

Online Purchase Intention: Explorations of the Facebook Users' Psychological Factors

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ABSTRACT

The social media usage in this era is not only for communication with others, but also as a platform for many businesses to promote and sell their product online. Facebook is one of the biggest social media network among marketers due to the innovativeness and effectiveness after the existence of e-commerce. Therefore, this study aims to examine the relationship between the psychological factors of Facebook; trust, privacy and security and online purchase intention. 396 Malaysian Facebook users were involved in this study by using purposive and convenience sampling method. The findings show that Trust, Privacy and Security have positive significant relationships with the Online Purchase Intention while the Security has the strongest significant impact on Online Purchase Intention. This study provides an understanding of how to develop strategies to engage with Facebook users. By engaging in the sharing of information with consumers the marketing approach can be implemented effectively.

Key Words: Online Purchase Intention, Trust, Privacy, Security, Facebook.

INTRODUCTION

Connecting individuals to others is among the most effective and significant business development of the 21th century. As recorded by Internet World Stats (2016), the world internet usage and population statistics as updated on June 30, 2016, there were 3,675,824,813 of people who accessing the Internet. The rate of access to social media on daily basis will affect the success of marketers engage users on social media (Smith, 2011). This means that majority of people nowadays make the social media as part of their life (Saxena & Khanna, 2013) and one of them is Facebook. Since the number of Facebook users growing worldwide, it is necessary for communication managers to understand online consumer behavior on their intention to purchase the goods and services.

Facebook

Facebook is the most popular social media network worldwide and has the top ranking among other social media platform (The Statistic Portal, 2016). It was found by Mark Zuckerberg as the Chief Executive Officer of Facebook since 2004 with education background from Harvard University. A lot of advantages and disadvantages of Facebook that were concluded by people around the world especially the Facebook users themselves. According to Scott (2013), there were more than 6 million of Facebook consumers who registered to buy and share information about products and 60 percent of them say that after following brands and products on Facebook, they are more able to recommend a product or

service to their friends (Parson, 2013). As stated by Kunkel (2013), there were 51 percent of users who buy different products through Facebook. Furthermore, Facebook can achieve more than one task and assisting the way of communication and sharing different information such as comments, thoughts, videos and images (Kietzmann, Hermkens, Mccarthy & Silvestre, 2011).

In Malaysia, out of 18.62 million Malaysians on the social media platform in 2017, there were 11.9 million people are Facebook users as updated on third quarter of 2017 (The Statistic Portal, 2017). With the increase of Facebook users, it could encourage online marketers to enhance their sales, and attract users to buy the products.

However, there are also weaknesses when it comes to ‘purchase abandonment (Kim, Lee and Kim, 2004). Online shoppers have a very high degree of trust because before make any purchase, they want to see, feel, and touch the online products with their own eyes and hands. This problem makes them hesitate and distract their intention to purchase online. Due to several trust matters, caused Personal Data Protection Act 2010 (PDPA) to be established in Malaysia. This signifies why this element should be included into Facebook Commerce (Cheong, Lim, Sei & Tan, 2015).

The case is fabricated by a study by Wong (2014). Besides, doubts about transaction capabilities or payment procedures are also undeniable as each payment transaction that uses the Internet and not over the counter will make online buyers hesitate to make payment transactions. Furthermore, the problem of poor interface features also affect the purchase intention of all internet shoppers out there. This is because, according to Kearney (2001) with the factors of poor interface features of the website, about 82 percent of internet shoppers left online retailers’ website without finishing their transaction. Therefore, this study aims to investigate the online purchase intention by using Facebook as social media platform to purchase online.

REVIEW OF THE LITERATURE

Online Purchase Intention

Purchase intention will occur when an individual plan to buy or purchase commodity or service in the future. According to Huang and Su (2011), purchasing intention may be classified as a component of a consumer’s cognitive behavior revealing the way an individual intends to purchase a specific brand. In the context of E-Commerce, online purchase intention can be defined as a situation when a person desires to buy a particular product or service through the website (Chen, et al., 2010). Consistent with that, online purchasing intention is the context to which a customer shows readiness to undertake an online transaction (Ling, Chai & Piew, 2010).

Several researchers have discovered that the reputation of the seller often has a positive and statistically significant impact on the consumers’ willingness to implement online purchase (McDonald & Slawson 2002; Melnik & Aim, 2002). Kim and Hong (2010) declared that an online website should understand the customers’ purchasing behavior in order to build and maintain the good relationship with customers. Jamil and Mat (2011) proposed that purchase intention may have a positive influence on actual online purchasing

and recommended to further investigate on the relationship between these two variables in future studies.

Trust

Trust is referred as the purchaser insight towards internet retailer's self-destructive considerations and conduct in view of their ability, benevolence and genuineness (Guo, Wang & Wang, 2012). As the online transactions are viewed as more risky, the sense of trust can reduce the fear of uncertainty in purchasing online, thus eliminate the psychological concern of customers about the e-retailers' behaviour (Mohseni & Sreenivasan, 2014). When there is more information about the product or service in the website, customer will gain more trust to purchase. This is because, Facebook permit users to share information about certain products and services (Fatemeh, Zuraini & Shanmugam, 2013).

A quantitative study by Cheng and Yee (2014) has been carried out by distributing online questionnaires to 250 Malaysian university students aged between 20 to 29 years old, who possess experience in online purchases and the result indicated that trust is significant in explaining the proportion of online purchase intention. Other reviewed by Delafrooz, Paim & Khatibi (2011) signified that trust as one of the precursors and the hugest factor affecting online purchase intention. A study by Cheng and Yee (2014), trust was reported has significant relationship with online purchase intention. This result was supported by Chai et al. (2011) and also Mohseni and Sreenivasan (2014). Therefore, this study should comprise trust as an issue that contribute to online purchase intention.

Privacy

Privacy is mostly concerned with the identifiable user data and users' rights to have control over their data (Mekovec & Hutinski, 2012). According to Boyd and Ellison (2008), privacy matters concerns of unintended exposure of personal information, rumors and gossip that can bring down other users reputation, use of personal data by third-parties, hacking and identity theft, unwanted contact and harassment or stalking, and surveillance-like structures due to backtracking functions.

A study by Debatin, Lovejoy, Horn, and Hughes (2009), the result showed that if Facebook users reported an invasion of personal privacy, users are more likely to change privacy settings than if they reported hearing of an invasion of privacy happening to others. This study was to investigate Facebook users' awareness of privacy issues and perceived benefits and risks of utilizing Facebook. Furthermore, past studies showed that there were positive relationship between the percentage of privacy and security and consumers' online purchase probabilities (Chang & Chen, 2008). Similar findings were made by Chen et al. (2010) who advise that privacy controls are needed to eliminate privacy concerns of online shoppers. Privacy is the ability of customers to share data by means of the Internet that enables purchase to be chosen. There are study examines that have tended to privacy as factor that influence online purchase intention (Belanger et al., 2002; Tariq & Eddaoudi, 2009).

Security

Security is one of dominant factors that influence the consumer to purchase online. As stated by Mekovec and Hutinski (2012), security is a level of assurance that a particular transaction will be performed without any security breach. The role of information security is to implement the mechanisms that will grant one's rights to privacy. On the other hand, security provides the physical, logical, and procedural safeguards that are needed to keep the data private. As stated in The Statistical Portal (2016), security is the most matters concerned

by U.S. social media consumers when it comes to purchase online with the highest percentage of 76.27 percent compared to other matters. Security matters happened when purchasing product through Facebook with no specific guidelines requirement from sellers in Facebook. Besides, there are no buyer protections if the sellers did not fulfill what they have promised to the buyers (Nenonen, 2006).

Perception of security risk had seen inversely significant to online purchase intention based on the study by Wright (2016). This means that the higher risk of security, the lower level of online purchase intention. The study's objective was to investigate the relationship between the consumers' sense of security of online store and online purchase intention from the store by using convenience sampling method. 200 respondents from researcher's institute aging between 18 to 23 years old and grades freshmen to fifth-years seniors. The response rate was 90 percent since the survey done in class.

Based on the discussion, we offer the following hypotheses:

- H₁** = There is a significant relationship between trust of Facebook and online purchase intention.
- H₂** = There is a significant relationship between privacy of Facebook and online purchase intention.
- H₃** = There is a significant relationship between security of Facebook and online purchase intention.
- H₄**= Trust is the most significant predictor of psychological factors that most influence the significant on online purchase intention.
- H₅**= Privacy is the most significant predictor of psychological factors that most influence the significant on online purchase intention.
- H₆**= Security is the most significant predictor of psychological factors that most influence the significant on online purchase intention.

METHODOLOGY

Population, Sample size and Instrumentation

The population of the study was Malaysian Facebook users. There are 11.9 million people of Malaysian Facebook users as updated on third quarter of 2017 by The Statistic Portal. 384 samples were set using purposive sampling as recommended by Krejcie and Morgan (1970).

The instrument was designed by adopting the items from various sources based on the previous studies. The items for trust, privacy and security were adapted from Adnan (2014) and Gupta & Dhama (2015) while the online purchase intention item was adopted from Duffett (2015). All the items were measured using five items rated on a 5-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree). In order to get a large number of respondents, the online survey was utilized by using google form as a platform. The survey link was sent to the identified groups of respondents via Facebook Chat and WhatsApp application. Face and content validity procedure was performed by the experts in the field.

Respondents' Demographic Profile

Using online survey, the number of respondents was exceeding the expectations. Out of 419 responses, 396 questionnaires were fully completed and acceptable. The respondents' profiles are depicted in Table 1.

Table 1 below showed the demographic summary for this study. Out of 396 respondents, there were 151 male and 245 female. Female got the highest percentage as always with 61.9 percent while male got 38.1 percent. This study was supported by Alexandra et al. (2013) which reported more than half of the respondents were female with percentage of 64 percent. Furthermore, females were reported actively participated in S-commerce in Pakistan rather than males (Sangi, Shuguang & Prince, 2017).

Table 1: Demographic Profiles of the Respondents

<i>Facebook Usage Characteristics</i>	<i>Freq</i>	<i>%</i>
Gender		
Male	151	38.1
Female	245	61.9
Total	396	100
Ages		
21 and below	46	11.6
22 – 30 years old	277	69.9
31 – 40 years old	62	15.7
41 – 50 years old	9	2.3
51 years old and above	2	.5
Total	396	100
Intention to purchase online		
Yes	246	62.1
No	150	37.9
Total	396	100
Frequencies would purchase online per month by using Facebook		
0- 2 times	299	75.5
3- 4 times	47	11.9
5- 6 times	28	7.1
7 times and above	22	5.6
Total	396	100

For the age groups, 277 respondents came from 22 to 30 years old with the percentage of 69.9 percent. This group of respondents was in categories of millennials which very suitable to be study objects since this group is in Facebook generation as stated by Dotson and Hyatt (2005) and Berndt (2007). 62 of them from the age of 31 to 40 years old with the percentages of 15.7 percent while there were 46 respondents from the group of 21 and below and nine respondents from age of 41 – 50 years. However, only two persons were 51 years old and above with the percentage of 0.5 percent.

For the intention to purchase online by using Facebook, 246 of respondents have intention to purchase online by using Facebook with the greatest percentage of 62.1 percent. Meanwhile the rest did not have intention to purchase online by using Facebook with percentages of 37.9 percent.

Furthermore, out of 396 respondents, 75.5 percent (299 respondents) claimed that the frequencies they will purchase online by using Facebook as per month was 0 to 2 times, 11.9 percent (47 respondents) chose to purchase 3 to 4 times, 7.1 percent (28 respondents) chose

to purchase from 5 to 6 times and the rest chose 7 to above times. This concluded that the most frequency for Facebook users to purchase online is from 0 to 2 times.

RESULTS AND FINDINGS

Factor Analysis, and Correlation Analysis

After undergoing the Factor Analysis, using the Principal Component Analysis and the Varimax Rotation Method with Kaiser Normalization, three factors emerged for independent variables. These three factors represent the basis for an understanding of the psychological factors on online purchase intention by using Facebook as the platform. For the first factors named trust, second name is privacy and the third name is security. The results of the analysis showed that the KMO value of 0.941 indicated the appropriateness factor analysis to be conducted. The values for MSA had the range of .917-.962, signifying the sampling adequacy for each item. Originally, 22 items were used to measure online purchase intention. However, only 15 items were retained. Three components were produced with removal of seven items (T6, T7, T8, T9, P1, P6, and S1) due to high cross loadings. The first component represented items from security, thus, the name of security was used. Second, the component represented items from trust, therefore the name of trust was retained. The last component comprised of items reflecting privacy, therefore the name of privacy was used. All of items displayed high values (between 0.5 and 1.0) indicated that the factors were relevant. The result was shown as depicted in Table 2 and Table 3.

Table 2 : Results of Factor Analysis for Psychological Factors

Items	Component		
	1	2	3
I believe that this Facebook site usually fulfils the commitments it should undertakes.		.650	
I am confident with the promises made in the Facebook site.		.808	
I trust this Facebook site never make false statements.		.767	
Facebook site is characterized by the frankness of the services that it offers to the consumer.		.774	
Facebook site is characterized by clarity of the services that it offers to the consumer.		.716	
I feel safe when I share personal information to Facebook site.			.735
I am confident that Facebook site complied by personal data protection laws.			.701
I believe that Facebook site treats buyer’s personal information with respect at all time.			.676
Facebook site will not reveal my personal information to other companies without my consent.			.646
Facebook site shows great concern for the security of any transactions.	.705		
Facebook site has sufficient technical capability to ensure that no other organization will misuse buyer’s personal information.	.765		
I feel secured to establish my personal information with Facebook site.	.694		
I am sure the information that I share in Facebook site will not be intercepted by unauthorized parties.	.737		

Facebook site has sufficient technical to protect buyer purchase online from hackers.	.744		
I believe the Facebook site has the security to ensure buyer's information cannot be modified.	.762		
<i>Variance Explained (%)</i>	28.699	22.819	19.316
<i>Kaiser-Meyer-Olkin Measure Of Sampling Adequacy.</i>			.941
<i>MSA</i>			.917- .962
<i>Bartlett's Test Of Sphericity</i>	<i>Approx. Chi-Square</i>		4227.577
	<i>df</i>		105
	<i>Sig.</i>		.000

Table 3 : Items Removed for Psychological Factors

Questi ons	Items
Trust	
T6	I trust the advice and recommendations of testimonial given through this Facebook site are benefit both seller and buyers.
T7	I believe Facebook site considers with the present and future interests of its users.
T8	Facebook site will not do anything intentional that would prejudice the user.
T9	I am confident that Facebook site is a capable platform in the marketing of any products.
Privacy	
P1	Facebook site shows concern for the privacy of its users.
P6	Facebook site sends advertising e-mail only with the user's consent.
Security	
S1	Facebook site has mechanisms to ensure the safe transmission of its users' information.

For dependent variable, a total of nine items were used. Based on the results of factor analysis below, the value of KMO of .926 showed sampling adequacy for factor analysis to be conducted. The MSA values range from .871- .955 supported the sampling adequacy for each item. The outcome indicated that there was no item being removed due to no cross loadings or no item loaded on different components from original conceptualization and items were retained to form a clear factor structures. All of items displayed high values (between 0.5 and 1.0) indicated that the factors were relevant as depicted in Table 4.

Table 4 : Results of Factor Analysis for Online Purchase Intention

Items	Component 1
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I will buy products that are advertised on Facebook in the near future.		.710
I am attracted to buy products that are promoted on Facebook.		.794
Advertisements on Facebook may increase purchase intention of featured brands.		.824
Interesting advertisements on Facebook have a positive influence on my purchasing decisions.		.860
I would buy the products that are advertised on Facebook if I have the money.		.839
I intend to acquire products that are promoted on Facebook.		.850
I am likely to buy some of the products that are promoted on Facebook if the price are reasonable.		.863
I plan to purchase the products that are advertised on Facebook if the products are beneficial.		.824
Advertisements on Facebook attract me to buy many different brands of products.		.859
<i>Variance Explained (%)</i>		68.238
<i>Kaiser-Meyer-Olkin Measure Of Sampling Adequacy.</i>		.926
<i>MSA</i>		.871- .955
<i>Bartlett's Test Of Sphericity</i>	<i>Approx. Chi-Square</i>	2879.010
	<i>df</i>	36
	<i>Sig.</i>	.000

Reliability Test

Cronbach’s Alpha was used to check the reliability of the total 15 items that used in the measurement of the four variables. As shown in Table 5, all the items measured for the five variables found to be highly reliable with the Cronbach’s Alpha values in the range of .875 to .941.

Table 5 : Results of Reliability Analysis

Variables	No of Items	Cronbach’s Alpha
<i>Psychological Factors (IV)</i>		
Trust	5	.875
Privacy	4	.878
Security	6	.917
<i>Online purchase intention (DV)</i>	9	.941

Correlation Analysis

Using correlation analysis, the associations between variable were tested. As shown in Table 6, trust, privacy and security have positive relationship with online purchase intention and they were considered moderate correlations (0.40-0.7). H₁, H₂ and H₃ were accepted as depicted in Table 6..

Table 6: Correlation Analysis

No	Variables	1	2	3	4
1	Trust	1			
2	Privacy	.652	1		
3	Security	.638**	.787**	1	
4	Online Purchase Intention	.455**	.469**	.533**	1

** . Correlation is significant at the 0.01 level (2-tailed).

Multiple Linear Regression analysis was used to identify the strongest predictor of online purchase intention among trust, privacy, and security. As depicted on Table 7, security had the highest impact on online purchase intention with beta value, $\beta = .373^{**}$. Therefore, researcher could concluded that security was the most significant predictor to online purchase intention among all the independent variables and only H_6 is accepted.

Table 7 : Multiple Regression between Psychological Factors and Online Purchase Intention

Independent variables	Coefficients		
	Standard Coefficient Beta	T	Sig
<i>Psychological factors (IV)</i>			
Trust	.178*	3.088	.002
Privacy	.060	.836	.404
Security	.373**	5.277	.000
R square	.308		
F	58.040		
Sig of F value	.000		
Durbin Watson	1.665		

DISCUSSIONS AND CONCLUSIONS

This study found that trust, security and privacy have positive significant relationship with online purchase intention, ($r = .455^{**}$, $r = .469^{**}$; $r = .533^{**}$) thus all the hypotheses were accepted. There are some studies stated that trust is an important factor that contribute consumers to purchase online because trust can reduce the hesitation of both online and offline purchasing intention (Richard & Guppy, 2014). It is supported by the previous study that privacy is another factor that contribute to online purchase intention since there were consumers that willing to share their information in the internet in order to make purchase decision. Moreover, this study also reflected to a study by Tsai and Yeh (2010) which declared that perception of security by customers toward online business have major concern of decision making process.

By using Multiple Linear Regression, the result shows that only security has significant effect and with the highest value of beta, it made security as the strongest predictor to online purchase intention. It indicates that security was the most significant influencer among other IVs. According to Nielsen (2011), security was one of the most significant factors concern for online purchaser to purchase online. His study showed that seven out of ten customers willing to spend more via online if the safety elements are better and stronger.

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