

EXPLORING CONSUMER BEHAVIOR OF THAI MILLENNIALS TOWARDS BUYING CONSUMER ELECTRONICS ONLINE

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Abstract

Online shopping has gained popularity in various types of products. The main attraction for consumers to shop online is convenience. Consumers nowadays can save time and enjoy the ease of shopping over the internet for a wide variety of items instead of going to a conventional store. However, consumer electronics are perceived as expensive products and many customers need to experience it before purchase. Moreover, there are other factors such as perceived ease of use, perceived usefulness, perceived privacy and security of transactions, need for touch, electronic word of mouth which influence the purchase intention.

The purpose of this study aimed to explore consumer behavior of Thai millennials towards buying consumer electronics online. The study was conducted on 200 Thai millennials, aged between 23 and 38 years old. The data were collected through an online questionnaire and analyzed by quantitative statistical methods. Independent sample T-test, one-way ANOVA and multiple linear regression analysis were used to test the hypotheses. The results showed that there were different perception towards online purchase intention among consumers who have different gender and monthly income. Nevertheless, consumers with different age and educational level have indifferent opinion towards online purchase intention. Significantly, the study also found that consumer behavior in terms of perceived usefulness, perceived privacy and security of transaction, need for touch, and electronic word of mouth influenced online purchase intention at the statistically significant level as of 0.05.

Keywords: Consumer Behavior, Thai Millennials, E-Commerce, Online Shopping

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Introduction

Nowadays, the way people shop has changed. Consumers can save time and enjoy the ease of shopping over the internet for a wide variety of items rather than going to a retail store. The online shopping has been growing dramatically worldwide. In countries with well-developed internet infrastructure, internet marketing activities has been growing rapidly, therefore this facilitates a lot of consumers to buy things online (Kau, et al., 2003). Commercial transactions conducted online can be called E-commerce. Therefore you're involved in E-commerce whenever you buy or sell something over the internet. Nava-Macali (2016) stated that E-commerce has increased opportunities for consumers to spend less time and have alternative products to choose from, and also convenient because e-commerce is open twenty-four hours and seven days. Furthermore, firms have to provide cheaper and more efficient products and services in order to enhance the strong market presence.

Thai millennials born in 1981 - 1996 (23-38 years old in 2019) are the largest group of internet users and online shoppers. Nowadays brands put a lot of effort to work towards millennials on social media because social media such as Facebook, Instagram, Line, and Twitter is a major influence in purchasing decision of millennials. According to the research on the millennial influence, it is found that 90% of millennials in Thailand are active on Facebook while 85% of millennials in Malaysia and 77% of Singaporean millennials subscribe to this channel, moreover users of popular social media such as Line, Instagram and Twitter are also higher in Thailand. Thai millennials accounted for 85% agree that technology gives them more freedom of mobility, and 79% agree that they couldn't live without their smartphones. Thai online shoppers can distinguish that established online marketplaces such as Lazada and Alibaba and high-risk social media sellers are different. Moreover, most Thai shoppers find social media shopping opportunities advertised on Facebook, Instagram, and other social media sites.

Compared with most consumers in Southeast Asian countries who seem to save and invest, Thai people are more likely to indulge and pay more for their favorite brands. However, consumer electronics are typically regarded as complex and expensive products, therefore, consumers need to test touch and test the products before they buy. (Kim & Forsythe, 2010). Although the role of e-commerce has increased currently, 51% of consumers still prefer buying products in offline stores (PwC 2017).

Nevertheless, it is revealed that consumers are expanding a range of products categories they wish to buy via the internet to those that hold attributes of "touch and feel" (Hollensen, 2014). As stated in the consumer survey of Retail Dive, being able to touch and feel products then take them home right after purchase scored highest among the reasons why they decide to buy in conventional stores instead of via the internet.

To conclude, consumer electronics has been playing an important role in everyone's life, especially in new generation's life, and the development of electronics consumption has evolved over time. The consumers' demand for the latest consumer electronics is growing every day, hence online

shopping allows an effective and convenient channel to reach the buyers and satisfied with their demands. In the near future, the development of online retailer is improving and ensures a bright future. The consumer electronics online retailers should seize the commercial opportunity and develop their products and services consistently to expand into new markets.

Research Objectives

The main purpose of this research is to explore Thai millennial consumer behavior towards online shopping of consumer electronic products. Ease of use and usefulness influence consumers to buy products online. Moreover, social media have changed the way consumers shop. However, to understand better how Thai millennials think about buying consumer electronics online, the objectives are presented as follows:

- (1) To identify consumers' attitude and intention towards buying consumer electronics online
- (2) To recommend efficient ways to overcome the disadvantages of buying consumer electronics online.

Conceptual Framework

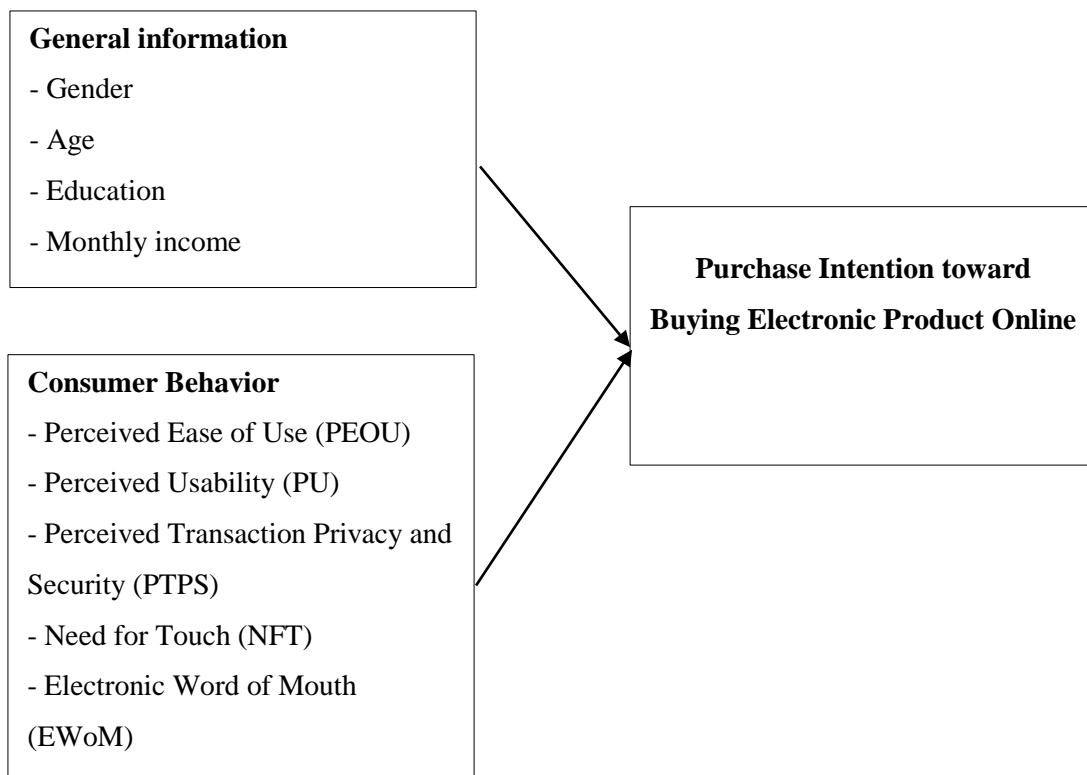


Figure 1 Conceptual Framework

Hypotheses

H1: Consumers with different gender, age, education and monthly income had different purchase intention for online electronic products.

H2: Consumer behavior in terms of perceived ease of use, perceived usability, perceived transaction privacy and security, need for touch and electronic word of mouth affected purchase intention for online electronic products.

Concepts, Theories and Related Researches

Demographic Factors

For online shoppers, sex, marital status, living area, age, education level, and monthly income were usually found to be relevant predictors of online shopping. Sultan and Henrichs (2000) described that the consumer's willingness to and preference for using the Internet as shopping medium was likewise positively related to income, household size, and innovativeness. In 2000, females were found to be the dominant online holiday season buyer (Sethna, Hazari, & Bergiel, 2017). Jotikasthira and Onputtha (2017) found that monthly income has an association with purchase intention because earning can create the purchasing power.

Consumer Behavior, E-commerce/Online shopping and Millennials and Online Shopping

Consumer behavior has been observed over the past 50 years and always been an area of major interest for social science researchers (MacInnis & Folkes, 2010). Therefore the purpose of studying consumer behavior is to understand the process of how a person selects, buys, uses, and disposes the products or services and how will their needs be satisfied (Solomon et al, 2006). By studying consumers, it benefits researchers to improve or introduce products or services. With clues from consumers, they can also know how to set prices, devise channels, craft messages, and develop other marketing activities (Kotler & Armstrong, 2008).

In terms of e-commerce/Online shopping, the Internet makes life fast. Consumers switch to online shopping because it is more convenient and they can save their time (Kumar & Kashyap, 2018). Many consumers opt to shop online because they spend less time making a decision, and as consumer decision making nowadays is influenced by speed and ease so they go for the less time-consuming choice (Beauchamp & Ponder, 2010). According to the Robinson, Riley, Rettie and Wilsonz (2007), what consumers find it convincing to shop online is being able to shop anytime they want and have their items delivered at the doorstep.

In terms of millennials and online shopping, People born between 1981 and 1996 (ages 23 to 38 in 2019) will be considered a Millennial (PEW Research center). Some nonobvious trends become apparent that retailers may think it is useful when they consider customer experience strategies, after breaking down the numbers according to demographics. The age group of 55 and older tend to prefer buying in-store rather than online. On the other hand, when considering the age group of 18 to 34, the

gap between online and offline closes. While online sales are very competitive catching up quickly to 63%, buying in stores is still dominant among younger shoppers, accounted for 75%. Retailers probably wonder what could be the future of customer experience after considering these numbers. Despite the advancement of technology, E-commerce is however not going to totally replace retailed stores any time soon according to the study.

To study the consumer behavior for online shopping, the study used the technology acceptance model (TAM) by Davis (1989). The technology acceptance model (TAM) is well-known to be the tool to study technology acceptance behavior. It consisted of Perceived Ease of Use, Perceived Usefulness, Perceived security, Perceived privacy, Need for Touch and Electronic Word of Mouth (EWOM). Firstly, 'perceived ease of use' refers to usability involves the extent to which a website helps users to use its functions simply and appropriately (Calisir et al., 2009). It has been exposed as a crucial factor in online shopping. Roy et al. (2001) proposed that online retailers are required to take a close look at the ease of navigation, ease of learning, perception, and support while designing online shopping websites. Secondly, 'perceived usefulness' refers to as an individual perception towards value after usage. In relation to online purchase, it can refer to online shopping performance over the internet, meaning that using the internet as a mean of buying will enhance their purchasing performance. This perception influences consumer attitude to shop online and their intention to shop online (Davis et al. 1989; 1993). Thirdly, 'perceived security' refers to the perception of security from access to the technology. Cheung and Lee (2006) examine the influence of perceived security on trust in the B2C e-commerce context. Their study reveals that perceived security, combined with other factors, has a significant impact on consumer trust in online shopping. Chang and Chen (2006) explain that perceived security, together with interface quality, is an important predictor of customer satisfaction on B2C e-commerce websites. The study also reveals that these two factors essentially affect switching cost, which implies that online buyers favor continuing to use websites that they recognize. Cheng et al. (2006) also described that perceived Web security, together with perceived usefulness and perceived ease of use, is significantly correlated with intention to use online banking sites. A similar finding from the research of Elliot and Fowell (2000) revealed that the consumers' perception of security-related issues was one of the most important factors in purchasing from a website. As a result, security has become one of the most crucial reasons that make consumers hesitate or fear using the internet to shop and it has become a powerful role in influencing their attitude towards online shopping. Fourthly, 'perceived privacy' refers to keep the information secret. Online privacy concerns often arise in a website administrator's collection and distribution of confidentially identifiable information about an individual customer who has logged into a particular website (Hatch, 2000). Smith et al. (1996) classified four factors of online privacy: unauthorized secondary use of personal information, improper access of digitally stored personal information, collection of personal information, and errors in collecting personal information. Fifthly, 'need for touch' refers to the touch on the products. Consumers may feel reluctant buying products over the

internet because they cannot touch and feel the product before purchase, especially expensive products such as electronics products. High levels of Need for Touch lead to a lower use of the Internet as a purchase channel, especially with those products that require quality to be assessed by means of touch, as opposed to only visually appraising the product (Citrin et al., 2003). Lastly, 'Electronic Word of Mouth (eWOM)' refers to the information spreading over. The role of eWOM volume and valence in influencing the online shopping behavior got much attention in existing research. Liu and Ji (2018) pointed out that online consumer purchase intention is positively associated with the perceived credibility and perceived usefulness of online reviews. Kudeshia and Kumar (2017) examined the social eWOM and proved that positive eWOM influences brand attitude and intention to purchase. According to Yang et al. (2016), reviews with a positive valence decrease the perceived purchase risk, which in turn improves the attitude towards purchasing and encourages the purchase intention. Purnawirawan et al. (2015) conducted a meta-analytic research that showed that online review valence significantly influences five variables: review credibility, perceived review usefulness, attitude towards product, product recommendation intention, and product purchase intention.

Methodology

Population and Samples

Millennials in Thailand aged from 22 to 37 are the population of the study. A total of 200 questionnaires will be completed and used for the analysis in the research.

Research Tool

This study used the questionnaire in order to collect the data. It is divided into 4 parts. The first part is about the general information consisting of gender, age, education and monthly income. The questions in this part are the multiple choices which the respondents answered the best choice that matched their characteristics. The second part is about consumer behavior consisting of perceived ease of use, perceived usefulness, perceived privacy and security of transaction, need for touch and electronic word of mouth. The third part is about consumer purchase intention. The questions in these two parts are the 5-point Likert scale varying from "1-Strongly disagree", "2-Disagree", "3-Neutral", "4-Agree", and 5-Strongly agree". In order to obtain the quality of questionnaire, validity and internal consistency reliability were employed. The Cronbach's alpha score as of 0.828 (Hair, 2010).

Data Collection

The data collection is divided into two ways. The first is primary data. In this study, the primary data are gathered through survey method, which is also the most common method used for primary data collection. Millennials in Thailand aged from 22 to 37 are the population of the study. The study sample will include a total of 200 millennials from any region of Thailand. 5-point Likert

scale is the main type of measurement used in the questionnaire. In order to avoid respondents' misunderstanding, the questionnaire for this study will be translated into Thai. A total of 200 questionnaires will be completed and used for the analysis in the research. These questionnaires will be generated by Google Form and requested to fill in online.

The second is secondary data. Secondary data was collected from various credible sources before the collection of primary data. These sources include literature reviews from various national and international journals, newspaper, websites, articles, books, reports, and online database. The secondary data collected helped identify and gave a better understanding of factors influencing the online shopping behavior of consumers.

Data Analysis

Data analysis employed Independent t-Test, One-way Analysis of Variance (ANOVA) and multiple linear regression. The Independent t-Test will be conducted to compare the means of two independent groups which are female and male to determine whether there is a significant difference between data variables. One-way Analysis of Variance (ANOVA) will be used to understand whether purchase intention towards buying consumer electronics online differed by age, education and monthly income. Multiple linear regression will be used to examine the relationship between the independent variables and the dependent variable.

Research Results

General Information of Informants

A total of 200 questionnaires were used for analysis. Among the respondents, 38.5% of them aged between 23-27, 50% aged between 28 - 32 and 11.5% aged between 33-37. The item for gender showed us that there were 127 females and 73 males. According to education level, 55.5% graduated with bachelor's degree, 38% with Master's Degree, 3.5% with Doctoral degree, 2.5% with vocational diploma and 0.5% with high school or lower. Moreover, it was found that most of the respondents have a full-time job accounted to 61.5%, 25.5% are students, 8.5% are self-employed, 2.5% were unemployed and 2% had a part-time job. Moreover, it was found that 34% of respondents had monthly income from 10,000 - 20,000 THB, 27% from 20,001 - 30,000 THB, 14.5% from 30,001 - 40,000 THB, 14% earned more than 40,000 THB and 10.5% earned less than 10,000 THB in a month.

Opinions towards Consumer Behavior of Thai Millennials and Purchase Intention of Electronics Online

The study indicated that millennials in Thailand aged from 22 to 37 had opinions towards consumer behavior in terms of perceived ease of use, perceived usefulness, perceived privacy and security of transaction, need for touch and electronic word of mouth in moderate and high level with mean score as of 4.05, 3.91, 3.33, 4.00 and 3.77 respectively and S.D. as of 0.65, 0.63, 0.72, 0.59 and

0.59, respectively. In the meantime, the purchase intention of electronics online was rated in moderate level with mean score as of 3.24 and S.D. as of 0.81.

Hypotheses Testing

H1: Consumer with different gender, age, education and monthly income had different purchase intention for online electronic products.

General information		Intention for Online Electronic Products		
Gender	T = -3.312	Sig. = 0.001	Accepted	
Age	F = 0.334	Sig. = 0.855	Rejected	
Education	F = 2.047	Sig. = 0.089	Rejected	
Monthly Income	F = 4.083	Sig. = 0.003	Accepted	

The study indicated that consumer with different gender and monthly income had different purchase intention for online electronic products. In the meantime, consumer with different age and education did not have different purchase intention for online electronic products at the significant level as of 0.05.

H2: Consumer behavior in terms of perceived ease of use, perceived usability, perceived transaction privacy and security, need for touch and electronic word of mouth affected purchase intention for online electronic products.

Consumer Behavior	Unstandardized			t	Sig.	Collinearity	
	Coefficients		Standardized			Statistics	
	B	Std.	Beta				Tolerance VIF
Error							
(Constant)	-1.071	0.391		1.603	0.111		
Perceived Ease of Use	0.028	0.078	0.023	0.357	0.721	0.719	1.391
Perceived Usefulness	0.401	0.090	0.312	4.450	0.000	0.583	1.716
Perceived Privacy and Security of Transaction	0.267	0.074	0.237	3.590	0.000	0.657	1.522
Need for Touch	0.298	0.076	0.219	3.924	0.000	0.924	1.082
Electronic Word of Mouth	0.302	0.086	0.222	3.500	0.001	0.716	1.396
$R = 0.666; R^2 = 0.443; \text{Adjusted } R^2 = 0.429; \text{SEE} = 0.60965; \text{Sig.} = 0.000$							

The study indicated that consumer behavior in terms of perceived usability, perceived transaction privacy and security, need for touch and electronic word of mouth affected purchase intention for online electronic products at the significant level as of 0.05.

Discussion

In terms of general information, the study showed that most of respondents from 200 respondents were female, aged between 23-27, graduated with bachelor's degree and earned monthly income from 10,000 - 20,000 THB. In terms of comparison between consumer's general information and opinion towards purchase intention for online electronic products, the study indicated that consumer with different gender and monthly income had different purchase intention for online electronic products. This is because that women will have more likely intention to purchase online products than men. The study matched with Sethna, Hazari, and Bergiel, (2017) mentioned that females were found to be the dominant online holiday season buyer. In addition, people with different income will have different intention to purchase since the purchase relates with income. The study matched with study done by Jotikasthira and Onputtha (2017) who found that monthly income has an association with purchase intention because earning can create the purchasing power. In the meantime, consumer with different age and education did not have different purchase intention for online electronic products.

In terms of opinions towards consumer behavior of Thai millennials of electronics online, the study indicated that millennials in Thailand aged from 22 to 37 had opinions towards consumer behavior in terms of perceived ease of use, perceived usefulness, perceived privacy and security of transaction, need for touch and electronic word of mouth in moderate and high level. In the meantime, the purchase intention of electronics online was rated in moderate level. This is because the technology acceptance is important factor in adapting to use the technology. The consumer who used the internet or application in order to purchase the products online need to understand the technology process and access. Most of the dimensions the consumers consider are perceived ease of use, perceived usefulness, perceived privacy and security of transaction, need for touch and electronic word of mouth (Davis, 1989). In terms of study the effect of consumer's behavior on purchase intention for online electronic products, the indicated that consumer behavior in terms of perceived usability, perceived transaction privacy and security, need for touch and electronic word of mouth affected purchase intention for online electronic products. The study matched with Chang and Chen (2001) who explain that perceived security, together with interface quality, is an important predictor of customer satisfaction on B2C e-commerce websites. Also. The study is similar to the research of Elliot and Fowell (2000) who revealed that the consumers' perception of security-related issues was one of the most important factors in purchasing from a website. In addition, the there is a support study from Kudeshia and Kumar (2017) who examined the social eWOM and proved that positive eWOM influences brand attitude and intention to purchase. According to Yang et al. (2016), reviews

with a positive valence decrease the perceived purchase risk, which in turn improves the attitude towards purchasing and encourages the purchase intention.

Suggestions

Suggestions from Research Results

The findings of this research illustrated that perceived usefulness, perceived privacy and security of transactions, need for touch, and electronic word of mouth could impact on the purchase intention of customers. Therefore, web operators, business owners or marketers of online store can understand the consumer behavior of Thai millennials in order to keep up with the trend to increase sales. Perceived usefulness is an important factor, the company should try to improve usefulness perception of customers. Perceived privacy and security of transactions, the company should use high-security system that could make more secure transactions through websites. Electronic word of mouth is fast but it can be either positive or negative. Online marketers should always maintain the quality of products and services. However, need for touch is another important factor as electronics are perceived to be expensive so customers need to touch and feel before purchase. To make up the disadvantage, online marketers should build a good reputation to make customers feel secure to buy electronics online.

Suggestions for Further Research

This study focused on quantitative research which collected information through using questionnaire. Therefore, the future study should apply the qualitative research method by using in-depth interview technique or observation at the consumers in order to receive insights. In addition, this study focused on consumer behavior affecting purchase decision, which applied technology acceptance model. Therefore, the future study should focus on other factors such as motivation to purchase, digital marketing strategy, and service quality of technology in order to cover the factors affecting consumer purchase decision towards online electronic products. Lastly, the study should expand the study to other samples in other countries and compare its result in the national and cross-national level so that the study can yield wider perspectives of consumer behavior.

References

Aaker, D. A., Kumar, V., Day, G. S., & Lawley, M. (2005). *Marketing Research: The Pacific Rim*. Queensland, Australia: John Wiley & Sons Australia.

Beauchamp M. B., & Ponder N. (2010). Perceptions of retail convenience for in-store and online shoppers. *Marketing Management. Journal.*, 20(1), pp. 49-65

Calisir, F., Elvan Bayraktaroğlu, A., Altin Gumussoy, C., İlker Topcu, Y., & Mutlu, T. (2010). The relative importance of usability and functionality factors for online auction and shopping web sites. *Online Information Review*, 34(3), 420-439.

Citrin, A. V., Stem Jr, D. E., Spangenberg, E. R., & Clark, M. J. (2003). Consumer need for tactile input: An internet retailing challenge. *Journal of Business research*, 56(11), 915-922.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319-40.

Elliot, S. & Fowell, S. (2000). Expectations versus reality: A snapshot of consumer experiences with Internet retailing. *International Journal of Information Management*, 20(5), 323-336.

Hair, J. F., Jr., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis*. Upper Saddle River, NJ: Pearson Prentice Hall.

Hatch O. G. (2000). *Privacy in the digital age: A resource for internet users*. U.S. Senate Judiciary Committee, Retrieved from <http://judiciary.senate.gov/privacy.htm>

Hollensen, S. (2014). *Global Marketing*. Harlow. England: Pearson.

Jotikasthira, C. & Onputtha, S. (2017). Factors Associating with Purchasing Decision of Gems and Jewelry and Possible Implication of Online Marketing to Empowering Entrepreneur's Sale Performance. *International Journal of Applied Computer Technology and Information Systems*, 7(2).

Kau, A.K., Tang, Y.E. & Ghose, S. (2003). Typology of online shoppers. *Journal of Consumer Marketing*, 20, 139-156

Kim, J., & Forsythe, S. (2010). Factors affecting adoption of product virtualization technology for online consumer electronics shopping. *International Journal of Retail & Distribution Management*, 38(3), 190-204.

Kotler, P. & Armstrong, G. (2008). *Principles of Marketing* (12th ed.). New Jersey: Prentice Hall.

Kudeshia, C., & Kumar, A. (2017). Social eWOM: does it affect the brand attitude and purchase intention of brands?. *Management Research Review*, 40(3), 310-330.

Liu, W., & Ji, R. (2018). Examining the Role of Online Reviews in Chinese Online Group Buying Context: The Moderating Effect of Promotional Marketing. *Social Sciences*, 7(8), 141.

MacInnis D. J. & Folkes V. S. (2010). The disciplinary status of consumer behavior: A sociology of science perspective on key controversies. *Journal of Consumer Research*, 36, 899-914

Nava-Macali, J. (2016). Knowledge on the Use and Benefits of E-Commerce. *Global Advanced Research Journal of Management and Business Studies*, 5(5), 124-128.

Purnawirawan, N., Eisend, M., De Pelsmacker, P., & Dens, N. (2015). A meta-analytic investigation of the role of valence in online reviews. *Journal of Interactive Marketing*, 31, 17-27.

Robinson, H., Riley, F.D., Rettie, R., & Rolls, W. G. (2007). The role of situational variables in online grocery shopping in the UK. *The Marketing Review*, 7(1), PP.89-106.

Roy MC, Dewit O & Aubert AB (2001). The impact of interface usability on trust in web retailers. *Internet Research*, 11(5): 388–398

Sethna, B. N., Hazari, S., & Bergiel, B. (2017). Influence of user generated content in online shopping: impact of gender on purchase behaviour, trust, and intention to purchase. *International Journal of Electronic Marketing and Retailing*, 8(4), 344-371.

Smith, H.J., Milberg, S.J., & Burke, S.J. (1996). Information privacy: Measuring individuals' concerns about organizational practices. *MIS Quarterly*, 20(2), 167–196.

Sultan, F., & Henrichs, R. B. (2000). Consumer preferences for Internet services over time: initial explorations. *Journal of consumer marketing*, 17(5), 386-402.