of a device, such as the smartphone's size, body, color, weight, and design. Software, on the other hand, consists of computer processes, programs, and documentation. The software can also include things like operating system, and applications. Apple's IOS and Google's Android are two examples of operating systems. Product characteristics include both hardware and software. According to an earlier study by Russell (2012); Lay-Yee, et al., (2013), users prioritize operating systems and other specifications. As a result, customers will pay attention to the product feature since it is important. Therefore:

H3: Product Features (PF) will have positive impact on Smart phone Purchasing Intention (PI).

Social Influence (SI)

In order to buy cell phones, users will be persuaded by the media, their parents, and their friends (Nelson & McLeod, 2005; Malviya et al., 2013; Lay-Yee et al., 2013; Rahim et al., 2016). Moreover, social components, including the user's small groups, family, and social roles and status, influence their behavior (Kotler & Armstrong, 2010). Users are constantly influenced by the social group, which is the people, throughout the decision-making phase. Users may listen to and focus on different social groupings, such as those who are more competent in particular areas, depending on a variety of reasons.

According to a study, others, particularly family members, influence consumers' purchasing decisions when purchasing high-involvement goods (Farzana, 2012). Similarly, by another study, respondents believe that community trends are one of the most significant factors that affect their choice to get a mobile phone (Osman, 2012). Furthermore, research showed that social influence has a major impact on a student's smartphone dependence (Ding et al., 2011). Another study of young adults aged 19 to 25 years old found that both direct and vicarious influencers had an effect on users' purchase intentions, direct influencers refer to parents and vicarious role models refer to celebrities. According to the findings, celebrities have a greater impact than parents (Ernest et al., 2010). Social influence does play a part, and it is the most important factor in costumers' smartphone addiction (Suki & Suki, 2013). So:

H4: Social Influence (SI) will have positive impact on Smart phone Purchasing Intention (PI).

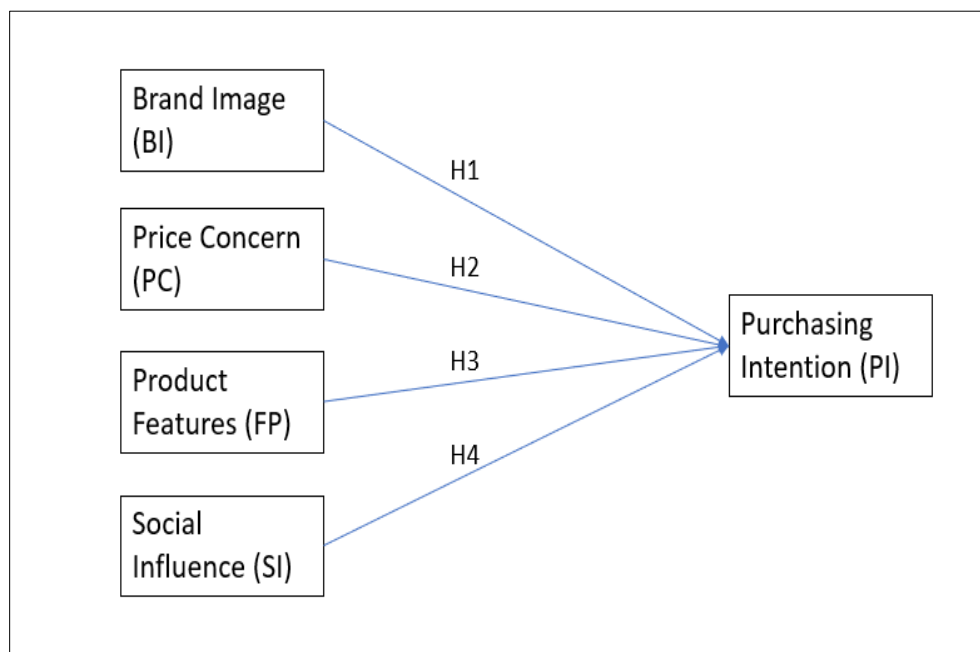


FIGURE 1
RESEARCH MODEL

METHODOLOGY

The current research used a quantitative methodology, using an online survey that was sent to all University of Dubai students who come from more than 45 different countries. The questionnaire was delivered through email and social media app (WhatsApp), with the possibility to share it with friends and family (snow bowling). The primary method used for data collection was a five-point Likert-scale survey. The respondents were provided a well-structured self-administered survey to answer, and their engagement was entirely voluntary. The survey was an adjusted

validated survey with certain changes to suit the particular setting of this study (Malviya et al., 2013; Lay-Yee et al., 2013; Rahim et al., 2016, Almuraqab, 2017; Almuraqab, 2021). The language was kept basic so order to approach the respondents' comprehension level.

A total of 187 responses were gathered. A few were blank, and some had very unusual responses (all agree, or all disagree), which were excluded. In the study, the remaining 175 were utilized. The participants' gender, age, occupation, and educational background were all collected as part of the survey. The remaining questions, which looked into their opinions on mobile phone purchase intentions, were graded on a five-point Likert scale ranging from "strongly agree" to "strongly disagree." The Smart PLS was used to evaluate the data collected *via* the survey.

Sample profile

The sample's demographic information revealed that 48 percent of respondents were men and 52 percent were women. Participants between the ages of 18 and 24 made up 44% of the sample, while those between the ages of 45 and 54 made up 6%. According to the participants' educational backgrounds, 51 percent had finished a bachelor's degree, and 22 percent had obtained a master's degree. Table 1 shows the results.

Gender	Frequency	Percentage
Male	84	48%
Female	91	52%
Education		
High school or less	15	9%
Diploma	18	10%
Bachelor	90	51%
Master's	38	22%
PhD/Doctorate	14	8%
Age		
18-24	77	44%
25-34	43	24%
35-44	45	26%
45-54	10	6%
Profession		
Student	67	38%
Employee	96	55%
Business owner	7	4%
Other	5	3%

DATA ANALYSIS AND RESULTS

The Partial Least Square (PLS) analytical technique was used in this research to apply Structural Equation Modeling (SEM). We utilized the Smart PLS to do this. In many areas of research, SEM has been widely utilized for theory validation and testing (Gefen et al., 2000). PLS is a strong analytical technique for simultaneously evaluating the entire structural model (Chin, 1998). PLS was used in this study to conduct data analysis in line with Anderson & Gerbing's suggested two-step approach (1988). The first stage was to use the measurement model to evaluate the validity and reliability of constructs, and then step two was to evaluate the structural model and hypotheses.

Measurement Model

Using content, accuracy, and convergent validity, this research evaluated the measuring instrument's validity and reliability. Cronbach's alpha, a popular technique for measuring scales' reliability and internal consistency, was used to assess the scale's dependability. According to Hair, et al., (2006), the scale's validity is usually recognized if Cronbach's alpha for each construct is equal to or higher than 0.70. Because Cronbach's alpha values for all of the constructs included in the study model surpassed the 0.70 thresholds, Table 2 shows a high level of internal consistency.

The Average Variance Extracted (AVE) and Composite Reliability (CR) tests were used to determine convergent validity in this research. The value of CR should be more than 0.70, and the value of AVE must be greater than 0.50 in order to fulfill convergent validity (Fornell & Larcker, 1981). Table 2 shows that all of the CR and AVE values in the current research are above the acceptable limit, suggesting that the convergent validity is well established.

Constructs	Items	Factor loading	AVE	CR	Cronbach α
Brand Image (BI)	BI1	0.836	0.58	0.846	0.757
	BI2	0.761			
	BI3	0.727			
Product Features (PF)	PF1	0.817	0.657	0.851	0.745
	PF2	0.843			
	PF3	0.77			
Price Concern (PC)	PC1	0.824	0.644	0.844	0.723
	PC2	0.794			
	PC3	0.789			
Social Influence (SI)	SI1	0.789	0.663	0.855	0.746
	SI2	0.843			
	SI3	0.809			
Purchasing Intention (PI)	PI1	0.959	0.837	0.939	0.9
	PI2	0.819			
	PI3	0.959			

This research also evaluated the square root of AVE in each latent component to verify discriminant validity. When the square root of the AVE in each latent variable is higher than other correlation values among the latent variables in the model, according to Chin (1998), discriminant validity is demonstrated. Because the square root of the AVE from each concept is greater than all other correlations with the other latent variables in this research, the discriminant validity is verified. Table 3 represents bold diagonal portion has the square root values of all the AVEs. Ultimately, this research shows that R^2 , which is the most important criteria for evaluating structural models (Klarner et al., 2013), has a high value of 0.69 for the study's main target construct (*i.e.*, PI). The model's predictive validity as the empirical study is shown by the high value of R^2 , which is over 0.25 (Hair et al., 2012).

	Brand Image	Price Concern	Product Features	Purchasing Intention	Social Influence
Brand Image	0.761				
Price Concern	-0.066	0.802			
Product Features	0.382	0.218	0.81		
Purchasing Intention	0.53	0.407	0.457	0.915	

Social Influence	0.027	0.222	-0.13	0.497	0.814
-------------------------	-------	-------	-------	-------	-------

Structural Model

The structural model estimation and assessment of the stated hypotheses are shown by the PLS-SEM analysis findings, as shown in Table 4. Depending on the following *t* values and *p*-values, the results of this research showed that all hypotheses are supported (Table 4). The findings of the model showed that BI ($b=0.421$, $p 0.001$) has a substantial and direct impact on consumers' views about smartphone purchases, proving H1. The findings also revealed that PC ($b=0.266$, $p 0.001$) has a strong connection with mobile phone purchase intent, supporting H2.

Furthermore, as predicted by H3, PF was shown to be one of the most important predictors of customer attitude ($b=0.298$, $p 0.001$). Lastly, SI was shown to substantially directly impact the PI of consumers' smartphones ($b=0.465$, $p 0.001$), proving H4.

Hypotheses	b	T Value	P Values
H1: Brand Image -> Purchasing Intention	0.421	9.392	0.00
H2: Price Concern -> Purchasing Intention	0.266	5.752	0.00
H3: Product Features -> Purchasing Intention	0.298	5.868	0.00
H4: Social Influence -> Purchasing Intention	0.465	9.289	0.00

DISCUSSION

The factors of purchasing intention of smartphones are consistent with the prior research, according to our study's findings. The brand image has a significant influence on purchasing intent. Social influence is a significant predictor of the purchasing decision. This corresponds to prior studies (Malviya et al., 2013; Rahim et al., 2016; Haba et al., 2017).

Furthermore, consumers' purchasing intention toward smartphones were shown to be significantly influenced by price concerns; these results are consistent with the studies of (Park & Lee, 2011; Lay-Yee et al., 2013; Malviya et al., 2013). Product features was also shown to have a substantial impact on purchase intent, which is in accordance with previous findings of (Malviya et al., 2013; Lay-Yee et al., 2013; Rahim et al., 2016).

The main factor for the limited number of studies conducted in the field of smartphone intention to buy, because the subject has piqued interest in recent years ago, a consensus on its description and idea has yet to be reached and remains unclear, resulting across several research gaps, each with a different context, that researchers and practitioners should fill.

The study's findings have fulfilled the research question; the interpretation of this research study has addressed the research question and goals by finding factors that may influence people's mobile phone purchasing intentions in the UAE. This study discovered that (BI) had an effect on UAE consumers' mobile phone purchasing intentions. The findings of this research study can be backed up by (Malviya et al., 2013; Lay-Yee et al., 2013; Rahim et al., 2016; Haba et al., 2017). Customers judge a company's image based on which famous brand people use in the mobile phone market, which is generating more sales and may be identified by how their technology influences UAE consumers' purchasing intentions for the current generation of smartphones. Brand image is the additional value for consumer goods and services. The way that customers think, feel, and behave on a certain brand and on the quality of the product may be represented. The results of this

study thus demonstrate that the brand image directly impacts the UAE consumers' desire to buy smartphones.

This study showed that social influence influences smartphone intention to purchase among UAE consumers, and individuals would encourage each other to select a smart phone. Prior studies have confirmed this finding (Malviya et al., 2013; Lay-Yee et al., 2013; Rahim et al., 2016). In fact, (Almuraqab, 2017; Almuraqab & Jasimuddin, 2017; Almuraqab et al., 2021) found similar findings on m-government services and how influential people in the UAE are encouraging each other to use such smart services through mobile applications. As a result, decision-makers must think about how they may use social influence, such as social influencers and/or celebrities, to generate more awareness and impact more consumers, which will have a beneficial impact on their purchasing decisions. On the other hand, research by Haba, et al., (2017) opposes this result, which may be due to the study sample utilized, which was a group of working professionals rather than people from public places.

Moreover, it was shown that customers place a high value on smartphones' features. Consumers are worried about the device's features and compare them before making a purchasing decision, such as the style or aesthetic, the operating system used, for *i.e.*, Android or IOS, overall performance, cameras, and other specifications for *i.e.*, (processor speed, RAM, internal storage, etc.). A similar conclusion was reached by (Malviya et al., 2013; Lay-Yee et al., 2013; Rahim et al., 2016). As a result, in order to gain a competitive edge, decision-makers need to pay attention to customer input and match product features with their expectations. This will increase consumer satisfaction and have a major effect on their decision to purchase.

Price concerns have been shown to substantially affect smartphone intention to purchase in numerous experiments (Hong et al., 2014). This result was backed up by (Malviya et al., 2013; Lay-Yee et al., 2013). As a result, this research reveals that, despite the UAE's high GDP per capita, users in the UAE compare prices and/or make a tradeoff between mobile phone worth and economic value. The UAE has over 200 nationalities, and expatriates outnumber UAE citizens, so most clients compare the prices and/or make a tradeoff between smartphone value and economic value. As a result, individuals may face issues of justice with the monetary costs of getting a service. They expect the service to be worth the money they pay, even if they don't always desire cheap pricing (Haba et al., 2017). As a result, the price of smartphones in the UAE has directly impacted consumers' purchasing intention.

To summarize, the immediate impact of brand image, social influence, product feature, and price concern on UAE customers' purchasing decisions, is important and substantially impacts their mobile phone intention to purchase.

CONCLUSION, IMPLICATION AND RECOMMENDATION

This research aimed to examine the variables that influence smartphone purchasing intention among UAE consumers. The study examined the relationship between brand image, social influence, pricing concern product features, and mobile phone purchase intention. Data was collected from 175 University of Dubai students and evaluated. Four hypotheses were described to investigate the connection between the independent variables: brand image, social impact, pricing concern, product feature, and smartphone purchase intention as dependent variable. All hypotheses were shown to be proved and accepted. This study's results have several important implications for smartphone manufacturers. This research yielded data that will educate smartphone manufacturers about the variables that affect smartphones' purchasing intention.

According to this research, brand image, social influence, pricing concern, and product features are strongly associated with purchasing intention. The current research has several limitations. First, because of the study's cross-sectional research design, no causal connection

between the variables could be established. To obtain more data for potential causal links between these variables, future study should use a longitudinal approach. The main sample was restricted to university students, which was the second restriction. As a result, the results may not be relevant to the UAE in general. Study on various samples of consumers in the UAE is required to enhance the results' generalizability. To summarize, the current study assists in understanding the significance of the brand image, social influence, pricing concern, and product features on smartphone purchase intention among UAE consumers. Other variables that may affect smartphone purchasing intention should be investigated in future research. In conclusion, the findings of this research indicated that smartphones' makers must examine the factors that influence UAE customers' purchasing intention, which might enhance them to expand their market share.

REFERENCES

- Aboelmaged, M., & Gebba, T.R. (2013). Mobile banking adoption: An examination of technology acceptance model and theory of planned behavior. *International Journal of Business Research and Development*, 2(1), 35-50.
- Al-jenaibi, B., & Almansouri, A.A. (2020). Smartphone effects on youth: Case of United Arab Emirates. *International Journal of e-Collaboration (IJeC)*, 16(2), 82-96.
- Almuraqab, N.A.S. (2017). M-government adoption factors in the UAE: A partial least squares approach. *International Journal of Business and Information*, 11(4).
- Almuraqab, N.A.S., & Jasimuddin, S.M. (2017). Factors that Influence end users' adoption of smart government services in the UAE: A conceptual framework. *Electronic Journal of Information Systems Evaluation*, 20(1), 11-23.
- Almuraqab, N.A.S. (2020). E & M-Government and smart city: A review of ICT strategies and plans in the United Arab Emirates. *International Journal of Management (IJM)*, 11(3).
- Almuraqab, N.A.S., Jasimuddin, S.M., & Mansoor, W. (2021). An empirical study of perception of the end-user on the acceptance of smart government service in the UAE. *Journal of Global Information Management (JGIM)*, 29(6), 1-29.
- Ameen, N., & Willis, R. (2018). *An analysis of the moderating effect of age on smartphone adoption and use in the United Arab Emirates*. In UKAIS, 1.
- Anderson, J.C., & Gerbing, D.W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103(3), 411-423.
- Ayyad, K. (2019). Motivations of using social media through smartphones among university students in the United Arab Emirates. *Journalism and Mass Communication*, 9(2), 53-62.
- Almuraqab, N.A.S. (2021). Determinants that influence consumers' intention to purchase smart watches in the UAE: A case of University students. *Advances in Science, Technology and Engineering Systems Journal*, 6(1), 1249-1256.
- Canalys. (2020). *Global smartphone market Q3 2020*.
- ChangeWave Research. (2010).
- Chew, J.Q. (2012). *Exploring the factors affecting purchase intention of smartphone: A study of young adults in UTAR*. Unpublished Degree Paper. Universiti Tunku Abdul Rahman, Perak Campus, Malaysia.
- Chin, W.W. (1998). The partial least squares approach to structural equation modeling. *Mod.Methods Bus. Res*, 295 (2), 295-336.
- Chow, M.M. (2011). Conceptual paper: Factors affecting the demand of smartphone among young adult. *International Journal on Social Science, Economics and Art*, 2(2), 44-49.
- Cornelis, P. (2010). Effect of co-branding in the theme park industry: A preliminary study. *International Journal and Contemporary Hospitality Management*, 22(6), 775-796.
- Ding, H.T., Suet, F.L., Tanusina, S.P., Ca, G.L., & Gay, C.K. (2011). Dependency on smartphone and the impact on purchase behavior. *Young consumers: Insight and Ideas for Responsible Marketers*, 12(3), 193 – 203.
- Ernest, C.D.R., Moshin, B., & Chung, Y.N. (2010). *The influence of role models on young adults purchase*. Faculty of Economics and Business University Malaysia Sarawak, 70-81.
- Farzana, W. (2012). Consumers' psychological factors association with brand equity of high involvement product: Case of laptop. *World Journal of Social Sciences*, 2(5), 90-101.
- Fornell, C., & Larcker, D.F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.
- Gefen, D., Straub, D., & Boudreau, M.C. (2000). *Structural equation modeling and regression: GSMA. (2016). The mobile economy Middle East and North Africa 2016*.

- Guidelines for research practice. (n.d.). *Communications of the Association for Information Systems*, 4(1), 7.
- Haba, H., Hassan, Z., & Dastane, O. (2017). Factors leading to consumer perceived value of smartphones and its impact on purchase intention. *Global Business and Management Research: An International Journal*, 9(1).
- Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E., & Tatham, R.L. (2006). *Multivariate Data Analysis, (6th edition)*, Prentice Hall, NJ.
- Hair, J.F., Sarstedt, M., Ringle, C.M., & Mena, J.A. (2012). An assessment of the use of partial least squares structural equation modeling in marketing research.
- Hong, Y.H., Teh, B.H., & Soh, C.H. (2014a). Acceptance of smartphone by younger consumers in Malaysia. *Asian Social Science*, 10(6), 34-39.
- Isabella, G. (2012). Influence of discount price announcements on consumer's behavior. *Journal of Business Administration*, 5(26), 657-671.
- Khasawneh, K., & Hasouneh, A.B.I. (2010). The effect of familiar brand names on consumer behaviour: A Jordanian perspective. *International Research Journal of Finance Economics*, 43.
- Klarner, P., Sarstedt, M., Hoeck, M., & Ringle, C.M. (2013). Disentangling the effects of team competences, team adaptability, and client communication on the performance of management consulting teams. *Long Range Planning*, 46(3), 258-286.
- Kotler & Keller. (2012). *Marketing management, (14th Edition)*. Pearson Education.
- Kotler, P., & Armstrong, G. (2007). *Principles of marketing, (12th Edition)*. Boston: Pearson Education.
- Lay-Yee, K.L., Kok-Siew, H., & Yin-Fah, B.C. (2013). Factors affecting smartphone purchase decision among Malaysian generation Y. *International Journal of Asian Social Science*, 3(12), 2426-2440.
- Learning. (2016). A Perspective from a GCC Higher Education Institution [online] Mobile Information Systems.
- Leo, C., Bennett, R., & Hartel, C.E. (2005). Cross-cultural differences in consumer decision-making styles. *Cross Cultural Management*, 12(3), 32-61.
- Ling, C., Hwang, W., & Salvendy, G. (2006). Diversified users' satisfaction with advanced mobile phone features. *Universal Access in the Information Society*, 5(2), 239-249.
- MacKenzie, D.L., & Hickman, L.J. (2006). *What works in corrections*. Cambridge: Cambridge University Press.
- Malviya, S., Saluja, D., Singh, M., & Thakur, S.A. (2013). A study on the factors influencing consumer's purchase decision towards smartphones in Indore. *International Journal of Advance Research in Computer Science and Management Studies*, 1(6).
- Nelson, M.R., & McLeod, L.E. (2005). Adolescents brand consciousness and product placement: Awareness, liking and perceived effects on self and others. *International Journal of Consumer Studies*, 25(1), 1-13.
- Norazah, Md.S. (2013). *Students' demand for smartphones Structural relationships of product features, brand name, product price and social influence*, 30(4), 236-248.
- Osman, M. (2012). A study of the trend of Smartphone and its usage behavior in Malaysia. *International Journal on New Computer Architectures and Their Applications*, 2(1), 274-285.
- Oulasvirta, A., Wahlstrom, M., & Ericsson, K.A. (2011). What does it mean to be good at using mobile device? An investigation of three levels of experience and skill. *International Journal of Human-Computer Studies*, 69, 155-169.
- Rahim, A., Safin, S.Z., Kheng, L.K., Abas, N., & Ali, S.M. (2016). Factors influencing purchasing intention of smartphone among university students. *Procedia Economics and Finance*, 37, 245-253.
- Shabeeh, R. (2015). UAEs power of mobile apps.
- Shorfuzzaman, M., & Alhussein, M. (2016). *Modeling learners readiness to adopt mobile*.
- Suki, N.M., & Suki, N.M. (2013). Dependency on smartphone: An analysis of structural equation modeling. *Jurnal Teknologi*, 62(1), 49-55.
- Trost, S. (2014). *Decoding the UAE smartphone usage*. The Nielsen Company.
- Weinberg, D. (2012). *Smartphone features*.