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# What Fashion Shoppers Want from M-Commerce: An Integration of Cognitive and Affective Factors to Explain Satisfaction and Loyalty

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#### **Abstract**

Due to current situation, huge growth rate of mobile users, it is undeniable that M-Commerce has become a huge opportunity as a distribution channel for many firms. In Thailand, fashion product is the most famous product selling online. From the uniqueness of fashion product, emotion is among the factors believing to have impact on satisfaction and loyalty in this context. Nevertheless, from prior research, affective factor (i.e. emotion) has not been integrated with other cognitive factors to explain the satisfaction and loyalty in M-Commerce. The author proposed new model integrating the affective factor with cognitive variables to better explain satisfaction and loyalty in M-Commerce. To emphasize the uniqueness of what fashion shoppers want from M-Commerce, the author compared the impact of the factors on satisfaction and loyalty for general product versus fashion product. Structural Equation Modelling (SEM) with multi-group techniques was employed to test the hypotheses. The results illustrate that the different types of product leads to different in factors affecting shoppers' responding outcomes. Firms in fashion and M-Commerce industries can use the proposed model and the results of this study to obtain long- term benefit from effective improving of their customer satisfaction and loyalty.

Keywords: M-Commerce, Mobile Shopping, Fashion, Emotion, Satisfaction, Loyalty

#### 1. Introduction

According to Electronic Transactions Development Agency (Public Organization), or ETDA, in 2016, the total value of E-Commerce market in Thailand has surpassed 2.5 billion baht or about 40% of purchasing value of all products and services (ETDA, 2016b). In addition, more people use their mobile devices to search and to buy product online every day, this is due to an explosive growth of mobile subscription reaching 90.94 million or equal to 133% of the Thailand population (Kemp, 2017), and smartphone is the most famous device people using to access to the internet (ETDA, 2016a). Therefore, at present, Mobile Commerce (M-Commerce) is a huge opportunity as a role of distribution channel for business. As a result, many E-Commerce providers expand their business to M-Commerce.

Among several products available online, in Thailand, fashion product (e.g. apparel, bag, shoes, and accessary) has been accepted as the most famous product people buying online (ETDA, 2015). This is a great opportunity for firms in the fashion and e-commerce industries to use online channel to sell this fascinating products, especially via M-Commerce. That is the reason why there are many players selling fashion product online and also many firms provides mobile shopping applications to sell fashion items. This creates convenience to the fashion shoppers, due to many choices of websites and mobile applications selling fashion items, for instance ZALORA, LAZDA, Line Shop, and 11street.

Nevertheless, many choices available also mean that shoppers can easily switch the brand of websites or applications to buy the fashion product. As a result, knowing what shoppers want, in order to keep them satisfy and repurchase the product at the websites or application, is crucial in this context. M-Commerce service providers must not only attract new customers but also retain them to repurchase (Lin & Wang, 2006).

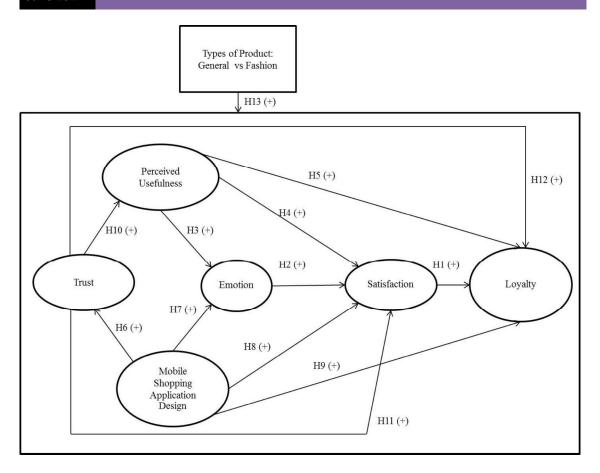
In this intense online competition, in order to maintain competitive advantage and grasp the huge opportunity of selling fashion product, loyalty certainly is an essential tool for the firms doing M-Commerce business, since it provides better financial benefit than finding new customers (Lin & Wang, 2006). Satisfaction is wildly accepted as the main factor affecting loyalty. It had been mentioned that satisfaction is a loyalty's Achilles' tendon (Oliver, 1999). It has been proved by many scholars that once satisfaction increases to a certain level, loyalty rate usually increases (Bowen & Chen, 2001; Oliva, Oliver, & MacMillan, 1992; Shankar, Smith, & Rangaswamy, 2003). Nonetheless, customer satisfaction as a factor itself has been criticized the lack of ability to perfectly explain loyalty, since relationships among other relevant constructs in particular context can play important role (Kumar, Dalla Pozza, & Ganesh, 2013).

According to the concept of consumer response, consumer evaluative judgement process is not only relying on the consumers' cognition, but also depending on their affection (Schiffman & Wisenblit, 2014). Hence, during the evaluation of satisfaction and loyalty, which consider being types of evaluative judgement process, cognitive and affective factors should be considered together to explain the outcomes of the situations. Cognitive part in M-Commerce can comprise of factors that consumers use as their consideration to evaluate the situation. Trust, mobile shopping application design, and perceived usefulness of the application are among important factors that prior researchers have demonstrated in order to create online satisfaction and loyalty (Cyr, Head, & Ivanov, 2006; Flavián & Guinalíu, 2006; Li & Yeh, 2010; Lin & Wang, 2006). However, one important affective factor has rarely been studied by previous researcher is emotion. Since, emotion usually plays an important role in impulsive buying product, impulse buying can be normally found in the buying situation of fashion product. (Joo Park, Young Kim, & Cardona Forney, 2006).

Therefore, the first objective of this research is to study the role of emotion, a crucial factor but lack of attention from prior researches, to explain satisfaction and loyalty in M-Commerce for fashion product. Second objective is to propose a new satisfaction and loyalty model of M-Commerce for fashion product that integrates cognitive and affective factors of shoppers. Firms in the fashion and M-Commerce industries can use the proposed model as a guideline to better understand factors affecting satisfaction and loyalty. Last objective is to prove that impact from factors affecting satisfaction and loyalty of shoppers who want to buy fashion products might be different from those of other shoppers who are looking for other kinds of products.

## 2. Theoretical Background and Research Model

Derived and adapted from cognitive appraisal theory (Lazarus, 1991), the proposed model of this research comprised of six constructs; Trust, Mobile Shopping Application Design, Perceived Usefulness, Emotion, Satisfaction, and Loyalty. Lazarus (1991) stated that people can have various outcomes responding to different affective and cognitive process in diverse situations. Integrating all of the six constructs and empirically examining them can advance the understanding of how the independent constructs can affect loyalty in M-Commerce as an outcome. A conceptual model with hypotheses that were empirically tested is illustrated in Figure 1.



**Figure 1:** The research model

#### Loyalty

Oliver (1999) clearly defined brand loyalty as a deeply held commitment to consistently repatronize a preferred product in the future, although situational influences and marketing efforts having potential to cause switching behavior. Moreover, according to Hoehle and Venkatesh (2015), loyalty in M-Commerce is the situation when mobile application users show their strong commitment in returning to use or to purchase the product via specific mobile application. Therefore, according to the definitions, this dependent construct can be separated into two dimensions; attitudinal commitment (when users have an intention to purchase) and revisiting behavior.

#### Satisfaction

A situation of consumers' post-purchase evaluation responding to the overall product or service experience has been defined in prior research as satisfaction (Oliver, 1992). Satisfaction has often been measured from many scholars (Audrezet et al., 2016; Voss, Parasuraman, & Grewal, 1998), since it is wildly accepted as predictor for word-of-mount recommendation and loyalty. Furthermore, prior research (Oliver, 1980) found that satisfaction mediated consumers' attitude from prior experience and can be used to describe interesting post-purchase behaviors; i.e. complaining, repurchase intention, and product usage. In addition, in the context of M-Commerce, Deng, Lu, Wei, and Zhang (2010) proved that satisfaction is an important factor having impact on loyalty. When customers have satisfaction with the products they purchased, loyalty has tendency to be formed. Then, as a result, although the customers may not shortly come back to buy any products from the same provider, they should not go to buy the products

from other providers. Nonetheless, there is evidence of situation when satisfaction is not always lead to loyalty (Matzler & Hinterhuber, 1998). This makes the relationship still interesting to investigate, especially in the context of M-Commerce which the shoppers have several choices regarding where to shop. This leads to the first hypothesis as follows:

H1 (+): Satisfaction has a positive influence on loyalty in M-Commerce.

#### **Emotion**

According to Bagozzi, Gopinath, and Nyer (1999), emotion is a mental state of readiness arising from cognitive appraisals from events or thoughts, resulting in a specific activity to sustain or deal with particular emotion, which depend on its nature and meaning for the person having it. The author measured three dimensions of emotion; pleasure, arousal, and dominance, adapted from the E-Commerce study of Porat and Tractinsky (2012). Scholars explained emotions as patterns of responses having evolved for the ability to enable a quick and efficient response to main environmental events (Ekman, 1992). As for M-Commerce context, event that can create emotion is probably the situation when consumers use mobile shopping application to buy product. There are evidences from previous literature showing that emotion can lead to satisfaction in E-Commerce (Hsu & Lin, 2015; Machleit & Mantel, 2001).

According to Lazarus (1991), the explanation of emotion affecting on satisfaction can be described, after using mobile shipping application, the users then have cognitive appraisal which derived from mobile shopping application design and perceived usefulness of the application. These, as a result, can lead to emotional response affecting satisfaction toward the application. Nonetheless, prior researchers rarely prove the relationship of how emotion can have impact on satisfaction in M-Commerce, specifically for the fashion product which emotion has a high chance to affect consumers' shopping outcome (Joo Park et al., 2006).

H2 (+): Emotion has a positive influence on Satisfaction in M-Commerce.

### Perceived Usefulness (PU)

Perception of users who believe that there will be utility from using the information system or application can be explained as perceived usefulness (Bhattacherjee & Premkumar, 2004). The author measured four dimensions of perceived usefulness for M-Commerce application; performance, productivity, effectiveness, and overall usefulness, which adapted from previous study (Bhattacherjee, 2001; Davis, 1989). According to previous researches, there are evidences showing that perceived usefulness can have impact on satisfaction and loyalty (Cyr, Hassanein, Head, & Ivanov, 2007; Wong, Lo, & Ramayah, 2014) in online context. Moreover, from cognitive theory of Lazarus (1991), emotion of users after using mobile shopping application can also be affected by perceived usefulness as well. Hence, perceived usefulness of M-Commerce application can have outcomes on emotion, satisfaction, and loyalty.

- H3 (+): Perceived Usefulness has a positive influence on Emotion in M-Commerce.
- H4 (+): Perceived Usefulness has a positive influence on Satisfaction in M-Commerce.
- H5 (+): Perceived Usefulness has a positive influence on Loyalty in M-Commerce.

### Mobile Shopping Application Design (Design)

This construct is the perception of consumers, who use M-Commerce application to buy product, regarding how well the application was designed. According to Hoehle and Venkatesh (2015), this variable can be measured from four types of consumers' perception about the application design. First dimension is branding of the application, how the trademark of the application has been well designed, in terms of color or image to be refined and to easily remember. Second is data preservation, whether the application can memorize users' information and can maintain users' status when users come back to use the application or not.

Next is instant start, which is the readiness to use or how fast the application can be opened when users want to use. Last dimension is orientation, whether the application can perform properly according to the directions; vertical or horizontal, that users want. When users are perceived that the mobile shopping application has been well designed, the trust in the application can be increased (Deng et al., 2010). A well designed application can also lead the users to have positive emotion and satisfaction with the use of application and finally can persuade user to use the application again in the future when they want to buy products online (Lin & Wang, 2006).

- H6 (+) Mobile Shopping App Design has a positive influence on Trust in M-Commerce.
- H7 (+) Mobile Shopping App Design has a positive influence on Emotion in M-Commerce.
  - H8 (+) Mobile Shopping App Design has a positive influence on Satisfaction in M-Commerce.
- H9 (+) Mobile Shopping App Design has a positive influence on Loyalty in M-Commerce.

#### Trust

According to Morgan and Hunt (1994), this construct is described as the willingness to rely on the honesty of the other parties in a relationship. Many scholars believed that trust is a key variable that should pay attention in an online shopping context (Kim, Ferrin, & Rao, 2008; Lin & Wang, 2006; Park & Yang, 2006; Sun, 2011). Trust has been proved by Horst, Kuttschreuter, and Gutteling (2007) that it has positive impact on perceived usefulness in online context. The reason is that when consumers have trust in the application, they tend to have positive attitude with it. This leads to positive impact on perceived usefulness of the application. Trust has also been mentioned that it has a strong impact on satisfaction in M-Commerce (San-Martín, López-Catalán, & Ramón-Jerónimo, 2015; Zhou, Li, & Liu, 2010). Moreover, trust implies that the consumers feel secure to use the mobile shopping application, which will lead to repeat using the application (Lin & Wang, 2006).

- H10 (+): Trust has a positive influence on Perceived Usefulness in M-Commerce.
- H11 (+): Trust has a positive influence on Satisfaction in M-Commerce.
- H12 (+): Trust has a positive influence on Loyalty in M-Commerce.

Last hypothesis is developed due to the uniqueness of fashion product (Joo Park et al., 2006) that makes the product different from other products. The author believes that different types of product (general versus fashion) possibly lead to different in factors affecting satisfaction and loyalty in M-Commerce.

H13: Types of product (general versus fashion) can lead to different in factors affecting M-Commerce Satisfaction and Loyalty.

#### 3. Research method

## Sampling Method

Population of this research is people who have experience with mobile shopping application; all of them must have used mobile shopping application (B2C or C2C only) for shopping product at least one time. All respondents were asked to project themselves into the recent situation when they used M-Commerce to buy product. Furthermore, as one objective of this research is to illustrate the different among the impacts of independent constructs on satisfaction and loyalty of general product versus fashion product, the author compared the two conditions by using two groups of respondents; which are people who just used mobile shopping application to shop for general product versus fashion product.

This purposive sampling method is applied to ensure the relevant of the respondents toward the research objective. As Structural Equation Modelling (SEM) is selected to test the hypotheses, the sample size should meet the statistical requirement of SEM to ensure the quality of the results. Weston and Gore (2006) mentioned that the minimum sample size of SEM should not be less than 200. This study has to prove relationships of variables in two product conditions (general versus fashion), hence sample size in total should be around 400. Finally, 386 respondents were recruited for the condition of general product and 215 participants for those of fashion product.

### Measurement of the Constructs and Questionnaire Development

Measurement items in the questionnaire were adapted from previous literature and adjusted after the interviewing with two target respondents (see more detail in Appendix). All measurement items were back translated into Thai. Then, the questionnaire was pre-tested for practicability by interviewing with the other seven respondents. For all constructs, the subjects were asked to answer the questions by rating on 7-point Likert-type scale (1 = "strongly disagree", 7 = "strongly agree"). Moreover, pilot study of 50 people had been employed to ensure reliability of all measurement items before collecting the samples for hypotheses testing.

# 4. Data Analysis and Results Quality of Research Instruments

To check for quality of the research instruments, reliability and construct validity testing were employed. The reliability was assessed using Cronbach's alpha (α) to verify the internal consistency of the constructs (Hair, Black, Babin, & Anderson, 2010), and the construct validity was examined by confirmatory factor analysis (CFA) of each construct (Jöreskog & Sörbom, 2001). Cronbach's alpha should be greater than 0.70 for sufficient internal consistency (Nunnally, 2010). All constructs have reliabilities ranging from 0.85 to 0.93 (see Table 1), showing good reliability and illustrating high reliability results. CFA is used to investigate how well the indicators are grouped into each construct hypothesized or specified (Jöreskog & Sörbom, 2001). Several indices to evaluate construct fit were employed. The findings of CFA are in Table 1, indicating good fit of the constructs with all fit index criteria. The CFA results show good construct validity, so the author could proceed to test the research hypotheses.



Table 1: Results from CFA and Reliability Test

Constructs	Dimensions	Std. Loading	SE	t-value	R <sup>2</sup>	Fit Statistic (not sig.)	Cronbach's alpha
Trust	Trust	0.945			0.893	P=0.161	0.932
Mobile	Branding	0.727	0.131	13.529**	0.529	0.164	0.855
Shopping	Data Preservation	0.801	0.099	16.455**	0.641		
Application	Instant Start	0.794	0.1	16.370**	0.63		
Design	Orientation	0.511	253	=	0.261		
Perceived	Performance	0.79	0.04	21.886**	0.624	P=0.174	0.87
Usefulness	Productivity	0.813	0.042	21.151**	0.662		
CHARLES AND AND AND AND	Effectiveness	0.893	3 <del>-</del> 3	=	0.797		
	Overall Usefulness	0.743	0.04	20.276**	0.553		
Emotion	Pleasure	0.858	(2)		0.736	P=0.176	0.874
	Arousal	0.668	0.114	15.941**	0.447		
	Dominance	0.84	0.066	23.983**	0.706		
Satisfaction	Satisfaction	0.936	8:43	<u> </u>	0.876	P=0.170	0.882
Loyalty	Attitudinal	0.83	122		0.689	8	0.916
	Commitment	0.906	0.41	34.126**	0.822		573.576076/1 Z

Note: \*\* p < .01

# Structural Model

Exploring the proposed model for both conditions; general versus fashion, provides information on how each independent constructs can differently influence satisfaction and loyalty when product types are different.

Statistical assumptions of SEM are tested. Hair et al. (2010) explained that if the sample size is over 200, the effects of normal distribution tend to be reduced because  $Z_{\rm skewness}$  and  $Z_{\rm kurtosis}$  are sensitive to sample size. The results should not be affected by a non-normal distribution, since this research has more than 200 respondents. For multicollinearity, this problem might not exist as the author checked for VIF and Tolerance which confirm no multicollinearity.

The results of fit assessment from structural model are in Table 2. The results shows that the research model is satisfactory fit to the empirical data and statistically valid for both data sets of general product and fashion product.

**Table 2:** Goodness of Fits Indices for the Structural Models

Fits Statistics	Value Obtained	Level of Acceptable Fit
Fits Statistics	(General/Fashion)	(Hair et al., 2010)
χ2/d.f.	1.391 / 1.326	Between 1 and 2
p-value	0.053 / 0.066	Not significant
CFI	0.996 / 0.992	0.90 or more
IFI	0.995 / 0.99	0.90 or more
NFI	0.986 / 0.97	0.90 or more
RFI	0.96 / 0.93	0.90 or more
GFI	0.982 / 0.962	0.90 or more
RMSEA	0.032 / 0.039	0.08 or less

## Hypotheses Testing

Before concerning the results of hypotheses testing, the author analyzed the coefficient of determination (R<sup>2</sup>) of endogenous constructs for the product conditions; general and fashion. R<sup>2</sup> for the final dependent construct (Loyalty) of the models are 0.65 and 0.705, respectively. It means that trust, perceived usefulness, mobile shopping application design, emotion, and satisfaction altogether can explain 65 and 70.5 percent of variation in Loyalty for the conditions of general product and fashion product, consecutively. According to Jöreskog and Sörbom (2001), surpassing 0.4 means that coefficient of determination for SEM model meets a satisfactory level.

Table 3 presents the hypotheses test results with direct effect, indirect effect, and total effect. For general product, H6, H7, H10, and H12 fail to reject. This means that mobile shopping application design, measured according to the four dimensions – branding, data preservation, instant start, and orientation – has a direct positive effect on trust (H6) and also has direct and indirect effect on emotion, measured according to the three kinds of emotion – pleasure, arousal, and distributive (H7). Furthermore, trust has a direct positive effect on perceived usefulness, measured according to the four dimensions – performance, productivity, effectiveness, and overall usefulness – (H10) and also has direct and indirect effect on loyalty, measured according to the two perspectives of loyalty– attitudinal commitment, and revisit (H12).

As for fashion product, H2, H3, H6, H7, H10, H11, and H12 fail to reject. The supported results from hypotheses testing that differ from the condition of general product are H2, H3, and H11. This means that, during the situation of buying fashion product, there are three unique relationships between factors occurring for this product type. Firstly, trust has direct and indirect positive effect on satisfaction (H11). Secondly, perceived usefulness has a positive direct effect on emotion (H3). Lastly, emotion has a positive direct impact on satisfaction (H2).

The hypotheses test results from both product types reveal that there are different influencing factors for shoppers who buy different kinds of product, hence H13 is supported. The details will be discussed next.

Table 3: Statistical Results of Hypotheses Testing

Hypotheses & Relationships			Gene	General Product	tot	10000000	Fashi	Fashion Product	7
	- 22	TE	DE	田	Results	TE	DE	田	Results
H1: Satisfaction -> Loyalty	q.	0.319	0.319	*	Not	0.629	0.629	×	Not
	SE		0.720		Supported		0.642		Supported
	+		0.444				0.979		
	Std. Coef.	0.199	0.199	100		0.187	0.187	Đ.	
H2: Emotion ->Satisfaction	q	0.132	0.132		Not	0.122	0.122	65	Supported
	SE		960.0		Supported		0.055	i	
			1.371				2.206*		
	Std. Coef.	0.144	0.144	ï		0.230	0.230	×	
H3: PU -> Emotion	þ	0.012	0.012	i	Not	0.118	0.118	3	Supported
	SS		0.063		Supported		0.059		
	+		0.193				1.987*		
	Std. Coef.	0.015	0.015	200	50	0.183	0.183	ė	
H4: PU -> Satisfaction	þ	0.041	0.039	0.001	Not	0.029	0.015	0.014	Not
	SE		0.295		Supported		0.053		Supported
	ţ		0.134	901000000			0.286		
	Std. Coef.	0.057	0.055	0.002		0.086	0.044	0.042	
H5: PU -> Loyalty	þ	0.054	0.041	0.013	Not	0.116	0.097	0.018	Not
	SS		0.106		Supported	1 III. AZSUMS	0.126		Supported
	t		0.384				0.772		
	Std. Coef.	0.047	0.035	0.011		0.101	0.085	0.016	
H6: Design -> Trust	p.	0.936	0.936	9	Supported	0.600	0.600		Supported
	SE		0.141				0.121		
	+		6.610**				4.920**		
	Std. Coef.	0.785	0.785	39		0.739	0.739		

Note: \*\* p < .01 (2-tailed), \* p < .05 (2-tailed)

[able 3: Statistical Results of Hypotheses Testing (continue)

Hypotheses & Relationships		0.000	Ger	General Product	tt	9	Fash	Fashion Product	ict
	- 83	TE	DE	Œ	Results	TE	DE	Œ	Results
H7: Design > Emotion	þ	0.505	0.497	0.007	Supported	0.484	0.406	0.077	Supported
<b>t</b> il	SE		0.082				0.083		
	÷		6.027**				4.872**		
	Std. Coef.	0.633	0.623	0.010	9	0.655	0.550	0.104	
H8: Design -> Satisfaction	þ	0.567	0.168	0.398	Not	0.271	0.005	0.265	Not
	SE		0.301		Supported		0.067		Supported
	+		0.559				0.088		
	Std. Coef.	0.776	0.230	0.546		0.693	0.015	0.678	
H9: Design -> Loyalty	p	0.781	0.054	0.727	Not	0.875	0.121	0.753	Not
	SE		0.210		Supported		0.142		Supported
	+		0.257				0.852		
	Std. Coef.	0.665	0.046	0.619		999'0	0.092	0.573	
H10: Trust > PU	þ	0.699	0.699	10	Supported	1.086	1.086	ij	Supported
	SE		0.090				0.170		
	÷		7.737**				6.382**		
	Std. Coef.	0.811	0.811	31		0.769	0.769	1	
H11: Trust -> Satisfaction	P	0.356	0.327	0.028	Not	0.359	0.327	0.032	Supported
	SE	V 0.040 W.100	0.626		Supported		0.156		
	+		0.521				2.095*		
	Std. Coef.	0.580	0.533	0.046		0.746	0.679	990.0	
H12: Trust -> Loyalty	p	969.0	0.554	0.142*	Supported	1.197	0.864	0.332	Supported
	SE		0.227				0.404		
	t		2.44*				2.136*		
	Std. Coef.	0.706	0.562	0.144		0.740	0.534	0.205	

Note: \*\* p < .01 (2-tailed), \* p < .05 (2-tailed)

## 5. Conclusion and Discussion

The objectives of this research are to study the role of emotion and to propose an alternative model to explain satisfaction and loyalty in M-Commerce for fashion product. Another objective is to prove that impacts from factors affecting satisfaction and loyalty of shoppers who want to buy fashion products might be different from those of other shoppers. All objectives were achieved and the discussions of the objectives are as follows.

Emotion, a crucial factor but lack attention from prior research in M-Commerce context, has an impact on shoppers' satisfaction for fashion product. According to factor loading from SEM results of fashion condition, dimension of emotion that plays important role to create satisfaction is pleasure (see appendix for factor loading of dimensions of each research construct). This finding confirmed that shoppers preferred situation that keep them having positive pleasure (Porat & Tractinsky, 2012). This positive emotion can finally lead to satisfaction of shopping experience in M-Commerce. As for how to create positive emotion to influence on satisfaction, the factors affecting emotion are Mobile Shopping Application Design (Design) and Perceived Usefulness (PU).

As for PU, effectiveness and productivity are the dimensions of PU that play very important role. Effectiveness of mobile shopping application can be derived from the benefit of how fast the application can help shoppers to buy the products. In addition, according to the research finding, PU can be improved by increasing trust of the mobile shopping application.

Regarding Design, instant start and data preservation are the dimensions of Design which play important role. The most crucial is instant start, relating to how fast the application can be responded after opening the application. Data preservation, another main aspect of Design relating to how application can memorize shoppers' information and status after they come back to the shopping application (Hoehle & Venkatesh, 2015). Design can also have a positive impact on trust which in return affecting PU, satisfaction, and loyalty of M-Commerce shopping for fashion product.

In terms of second objective, new alternative model is successfully proposed. According to the results of statistical testing, the model has passed the conditions to explain the proposed constructs. This model will shed the light for future researchers that affective factors should be studied properly to explain shoppers' responding outcomes in M-Commerce context.

As for the last objective, according to the research finding, impacts from factors affecting satisfaction and loyalty of shoppers who want to buy fashion products do have differences from those of other shoppers purchasing general product. For satisfaction of fashion product, factors directly affect satisfaction are emotion and trust, but these two factors do not have impact on satisfaction in the condition of general product. From standardized beta coefficient, trust has the strongest effect on satisfaction. In addition, although not directly influence on satisfaction, Design and PU have indirect effects on satisfaction through emotion.

In terms of loyalty for both product types, trust is the only factor having direct effect on loyalty. Moreover, even though it does not have direct impact on loyalty, Design has indirect effect on loyalty through trust for both product conditions. Attitudinal commitment is the dimension of loyalty that has been more affected by the mention factors than the dimension of revisit.

From the above conclusion, it is clearly shown that trust is the most important factor for creating both satisfaction and loyalty for both product conditions. In addition, there is a contradictory finding compare to previous researches in M-Commerce; satisfaction in this study does not significantly have an impact on loyalty. The explanation for this is that nowadays there are so many M-Commerce providers, therefore shoppers have several choices

and loyalty becomes such a difficult thing to obtain. Nonetheless, according to the research of Matzler and Hinterhuber (1998), it makes the author believes that if high level of satisfaction can be achieved, shoppers will have loyalty to that particular M-Commerce provider.

Last but not least, to summarize what fashion shoppers want from M-Commerce, to create satisfaction, trust and emotion of shoppers (especially pleasure) should be well concerned. In addition, emotion of shoppers can be positively adjusted by the appropriate application design and the perceived usefulness of the application. To create loyalty, shoppers want to have trust in the mobile shopping application, which can be achieved through mobile shopping application design, especially the design related to instant start and data preservation.

# Theoretical Contributions and Suggestions for Future Research

The author expands the frontier of knowledge in online marketing by integrating emotion as an affective factor into cognitive factors to better explain satisfaction and loyalty in M-Commerce, especially in the context of fashion product. This research can shed the light for future researchers in M-Commerce that in order to understand consumer responding outcomes (e.g. satisfaction and loyalty), affective part of consumer should not be ignored to study together with consumer cognition. The other affective factors that have not been studied in the context but have potential to influence shoppers' responding outcomes are; for example, mood and personality trait. Future researchers; especially those who are interested in fashion product which affective part has a high chance to influence on satisfaction, may study the two mentioned factors.

Furthermore, apart from result of hypotheses testing, the author pointed out that different kinds of product can lead to different in factors affecting satisfaction and loyalty in M-Commerce context. This can make researchers to realize that product type is another moderating variable to help better explain satisfaction and loyalty in M-Commerce. Future research can also apply and adapt the proposed model to explain satisfaction and loyalty in M-Commerce for other types of product. Understanding some product types; for instance electronic product which is also a famous product selling online, should be worth to explore the result for both academicians and practitioners.

#### Managerial Implications

There are several benefits which executives can obtain from using the research result. First, knowing what factors are important from the proposed model, firms in M-Commerce and fashion businesses can apply those results as a guideline to better deliver satisfaction and create loyalty to their customers. Second, knowing that different types of product can lead to dissimilarity in the concerning factors, M-Commerce firms may be able to design and customize their applications to better suit what their shoppers really want. This will, as a result, benefit their shoppers and increase loyalty of the firm in return.

Moreover, the author explained the detail of dimensions for each construct. This will help to understand which dimensions of each construct in the proposed model having strong effects on the shoppers' responding outcomes in M-Commerce. Therefore, executives can focus on the right detail to improve the outcomes. For example, instant start is the type of application design that firms should pay attention, since it strongly influences on shoppers' satisfaction. All in all, the firms that apply the result of this study can have benefit in the long run, since they can manage their shoppers' satisfaction and loyalty more effectively.



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**Appendix**: Measurement Items (adapted from the mentioned sources) with factor loading from SEM results – General versus Fashion

Loyalty (Hoehle & Venkatesh, 2015; Lin & Wang, 2006)

Attitudinal (0.999 versus 0.989)

I encourage friends and relatives to be the customers of the mobile shopping application.

I say positive things about the mobile shopping application to other people.

I will use more services offered by the mobile shopping application in the next few years.

I would recommend the mobile shopping application to someone who seeks my advice.

Revisit (0.804 versus 0.828)

I consider the mobile shopping application to be my first choice.

**Satisfaction** (Deng et al., 2010; Oliver, 1999) (0.998 versus 0.999)

My choice to this mobile shopping application is a wise one.

I think I did the right thing when I chose this mobile shopping application to buy the product.

Overall, my feeling to this mobile shopping application is satisfactory.

**Emotion** (Porat & Tractinsky, 2012) The respondents need to answer the question of "What do you feel when you are using the mobile shopping application?"

*Pleasure* (0.853 versus 0.750)

Pleased

Happy

Bored (inverse scale)

*Arousal* (0.529 versus 0.449)

Wide awake

Aroused

*Dominance* (0.645 versus 0.589)

In control

**Dominant** 

Free

**Perceived Usefulness** (Bhattacherjee, 2001; Oghuma, Libaque-Saenz, Wong, & Chang, 2016)

Performance (0.823 versus 0.789)

Using the mobile shopping application helps me to accomplish things more quickly.

Productivity (0.865 versus 0.817)

Using the mobile shopping application increases my productivity in shopping.

Effectiveness (0.899 versus 0.869)

Using mobile shopping application enhances my effectiveness in managing my shopping.

Overall Usefulness (0.709 versus 0.788)

Overall, mobile shopping application is useful in managing personal shopping.

# **Mobile Shopping Application Design**

*Branding* (0.694 versus 0.684)

The mobile shopping application uses brand colors or images in a refined and unobtrusive way.

The mobile shopping application doesn't force me to watch an advertisement.

The mobile shopping application quietly reminds you of the brand that runs the application

The mobile shopping application integrates branding effectively.

Data Preservation (0.777 versus 0.742)

The mobile shopping application automatically saves your data when you close the application.

The mobile shopping application doesn't require you to manually save your data when you quit the application.

The mobile shopping application saves the data automatically and you can re-start where you left previously.

The mobile shopping application allows you to quit the application and restart at the same stage when re-entering it.

Instant Start (0.858 versus 0.815)

The mobile shopping application launches quickly and allows you to instantly start using it.

The mobile shopping application doesn't require much time to open.

The mobile shopping application is instantly "ready to go" right after switching it on.

Orientation (0.487 versus 0.521)

The mobile shopping application doesn't prompt you to change the orientation of the screen (move the device).

The mobile shopping application works well independent of how you hold your mobile device. The mobile shopping application flips the content over if you change the orientation of the device (horizontal/vertical).

The mobile shopping application works well independent of whether you hold your device horizontally or vertically.

**Trust** (Kim et al., 2008) (0.630 versus 0.709)

This mobile shopping application is trustworthy.

This mobile shopping vendor is honest.

This mobile shopping vendor is care about customers.

This mobile shopping vendor gives the impression that it keeps promises and commitments.

I believe that this mobile shopping vendor has my best interests in mind.