# EXPLORING THE ANTECEDENTS OF INDONESIAN E-COMMERCE USERS' USAGE INTENTION

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# ABSTRACT

This study aims to uncover the interaction among types of motivation or individual attributes (hedonic, utilitarian), psychological attachment (satisfaction, trust) and behavioural intention. Motivation is an important aspect to understand user behaviour in e-commerce. The study involves 178 respondents by utilizing a survey method as means of inquiry. This study found that hedonic and utilitarian motivation significantly influences user's satisfaction subsequent to intent to use e-commerce respectively. Furthermore, satisfaction and trust may also lead to boost a higher intention in particular to use e-commerce which is consistent to what have been examined in consumer behaviour and ICT management literature. Finally, this study contributes to the literature in explaining the involvement of hedonism and utilitarianism motives in ICT/e-commerce' usage.

Keywords: E-Commerce, Utilitarian Motivation, Hedonic Motivation, Intentional Behaviour.

## **INTRODUCTION**

The Motivational Model explains the extent to which individuals are motivated to use information technology in meeting their needs. Motivational models appear when Davis (1989), conducted an empirical study to analyse motivation that encourages individuals to use computers for work environments. Basically, the motivation of individuals using information technology can be motivated by intrinsic motivation and extrinsic motivation. Moreover, motivation drives a decision in taking further action. In the literature, two common types of motivations are hedonic and utilitarian motivation. Hedonic motivation is motivation which is the background of individual activities based on satisfaction/enjoyment felt by an individual (Thong et al., 2006). Furthermore, it is an essential factor in the acceptance and use of technology in consumers (Childers et al. 2001; Venkatesh & Brown, 2007). Another type is utilitarian motivation which is defines as motivation carried out by individuals based on logical satisfaction in fulfilling economic needs which is often associated with rational reasons (Batra & Ahtola, 1991; Babin et al., 2002).

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Based on several information systems theoretical and behavioural approaches, it is of growing encouragement by researchers in the extension of new logics of interactions among concepts based on the development of previous research. Hence, this study aims to combine several variables that exist in Technological Acceptance Model (TAM), the success model of information systems and UTAUT2 on the use of e-commerce on various studies (Venkatesh et al., 2003; Iivari, 2005; Rodriguez & Trujillo, 2014). Moreover, this study focuses in exploring behavioural intention of e-commerce users, using ten Indonesian e-commerce websites with the most significant visitors based on search engine optimization (SEO) survey results (https://www.alexa.com). The Amazon-owned online solutions provide information on the e-commerce website ranks both nationally and globally-the ranks are based on the amount of visitor traffics on the site. Further, the accuracy of the information presented makes this site as a primary guide used by marketers and prospective buyers to monitor large numbers of customers visiting the website.

# LITERATURE REVIEW

## **Hedonic Motivation**

Activities that require less effort can increase the likelihood of an individual to be involved. The seamless nature of mobile phone users and their tendency towards motivational involvement affects value-driven satisfaction. The perceived value of users is their perceptions and attitudes towards the ability of their mobile devices to easily and easily provide a desired final state (activity and purpose) when involved. The value of users obtained from mobile involvement must increase the satisfaction of their relationships during and after activities that increase their attitude of involvement. Hedonic motivation maybe a result of pursuance of a certain selected lifestyle (for instance, fashion lifestyle) may have attached an individual to having an emotional decision to consume or purchase particular product that may serve individuals with attributes that they wish to be known for (Kartajaya et al., 2019). According to Anderson et al. (2014) through their review on previous studies hedonic values can include a desire for entertainment and escapism as these authors (Babin et al., 1994; Childers et al., 2001) or the wish to obtain good deal and the enjoyment of the hunt for a good bargain.

In the context of usage technology behaviour, hedonic motivation that exists in individuals is a driver of one's intent to use information and communication technology (ICT), in line to what have been examined in previous researches (Yang & Lin, 2014; Rodriguez & Trujillo, 2014). Nonetheless, a contradictive result was indicated a Gaitan et al's study (2015) showing an insignificant influence between hedonic motivation on the intention to use e-banking services. Despite differences of findings in those studies, this study contends that hedonic motivation will result in different behavioural outcomes in the interaction between the user, the e-commerce platforms and the psychological antecedents reflected by trust, and thus the hypotheses relevant to this extant research of e-commerce usage intention are:

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*H1: Hedonic Motivation is positively affecting user satisfaction H2: Hedonic Motivation is positively affecting user trust* 

#### **Utilitarian Motivation**

Utilitarian behaviour is an action based on purpose and rationale, focusing on effectiveness and instrumental values. Previous research have focused on utilitarian motivation research on web consumption (Childers et al., 2001; Cotte et al., 2006; Hartman et al., 2006). The intended web consumption includes a variety of activities such as browsing, shopping, looking for entertainment and so on (Parasuraman & Zinkhan, 2002). Further, utilitarian values driven by the desire for efficient, rational, task-oriented efforts relevant to purchasing products (Anderson et al., 2014). Consumers motivated by utilitarian values online may seek the convenience of saving time or the ease of accessing (Babin et al., 1994; Childers et al., 2001; Anderson et al., 2014).

An individual's action can be driven by utilitarian motives that encompass several characters that includes: controlled, aiming to increase satisfaction, adequate and in accordance with needs. The use of utilitarian motivation will provide a guideline in making efficient decision based on one's need. Although in some situations there are no differences in external factors, the existence of the guideline will lead an individual to pursue and exploit suitable option. Utilitarian motivation could influence satisfaction and trust of individuals especially when one's feeling over shopping via e-commerce makes it possible to acquire suitable price. Also, this type of motivation exists to an extent of which attain dominant control in making a rational purchase is attained and attributed by economic-orientation meaning that, individuals will make a rational decision in order to obtain a good bargain (Kartajaya et al., 2019). Hence, e-commerce purchases will generate satisfaction and trust and making repetitive payments as a consequence (Chaudhuri & Holbrook 2001; Kim et al. 2013). Based on those logics, the hypotheses of this study are:

*H3: Utilitarian motivation is positively affecting user satisfaction H4: Utilitarian motivation is positively affecting user trusts* 

#### **User Satisfaction**

In consumer behaviour studies, customer satisfaction had mainly been the hallmark of an outcome measure driven by behavioural interactions. Kim et al. (2011) have examined the antecedents of trust, satisfaction, and loyalty in the use of e-commerce. The results show that satisfaction is a significant predictor of trust. Further, feeling of secureness in executing an e-commerce transaction is one of the main antecedents that leverages user's satisfaction subsequent to increasing trust. Also, users' satisfaction is commonly being influenced by their acceptance on e-services which are triggered by perceived mobility, connectedness, security, quality of service and system (Park & Kim, 2015).

Another The results of the study by Kim et al. (2012) show that satisfaction has a significant effect on the intention of using internet shopping. Also, it had been found that

perceived value, confirmation, and website quality are determinants of users' satisfaction, and hence significantly influences trust (Hsu et al., 2015). This means that users are satisfied with the services available on mobile technology because it is very useful in helping complete work tasks. Satisfaction increasingly motivates the user's intention to always make mobile technology the first choice.

H5: User satisfaction is positively affecting user trustsH6: User satisfaction is positively affecting intention to use e-commerce

### **User Trusts**

Trust is an important determinant in the online environment nowadays (Yang & Lin, 2014). It is defined as the willingness of an individual compliantly being susceptible to the actions by other entity, with an expected outcome that the other will perform a desired action important to the trustor, regardless of the ability to monitor or control it has to that other entity (Ring & Van de, 1992; Yang & Lin 2014). It is an important caveat of individuals' loyalty related to the use of ICT as a behavioural outcome subsequent to one's satisfaction (Zhou et al., 2010a). The failure of trust to accommodate an individual's expectation would jeopardize ones' loyalty as a behavioural outcome. Further, as service provider's culture is heavily emphasized on its technology, it tends to create low trust amongst the users' full trust (Coutu, 1998; Yang & Lin., 2014). Accordingly, online trust differs to offline trust, since in an online context, the technology and the organization utilizing it are the objects of trust (Beldad et al., 2010; Yang & Lin, 2014).

It is important to understand the influence that trust have on a desired behavioural outcome. This is due to an individual's perception, assuming that via the use of technology, it will eliminate barriers of one's daily life and make 'jobs to be done' easier to accomplish. Hence, when individuals are satisfied, they sense the usefulness of operating technology, vice versa. On this basis, loyalty in using online technology will be determined by the user as explored in several previous researches (Deng et al., 2010; Zhou et al., 2010b; Kim et al., 2011; Karjaluoto et al., 2012). Thus, the hypothesis pertinent to this study is:

H7: User trusts will positively affect users' intent to use e-commerce

#### **Intention to Use E-Commerce**

Usage intention is a common predictor used to determine the extent to which individuals use information and communication technology. It means that one's intent to use may predict a possible outcome subsequent to an actual usage. Several previous researches have suggested that users' behavioural intention has a significant effect on an actual technological/ platforms/ e-commerce usage (Chu, 2013; Kwon et al., 2014; Martins et al., 2014: Rodriguez & Trujillo, 2014). As examined by Kwon et al. (2014), perceived mobility, security, connectedness, system and service quality, usefulness, attitude, and flow experience as motivational determinant for

intended usage on social networking services. Moreover, increasing trust and satisfaction will facilitate a repetitive behaviour such as repurchase intention (Hsu et al., 2015). As previous studies have confirmed that the usage intention acts as an antecedent of an actual usage behaviour, of which it could not act to stand alone as an exogenous variable. Thus, the logical flows of behavioural pattern in ICT usage is generally determined by motivational and individual drivers; also, initial behavioural outcomes such as: attitude, trust, and satisfaction. Motivation in the context of ICT usage is a form of encouragement that comes from within an individual to continue to use information and communication technology in carrying out their work. A previous research by Chu (2013) has demonstrated those logical sequence by acknowledging that intention had a significant effect on an actual usage. Moreover, the measurements of intentional behaviour could be determined from the intensity, motivation, and priority of use.

#### **METHOD**

The empirical section should provide appropriate citations to the methodology used. Paper's argument should be built on an appropriate base of theory, concepts, or other ideas. The research or equivalent intellectual work on which the paper is based should be well designed. Methods employed should be appropriate. This study employs empirical studies to test the proposed hypothesis by using a set of questionnaires to collect the data. The questionnaire was develop using the five constructs: hedonic motivation, utilitarian motivation, user satisfaction, user trusts, and intention to use e-commerce.

#### **Instrument development and Data collection**

This research has five constructs which was adopted from established scales of relevant previous studies. A five-item scale of hedonic motivation was derived from Rodriguez & Trujillo (2014). Further, utilitarian motivation, user satisfaction and trust adopt the 12-item scale from Kim et al's (2013) study. Adding to those, intention to use e-commerce adapted a scale from the original work of Venkatesh et al. (2012). The total 20-items construct in this study was measured through the use of an interval measure in the form of five-point Likert-scale that indicates agreeableness on statements provided.

The instrument was developed based on various theories in the area of information systems particularly that related to e-commerce. On a conceptual definition basis, hedonic motivation measures the individual behaviour on keeping with the trend while utilitarian motive measures rational reason of individual to fulfil economic needs. Furthermore, user satisfaction measures the degree of perceived enjoyment of existing systems. Trust has been regularly used in estimating the benevolence and credibility of electronic commerce. In addition, intention to use e-commerce measures the user willingness to use electronic commerce on fulfilling their needs.

The data was collected through a survey in Indonesia. The targeted respondents were active users of e-commerce platforms. Prior to that, a pilot study was conducted on 20

respondents to ensure the validity and reliability of designed questionnaire. In sum, a total of 200 questionnaires were received. Due to incomplete data, some were dropped-off resulting in 178 usable response.

# **Data Analysis**

Current studies apply Structural Equation Modelling (SEM) as utilized by many research prior to this study. SEM is capable to present path and factor analysis while presenting construct validity and reliability and the same time (Gefen, 2000; Chaudhuri & Holbrook, 2001; Chiu et al., 2013; Kim et al. 2013). As a statistical tool, the Generalized Structured Component Analysis (GSCA) was employed to test the proposed hypothesis while simultaneously assessing the construct reliability and validity (Henseler, 2010; Jung, 2011). Compared to other SEM based analysis such as Partial Least Squares (PLS-SEM) and Covariance Based (CB-SEM), GSCA fills a technical gap by providing the overall model FIT criteria as provided in CB-SEM as well as assessing hypothesis testing using bootstrapping as provided by PLS-SEM (Hwang et al. 2019).

#### RESULTS

Results of GSCA analysis are presented in constructs and model measurement. Construct measurement explain the factor analysis while the model measurement explains the inner model assessment for path hypothetical assessment.

#### **Construct Measurement**

Construct measurement use validity indicates by the Average Variance Extracted (AVE) while the reliability indicates by Cronbach-Alpha (alpha). The average variance extracted cut-off value have to be  $\geq 0.5$  and alpha have to be  $\geq 0.688$ . As indicated (see table 1), all of the variables have met the threshold of validity and reliability measurement. Further, the loading factor for each construct indicates the estimate value of standard error (SE) and Critical Ratio (Ratio). The loading factor indicates the ability of items to represent the construct. Thus, construct validity criterions have been met. As the types of constructs are reflective, the representation of the constructs in this study are based on the highest estimate value (highlighted in bold) as indicated (see Table 1).

Table 1 CONSTRUCT MEASUREMENT								
Variable	Items	Estimates	SE	CR	AVE	Cronbach Alpha		
Hedonic Motivation (X1)	X1.1	0.788	0.025	31.18*	0.607	0.784		
	X1.2	0.770	0.030	25.62*				
	X1.3	0.737	0.035	20.82*				
	X.1.4	0.819	0.020	41.8*				
Utilitarian Motivation (X2)	X2.1	0.780	0.032	24.11*	0.528	0.768		

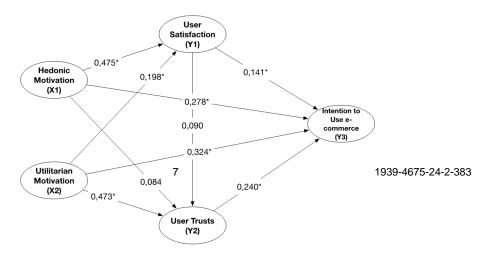
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	X2.2	0.767	0.029	26.91*		
	X2.3	0.770	0.032	24.41*		
	X2.4	0.753	0.035	21.62*		
User Satisfaction (Y1)	Y1.1	0.727	0.032	23.07*	0.557	
	Y1.2	0.722	0.051	14.2*		0.735
	Y1.3	0.810	0.029	27.49*		
	Y1.4	0.722	0.049	14.73*		
User Trust (Y2)	Y2.1	0.277	0.059	4.73*	0.589	0.778
	Y2.2	0.356	0.059	6.05*		
	Y2.3	0.239	0.060	3.99*		
	Y2.4	0.418	0.064	6.49*		
Intention to use e-Commerce (Y3)	Y3.1	0.792	0.024	32.98*	0.594	0.772
	Y3.2	0.781	0.021	37.17*		
	Y3.3	0.762	0.026	29.86*		
	Y3.4	0.747	0.036	20.75*		

#### **Measurement Model**

The measurement model is used to explain the path analysis pertaining to this study. Further, it is utilized as means of hypothesis testing. Also, it is employed in measuring the relationship of construct both: indirect-effect and indirect-effect (mediating effect). The analysis indicates that hedonic motivation positively affects customer satisfaction (0.475) and intention to use e-commerce (0.278). Further, utilitarian motivation is a significant predictor of endogenous variable: (a) customer satisfaction (0.198); (b) intention to use e-commerce (0.473); and, (3) user trust (0.324). Nonetheless, the relationship between hedonic motivation and user satisfaction with user trust were not statistically significant. Thus, from seven hypotheses proposed, mostly gained support (see Table 2 and Figure 1).

Table 2 STATISTICAL EFFECT/ HYPOTHESIS TESTING							
Hypotheses	Estimates	SE	CR	Supported			
Hedonic Motivation $\rightarrow$ User Satisfaction	0.475	0.077	6.19*	Yes			
Hedonic Motivation $\rightarrow$ User Trust	0.084	0.083	1.01	No			
Utilitarian Motivation $\rightarrow$ User Satisfaction	0.198	0.093	2.14*	Yes			
Utilitarian Motivation $\rightarrow$ User Trust	0.324	0.065	4.95*	Yes			
User Satisfaction $\rightarrow$ User Trust	0.090	0.059	1.54	No			
User Satisfaction $\rightarrow$ Intention to Use E-Commerce	0.141	0.046	3.04*	Yes			
User Trust $\rightarrow$ Intention to Use E-Commerce	0.240	0.059	4.04*	Yes			



# Figure 1 GSCA-Structural Path

#### DISCUSSION

As this study aims to examine the motivational background of e-commerce user to intentionally use e-commerce, it involves two types of motivational concepts: hedonic and utilitarian motivation. Hedonic motivation depicts the user behavior on system usage based on the perceived newness to current technology development or self-perceiving themselves as modern individuals. This study found that hedonic motivation significantly influences user's satisfaction. Consistent to previous research (Babin et al.,1994; Childers et al., 2001; Anderson et al., 2014; Kartajaya et al., 2019), hedonic values may drive an individual's satisfaction as they had achieved joyful experience online that had fulfilled one's own objective and hence, feeling satisfied with the expected outcome. Further, it corroborates with the experiential users who are more likely to engage in the activity or to adopt the technology when they have experienced instant pleasure or satisfaction from it (Zeng et al., 2019). Nonetheless, as hedonic motivation and trust did not indicate a significant effect, it may be possible that hedonic motive is mainly driven by emotional feeling rather than rationally driven. Thus, whether or not an e-commerce platform or its products are trustworthy, hedonic users tends to emotionally engage despite further potential consequences.

On the other hand, utilitarian motive indicated a significant influence on user's behaviour. Since utilitarian is perceived as efficient, rational, task-oriented efforts relevant to purchasing products (Anderson et al., 2014), individuals whom are likely to use e-commerce obtains satisfaction due to certain circumstances such as being able to find adequate information or a suitable bargain that needs to be comprehended for initiating further action. Consumers motivated by utilitarian values online may seek the convenience of saving time or the ease of accessing (Anderson et al. 2014). Nonetheless, in some cases utilitarian motive it might not be a significant predictor of satisfaction, but rather, as a proxy whether or not to consume a product. This was suggested in a recent research by Zeng et al., (2019), utilitarian consumers whom are concerned in achieving the consumption need that match their expectation had no direct intention in a particular buying behaviour. Although, buying behaviour was not the focus of this study; but nevertheless, a utilitarian motive would be able to drive a particular perception such as satisfaction that leads to an accomplishment of an intended behaviour. Subsequently, satisfaction and trust may also lead to boost a higher intention in particular to use e-commerce which is consistent to what have been examined in the literature (Kim et al., 2012; Hsu et al., 2015). This confirms the notion that

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users' motivations aligned to satisfying hedonic or utilitarian needs might develop tools and functions-fit that support users' lifestyle activities (Kim et al., 2013). It is possible that once users are attached to a positive experience in the use of the internet/platform/website, it would be likely that they will possess psychological push factor (satisfaction, trust, loyalty) prior to an intended use of a particular platform. Although users' satisfaction did not predict a higher trust, it might be an indication that certain other predictors might be found to be more suitable to predict trust such as perceived usefulness or attitude prior to ones' satisfaction.

#### CONCLUSION

To sum up, this study has uncovered the interaction among types of motivation or individual attributes (hedonic, utilitarian), psychological attachment (satisfaction, trust) and behavioural intention. This study found that motivations positively influences individual's satisfaction and trust. Furthermore, these individual psychological attachments are drivers of intentional behaviour to use particular e-commerce platforms. Thus, it confirms previous researches that had explored behavioural intent in ICT usage of either types of platforms or online technology involvement. Nevertheless, this study is not without its limitation.

Firstly, while types of motivation or individual attributes represented by hedonics and utilitarian perspectives subsequent to satisfaction, trust and usage intention, this study did not proceed to a further stage of intentional behaviour such as e-commerce usage. Secondly, other psychological attachment variable such as loyalty and continuance intent or usage had not been used in this study. It is important that further sequence of behaviour leading to action are utilized in the future as it would be able to provide a useful knowledge on intentional behaviour succeeding to actions. Thirdly, the absence of individual's perceived value, online lifestyle and usefulness of a particular e-commerce platform has yet being able to provide a clear insight of motivational drivers that leads to e-commerce usage intention. This is needed due to its importance in explaining reasons of why people engage in usage intention and attached to either hedonism or utilitarianism motives in ICT/e-commerce usage. Finally, characteristics of respondents and limited utilization of analysis still limits this study to provide a specific generalization on ICT behavioural intention as this is a single country study and not mentioning that ICT management is very broad in nature, especially when explored in the nexus of other disciplines such as marketing and behavioural studies which are widespread across sectors.

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