Online Experience from Shopping Applications and the Impacts on Repeat Usage and Word-of-Mouth Intention

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ABSTRACT

This research aimed to explore the influences of online shopping experience in terms of relative advantage, perceived enjoyment and personalization on consumers' repeat usage intention and word-of-mouth intention. The questionnaires were completed by 212 private university students using purposive sampling. The descriptive statistics was used to analyze the descriptive data and structural equation modeling was used to test the hypotheses. Most respondents were female. Most of them used Shopee application to make a purchase and fashion items were most bought online. The independent variables consisted of relative advantage, perceived enjoyment and personalization. The dependent variables were behavioral intention and word-of-mouth intention mediated by consumer satisfaction. The hypotheses were supported by the data set except that relative advantage did not have a significant impact on satisfaction.

Keywords: Online Shopping, E-Commerce, Application, Word-of-Mouth

INTRODUCTION

Consumers have increasingly shopped online through various platforms, especially shopping applications (Tunsakul, 2020). Shopping application is an e-commerce technology that enhances customer shopping experience and provides personalized products and services (Roy et al., 2017). Shopping applications popular among Thai shoppers include Lazada, Shopee, Big C Plus, SHEIN, TikTok Seller, Lotus's, Thisshop and ONESIAM (MobileAction, 2022).

Shopping applications like Lazada and Shopee allow buyers to meet various sellers, offer buyers personalized experience by suggesting products that they may be interested in, and provide daily or monthly special offers such as discounts and coupons.

According to Roy et al. (2017), a study of smart retail experience which has limited empirical evidence can help to contribute to information system and marketing literature. Therefore, the author is interested in exploring the influences of smart retail experience via shopping applications on customer behavior to add on empirical evidence to marketing or digital marketing field of study.

CONCEPTUAL FRAMEWORK AND RESEARCH HYPOTHESES

Independent Variables: Smart Retail Experience (Relative Advantage, Perceived Enjoyment, and Personalization)

Roy et al. (2017) defined smart retailing as "an interactive and connected retail system which supports the seamless management of different customer touchpoints to personalize the customer experience across different touchpoints and optimize performance over these touchpoints." Smart retailing helps to anticipate consumer needs, make recommendations based on consumer interactions and enable customers to navigate through their purchase decision journey seamlessly (Roy et al, 2017; Gretzel et al., 2015). Roy et al. (2017) proposed that smart retail experience includes relative advantage, perceived enjoyment, and personalization. Relative advantage refers to the degree at which the technology is perceived as better than the available technologies in the market (Lu et al, 2015). Perceived enjoyment refers to an affective aspect related to the extent to which pleasure or enjoyment is perceived by consumer using the smart retail technology (Choi & Park, 2014). Personalization refers to the ability of the smart retail technology to offer personalized and customized services to consumers (Neuhofer et al., 2015).

Mediatior: Satisfaction

Satisfaction is the customer's fulfillment response, as well as a judgment that a product or service feature, or the product or service itself, provides a pleasurable level of consumption-related fulfillment (Zeithml et al., 2016). Zeithml et al. also verified that customer satisfaction is influenced by product and service features, customer emotions, attributions for service success or failure, perceptions of equity or fairness, other customers, family members, and coworkers.

Studies by Roy et al. (2017), Morgan-Thomas and Veloutsou (2013), and Kumar et al. (2013) revealed that customer satisfaction was positively influenced by smart retail experience. However, the results did not display the relationship between each dimension of smart retail experience and satisfaction. Therefore, the following hypotheses are proposed:
H1: Relative advantage significantly influences satisfaction.
H2: Perceived enjoyment significantly influences satisfaction.
H3: Personalization significantly influences satisfaction.

Dependent Variables: Behavioral Intention (Repeat Usage Intention) and Word-of-Mouth Intention

The behavioral intention represents a customer's likelihood to repeat his or her behavior toward using a product or a service in the future (Zeithaml et al., 2016). According to Chu & Lu (2007), behavioral intention is determined by the perceived value based on an overall assessment of the costs and benefits of a given market offering. The studies by Roy et al. (2017) and Zeithaml et al. (2016) also indicated that customer satisfaction enhanced behavioral intention. A hypothesis is then proposed:

H4: Satisfaction significantly influences repeat usage intention.

Word-of-mouth (WOM) has been said to have a strong influence on consumer choice (Casalo et al., 2008). WOM can be influenced by new, innovative and unique products (Berger & Scwartz, 2011). Previous studies show that WOM is positively influenced by satisfied

customers (Casalo et al., 2008; Roy et al., 2017). Therefore, a hypothesis is proposed:

H5: Satisfaction significantly influences WOM intention.

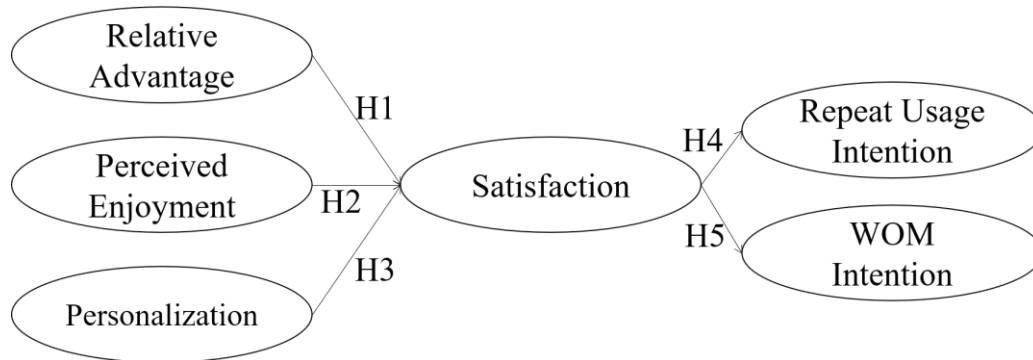Figure 1 represents the conceptual model of this study, depicting relationships among all the hypotheses.

Figure 1: The Conceptual Model

RESEARCH METHODOLOGY

Respondents of the study

The target population was a private university's undergraduates who used applications to shop online, and owned a smart phone, tablet or personal computer. The selection of target respondents was based on purposive sampling method, which depends on the researcher's judgment that the sample would represent the target population. The target respondents were the author's students. 212 respondents were eligible to respond to and complete the questionnaire, which was sufficient for the minimum requirement (150-400 respondents) of using Structural Equation Modeling (SEM) as an analytical tool (Hair et al., 2006).

Research instruments / Questionnaire

There were totally 21 scale questions regarding all the variables. Table 1 shows list of variables and sources of measurement items, and Cronbach's alphas. The respondents were asked to indicate their response for all questions on the scale of 1 to 5 including 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree to 5 = strongly agree. According to Table 1, the Cronbach's alphas for all measurement items (n = 212) of each variable range from 0.825 to 0.914, which are acceptable according to Maholtra (2007).

Table 1. Summary of Reliability Statistics, n = 212

Variables	Measurement Items	Cronbach's Alphas
Relative Advantage	1) The application I frequently use is more convenient than others 2) The application I frequently use is easier to use compared to others	0.854

	3) The application I frequently use gives me a better shopping experience 4) The application I frequently use offers consistent results over time.	
Perceived Enjoyment	1) I have fun interacting with the application I frequently use 2) The application I frequently use provides me with a lot of enjoyment 3) I enjoy using the application I frequently use	0.914
Personalization	1) The application I frequently use offers me personalized services 2) The application I frequently use understands my specific needs 3) The application I frequently use is customized to my needs	0.846
Satisfaction	1) Overall, I am satisfied with the application I frequently use 2) The application I frequently use exceeds my expectations 3) The application I frequently use is close to my ideal technology	0.825
Repeat Usage Intention	1) Given a chance, I intent to continue using the application 2) I am willing to use the application in the near future 3) I will frequently use the application 4) I will continue using the application in the near future	0.904
Word-of-Mouth (WOM) Intention	1) I would like to introduce the app to others 2) I would speak favorably about the app to others 3) I would say positive things about the app to others 4) I would assist other customers with the app I am using if they need my help	0.869

RESEARCH RESULTS

Demographic profile of the respondents

The demographic profile in this study comprises two main sections including gender, and most frequently used shopping applications. Table 2 shows the descriptive data of the respondents.

Table 2. The Demographic Profile of the Respondents

Demographic Profile of the Respondents		**Descriptive Statistics**	
		Frequency	**Percent**
Gender	Male	73	34.4
	Female	139	65.6
	Shopee	180	84.9
	Lazada	21	9.9

Most Frequently Used Shopping Applications	Pomelo	3	1.4
	SHEIN	3	1.4
	Others (e.g. Tiktok Seller)	1	0.5

From table 2, out of a total of 212 respondents, the majority were female (139, or 65.6 %), while 73 respondents (34.4 %) were male. The data reflected that Shopee ranked number one among the respondents (180, 84.9%).

Confirmatory Factor Analysis (CFA)

Table 3 shows summary of fit indices of measurement model. The CFA results from this study (Table 3) with the use of modification fit indices show that the model fits with the dataset, χ^2(n = 212, df = 191) = 1.978, p < 0.05 and GFI shows quite acceptable fit, which is close to 1 (0 = poor fit, and 1 = perfect fit). For the Root Mean Square Error of Approximation (RMSEA), the smaller values indicate better model fit. The result shows the value of 0.068 while values ranging from 0.05 to 0.08 are considered acceptable, values from 0.08 to 0.10 indicate mediocre fit, and those greater than 0.10 indicate poor fit (Ho, 2006). In addition, baseline comparisons fit indices of NFI, RFI, IFI, TLI, and CFI show improvement in fit for the hypothesized model (default model) compared to the null model (from 0.900), from 0.053 (1-0.947) to 0.123 (1-0.877) appearing to be small as to be of little practical significance.

Table 3. Summary of Fit indices of Measurement Model

	Measures of Absolute Fit			Measures of Incremental Fit				
	χ^2/df	RMSEA	GFI	NFI	RFI	IFI	TLI	CFI
Rules	< 2.0	Acceptable at 0.05 - 0.08	Close to 1	0.900	0.900	0.900	0.900	0.900
Model	1.978	0.068	0.865	0.898	0.877	0.947	0.935	0.946

Hypothesis Testing

The results of SEM as shown in table 4 indicate that the unstandardized regression weights are significant by the critical ratio test (C.R. > ±1.96, p < 0.05) except the relationship between relative advantage and satisfaction (C.R. = 1.921, p = 0.055). However, this appears to be a very small difference from the significance level.

Table 4: A Summary of Hypothesis Testing

Hypothesis	Unstandardized Coefficients		Standardized Coefficients	Critical Ratio (CR)	p-value	Hypothesis Supported
	B	Std. Error	Beta			
H1: Relative advantage significantly influences satisfaction.	0.098	0.051	0.117	1.921	0.055	No
H2: Perceived enjoyment significantly influences satisfaction.	0.182	0.049	0.275	3.735	0.000	Yes

H3: Personalization significantly influences satisfaction.	0.533	0.077	0.657	6.960	0.000	Yes
H4: Satisfaction significantly influences repeat usage intention.	0.997	0.099	0.863	10.056	0.000	Yes
H5: Satisfaction significantly influences WOM intention.	0.777	0.098	0.836	7.932	0.000	Yes

Figure 2 shows the structural path model with hypotheses 1 to 5. The solid lines represent the hypotheses supported by the findings while the dot lines represent those not supported by the findings. According to the structural path model, relative advantage of the application had no significant impact on satisfaction (β or standardized regression weight = 0.117, p > 0.05). Perceived enjoyment significantly influences satisfaction (β = 0.275, p < 0.001). Personalization significantly influences satisfaction (β = 0.657, p < 0.001). Satisfaction significantly influences repeat usage intention (β = 0.863, p < 0.001). Lastly, satisfaction significantly influences word-of-mouth intention (β = 0.836, p < 0.001). The explained variances for all independent variables are represented by the squared multiple correlations (R^2). The percentage of variance explained ranges from 0.700, or 70% (word-of-mouth intention) to 0.939, or 93.9% (satisfaction). For all measurement variables, the residual variances ($1-R^2$) ranged from 6.1% to 30%, meaning that 6.1% of variation in satisfaction, 25.5% of variation in repeat usage intention and 70% of variation in word-of-mouth intention were influenced by other factors.
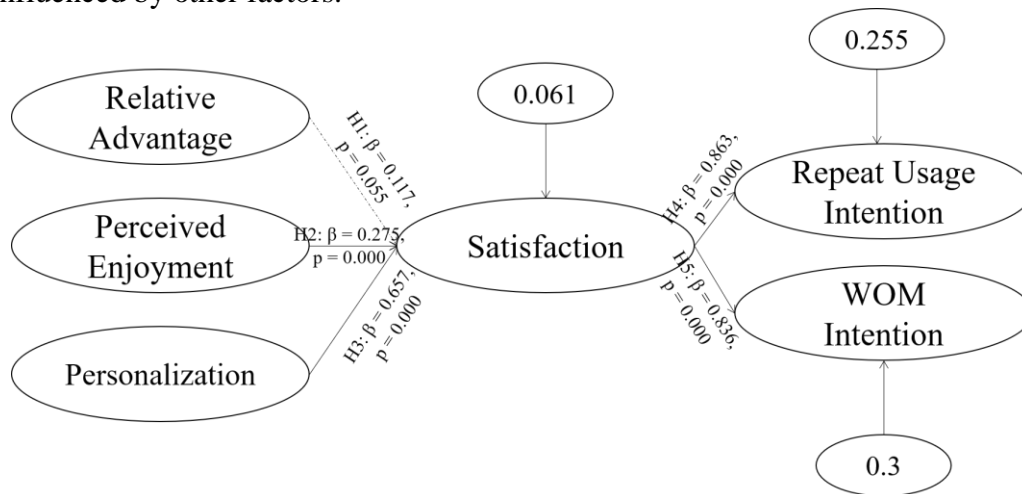

Figure 2. Structural Path Model with the Summary of Findings

DISCUSSIONS AND CONCLUSIONS

The study has fulfilled the research objective. The results show significant relationships between variables except the relationship between relative advantage and satisfaction. Nevertheless, shopping application developers should still consider relative advantage as it does not considerably differ from the significance level (p = 0.055 compared to 0.05).

This study provides some useful implications for e-commerce and online shopping behavior. Shopping applications should be convenient and easy to use, should provide a good user

experience, and should offer consistent results over time. Developers should also consider making users enjoy using their applications, for example, by offering mini games for users to collect coins in exchange for discounts. Moreover, enhancing personalization will highly enhance user satisfaction according to the research result which shows a very high regression weight on the relationship between personalization and satisfaction. Enhancing user satisfaction will therefore lead to repeat usage intention and word-of-mouth intention.

Limitations and Suggestions for Further Research

The main limitation of this study is that the respondents are all Thai nationals and adolescents, which may not represent application users in general. Future research is encouraged to expand other groups of consumers. In addition, other variables need to be further explored.

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