Perilaku Pelanggan untuk Mengadopsi M-Commerce di pada Generasi Y

Customer Behavior to Adopt M-Commerce among the Y Generation

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Abstrak

M-commerce adalah pilihan belanja online menggunakan smartphone yang semakin berkembang di Indonesia. Indonesia telah menjadi negara berkembang dengan tingkat penetrasi internet yang terus bertambah. Banyak faktor yang mempengaruhi penggunaan aplikasi m-commerce oleh generasi Y. Pengguna m-commerce sebagian besar merupakan generasi Y dan terus mendominasi dalam penggunaan m-commerce di Indonesia. Masalah dalam penelitian ini adalah bagaimana menjelaskan perilaku generation Y sebagai pelanggan m-commerce di Indonesia. Penelitian ini bertujuan menemukan perilaku generasi Y sebagai m-commerce dalam melakukan transaksi m-commerce dan mengadopsi m-commerce. Metode yang digunakan pada penelitian ini adalah Structural Equation Models (SEM) untuk menganalisis faktor-faktor yang mempengaruhi perilaku Generasi Y dalam penggunaan m-commerce. Hasil penelitian ini menunjukkan bahwa mayoritas generasi Y sebanyak 82,8% memiliki perilaku untuk tetap mengadopsi m-commerce dan mempertahankannya di masa depan. Hasil penelitian ini menegaskan bahwa kegunaan, kemudahan penggunaan, m-commerce yang mudah dipelajari, fleksibilitas dan kompatibel dalam berbagai perangkat mempengaruhi tingkat adopsi m-commerce di Indonesia. Penelitian ini diakhiri dengan diskusi tentang hasil untuk m-commerce dan akan terus mengadopsinya di masa depan.

Keywords : Perilaku Pelanggan, M-Commerce, Y Generation, SEM, Indonesia

Abstract
M-commerce is an increasingly online shopping option using a smartphone in Indonesia. Indonesia has become a developing country with a growing level of Internet penetration. Many factors affect the use of a m-commerce application by Y generation. User m-commerce most Y generation that continues to dominate in the use of m-commerce in Indonesia. The problems in this study is how the customer behavior of Y Generation as a m-commerce in Indonesia. This studies purpose is find the customer behavior of Y Generation when conducting a transaction using the m-commerce and adopting m-commerce. The method used is the Structural Equation Models (SEM) to analyze the factors that influence the behavior of Y Generation in the use of m-commerce. These results indicate that the majority of Y generation as much as 82.8% have a fixed behavior to adopt m-commerce and keep it in the future. The results of these studies confirm that the usability, ease of use, m-commerce is easy to learn, flexibility and compatible in a variety of devices affects the rate of adoption of m-commerce in Indonesia. The paper

concluded with discussion on results for Y generation tends to prioritize the factors of satisfaction and confidence in the use of m-commerce and will continue to adopt it in the future.

1. INTRODUCTION

Today, Internet is very important. In Indonesia, internet come to grow up. Indonesia is large country with a level of internet penetration continues to grow. Indonesian society can not escape from the advances in information technology. Information technology has affected the way people communicate. Since the government to build the Internet infrastructure since the 1980s, the number of internet users in Indonesia reached 88.1 million users in 2014 and spread throughout Indonesia. Increased rates of Internet penetration have increased in the year 2014 to 34.9% increased by 9% from previous year. The internet users in Indonesia as much as 82.8% is the Y generation. A total of 85% access using a mobile phone and as much as 31.5% use the internet for commerce and 26.1% for service [1].

Generation Y itself is the generation that was born in years 1980 to 1999 or the current age of 15 -35 years. Generation Y, the conditions are now in productive age working and studying in high school or in college. From the data of Indonesian Internet users as much as 88.1 million, 82.8% of users are the generation Y [2] [3]. This means that internet users in Indonesia as dominated by the Y generation. In terms of usage, the Internet is more widely used by the people of Indonesia for trade affairs by 31.5% and the services sector 26.1% [1].

Mobile commerce in question is an online shopping service application accessed mainly via smartphones [4]. Mobile commerce will now be called M-Commerce is an evolution in e-commerce model where customers purchase in accessing services using a mobile phone [5]. People are much more like the mobile phone because it is more personal and easier to carry. Even in some parts of the mobile phone has been able to replace the role of a PC or laptop running an application. As in accessing M-commerce can be conducted using a mobile phone. In accessing the M-commerce applications, experience and behavior will determine an application can be accepted by users. As stated by Roback that determine the behavior of specific response against one or several objects [6]. The better a person's response is certainly getting better the behavior that can be given to the object. M-commerce in response to the generation Y in response to the m-commerce applications is highly dependent on the experience of the individual.

To access the internet, as many as 85% of Indonesian people Accessing the internet via a mobile phone, even for the island of Java and Bali are a dominant figure of 92% [1]. This shows that the growth of accessing the internet through mobile devices very rapidly. However, the Indonesian people have not been too bold in transacting online. Still as much as 34% use mobile commerce for browsing the price and the product to be purchased and only 27% were actually transaction in mobile commerce or e-commerce such. What is interesting to observe is as much as 58% of perpetrators of online shopping are women and the remaining 42% were male [1].

In this study, an attempt to see whether that be a factor in forcing the customer in Indonesia is still low in the adoption of mobile commerce in the shop? Another problem will be investigated in this study is how the behavior in the use of mobile commerce in the Y-generation customer in Indonesia. This study attempts to investigate the factors that influence customer mobile commerce in Indonesia so that the figure is still low use of mobile commerce and how the behavior of customers in the adoption of mobile commerce.

2. RESEARCH METHODOLOGY

This present study focused on how the customer behavior of Y Generation in Indonesia to the adoption of M-commerce. The main motivation for this research was that there was no study conducted that involved Y Generation intention to adopt M-commerce in Indonesia. This research involves 155 respondents who wholly Y generation are scattered throughout Indonesia and is sampling used in this research. Sampling used in this study using purposed sampling and distributed in 10 major cities in Indonesia. The research data obtained by respondents fill out the online questionnaire. The sample selection was done by respondent selection based on age and only selected respondent according to criteria as Y generation. Respondents were selected respondents was born from 1980 to 1999.

2.1 Y Generation

Y Generation refers to a group of individuals born between 1980 and 1994 at this time has been entered in the middle school or college [3]. Compared with the previous generation (X Generation), the Y generation is very familiar and easy to use electronic equipment in the communication, media and digital technologies [7] [6] [2]. In this case, generation Y is indicated to use and have a good mobile phone to communicate as well as access to internet and their very familiar to use mobile commerce. Their activities to access internet >3 hour per a day.

2.2 M-commerce

M-commerce is a new generation of e-commerce [8]. To understand more about M-commerce is Necessary first to understand e-commerce. E-commerce can be Described as a form of sharing business information, manage business relationships, and connect business transactions using a computer connected to the telecommunications system [9]. Telecommunications system is in the form of private and public systems such as the Internet network. Tus, According to Husam [10] in their study, defining M-commerce as some of the transactions Carried out (such as data entry and purchase) or content delivery (such as reports and notifications) with monetary value that is done by the network and mobile devices. Mobile commerce activities are done using wireless enabled handheld devices which include cell phones and personal digital assistant and other smart phones [11] [12].

Mobile commerce (m-commerce) can be viewed as a subset of e-commerce and refers to many transactions with monetary value that is conducted via a mobile network Q [13]. M-commerce applications have two major characteristics: mobility and broad reach. Mobility implies portability, users can conduct business real time via mobile devices. With m-commerce, people can be reached at any time via a mobile device. M-commerce is described as, "e-commerce business processes and models carried out on a mobile terminal" [14]. This view can however be expanded to include the other M-commerce services e.g. location-based services, airtime purchases, ringtone downloads and mobile payments (including Point-of-Sale payments) [14]. Lucy Gitau [14] defined m-commerce as exchange or buying and selling of commodities and services through wireless handheld devices such as cellular telephones and personal digital assistant (PDAs). This study agrees to Lucy Gitau to adopts the definition of m-commerce as any transaction, involving the transfer of ownership or rights to use goods and services, which is initiated and/or completed by using mobiles devices to access computer-mediated networks with the help of a mobile device.

2.3 Perceived Usefulness

Davis [15] defined perceived usefulness as "the degree to which a person believes that using a particular system would enhance his or her job performance". The importance of perceived usefulness has been widely recognized in the field of mobile commerce. According to Davis [15], Perceived Usefulness of a system may be defined as the extent to which individuals

believe that using the new technology will enhance their performance. Lucy Gitau [14] explain that perceived usefulness can influence the intention to accept and adopt mobile commerce directly or indirectly. Khalifa & Shen [16], in their study argued that Information Systems and M-commerce provides evidence on the significant effect of Perceived Usefulness on adoption intention. Hence it would be essential to include perceived usefulness in the model.

According to Lucy Gitau [14], Perceived usefulness is a prominent factor which is widely used in explaining consumer behavior towards a new technology. According to Davis [15], Perceived Usefulness of a system may be defined as the extent to which individuals believe that using the new technology will enhance their performance. Therefore, perceived usefulness can influence the intention to accept and adopt mobile commerce directly or indirectly. Khalifa & Shen [16], in their study argued that Information Systems and M-commerce provides evidence on the significant effect of Perceived Usefulness on adoption intention. Hence it would be essential to include perceived usefulness in the model. An empirical studies support Perceived Usefulness as a primary predictor of M-commerce adoption [9] [17] [18] [15] [3]. According to Lucy Gitau [14] this construct assesses the extrinsic characteristics of mobile commerce and further shows how mobile commerce can help the users to achieve task-related goals, effectively and efficiently.

Luo Chinxiang [19] in their study at 2014, explored the key factors that influence the m-commerce adoption, perceived usefulness has a positive effect on user's perceived value. The results portrayed a positive relationship between Perceived Usefulness and adoption to use mobile commerce. The similar results were also found by Lucy Gitau that there is a relationship between perceived usefulness with the adoption of m-commerce on online customer [14]. Anjani Malik [9] found that usefulness has a determinant of customer acceptance on adoption mobile commerce.

This study has a Hypotheses:

H$_1$: *usability has a relationship of behavior and determines in adopting M-commerce among Generation Y in Indonesia*

2.4 Perceived Ease of Use

According to Davis [15] Perceived Easy of Use (PEOU) refers to the degree to which a person believes that using a particular system would be free of effort. Similarly, Hainudin [20] and Kazi [2] found that PEOU has a positive effect on behavioral intention to use the Internet banking. Guriting and Ndubisi [21] found that PEOU had a significant positive effect on behavioral intention to use online banking in Malaysia. Anjani Malik [9] found that PEOU has a determinant of customer acceptance on adoption mobile commerce.

Lucy Gitau [14]defined perceived Ease of Use (PEOU) as the degree to which the prospective user expects a new technology to be free of effort. It is further described as the internal belief of mental effort involved in using a system. This study defines it as the degree to which the user expects the system to be user friendly. According to Davis [15], an individual may believe that Kim and Garrison an application is useful, but he or she might also find that the system is difficult to use. Many previous empirical studies show that perceived ease of use has a positive influence in the adoption of mobile commerce (Khalifa and Shen [16], Abdulah Kazi [2] , Keung Jong Bong [5]). Many users take PEOU as a crucial factor since many of them are common citizens who are not necessarily adept in technology. This construct should therefore be included in the model.

According to theory, this hypothesis be assumed that:

H$_2$: *Easy of use has a relationship of behavior and determines in adopting M-commerce among Generation Y in Indonesia*

2.5 Perceived Ease of Learning

Easy of learning can be defined as the ability to understand and use an application with a relatively short time [22]. Easy of learning shows that a mobile commerce application can be learned quickly and the customer does not require a long time to be able to use it at the time of first use [23] [24]. M-commerce is easy to learn and quick to be used can provide a higher level for a return visit and used continuously by the customer. From the research that has been done previously showed that the level of learning that is both easy can increase the rate of adoption of m-commerce [25] [26]

This study has a hypothesis:

H₃: easy of learning has a relationship of behavior and determines in adopting M-commerce among Generation Y in Indonesia

2.6 Satisfaction

Customer satisfaction is defined as a pleasurable level of consumption-related fulfillment [27] [28]. Chen, Huang and Chou [29] suggested that customer satisfaction plays a critical role in WOM behavior because it affects individual motivations to recommend products or services. Previous studies have indicated that people who feel satisfied are more willing to recommend products and services to peers and family. Thus, when customers are more satisfied with a store, they are more willing to engage in check-in behavior immediately. Pin Luarn [28] study funding a customer satisfaction is positively related to user engagement in check-in behavior

This study has a Hypotheses:

H₄: satisfaction has a relationship of behavior and determines in adopting M-commerce among Generation Y in Indonesia

2.7 Compatibility

According to The DOI theory from Rogers [30] [31], also articulates that there are five perceived characteristics of innovation that forms a favorable or unfavorable attitude towards the innovation: *Compatibility, Complexity, Observability, Trialability, Relative advantage.* Roger defined compatibility as the degree to which an innovation is perceived as consistent with the existing values, past experiences and the needs of potential adopters [31]. An idea that is incompatible with the values and norms of a social system will not be adopted as rapidly as an innovation that is compatible. The similar with that study, Kim-Choy Chung [3] in his study a founding that a compatibility determines the behavioral intent to adopt mobile commerce among the Y Generation in Kazakhstan.

This study has a Hypotheses:

H₅: *Compatibility has a relationship of behavior and determines in adopting M-commerce among Generation Y in Indonesia*

2.8 Consistency

Consistency refers to the ability of mobile commerce to show the product in the original [2] [32]. This will increase customer confidence towards the M-commerce [18]. Consistency refers to the trust and the satisfaction. Both of these are related to one another.

According to theory, this hypothesis be assumed that:

H_6: *Consistency has a relationship of behavior and determines in adopting M-commerce among Generation Y in Indonesia*

2.9 Flexibility

Flexibility is defined as the ability to provide services that vary according to customer needs [26]. This definition is more appropriate in some m-commerce applications that provide appropriate services for customers according to their needs. Research shows that customers are likely to use m-commerce applications are repeatedly if provided service that is easy and flexible so customers are not having trouble [32] [33]. These results will influence the customer to adopt the m-commerce.

This study has a hypothesis:

H_7: *Flexibility has a relationship of behavior and determines in adopting M-commerce among Generation Y in Indonesia*

2.10 Customer Behavior

Schiffman and Kanuk [34], in his explanation about consumer behavior has said that the concept is all about how people make their decisions on personal or household products, with the use of their available resources such as time, money and effort. Vrechopoulos [35] conducted a study in Finland, Germany and Greece and compared adoption rates and consumer behavior toward M-Commerce. He found out that consumers were high in adoption and diffusion due to better quality mobile devices, user-friendly shopping interfaces, more useful applications and services, lower prices, better security, better coverage and higher speed. Similarity Gomathy has founded customer behavior has relationship to m-commerce quality [36].

The independent variables of this study are perceived usefulness (PU), perceived ease of use (PEOU), perceived easy of learning (PEOL), Satisfaction (SAT), compatibility (COM), consistency (CON), and flexibility (FLE). These independent variables may be the determinants that influence dependent variable, i.e. intention to adopt (ADOP) M-commerce among Y Generation in Indonesia. A self-administered questionnaire was used in this research, which consists of two sections.

According to value theory, hypotheses in this study:

H_1: *usability has a relationship of behavior and determines in adopting M-commerce among Generation Y in Indonesia*

H_2: *Easy of use has a relationship of behavior and determines in adopting M-commerce among Generation Y in Indonesia*

H_3: *easy of learning has a relationship of behavior and determines in adopting M-commerce among Generation Y in Indonesia*

H_4: *satisfaction has a relationship of behavior and determines in adopting M-commerce among Generation Y in Indonesia*

H_5: *Compatibility has a relationship of behavior and determines in adopting M-commerce among Generation Y in Indonesia*

H_6: *consistency has a relationship of behavior and determines in adopting M-commerce among Generation Y in Indonesia*

H_7: *flexibility has a relationship of behavior and determines in adopting M-commerce among Generation Y in Indonesia*

Fig. 1<Model Research>

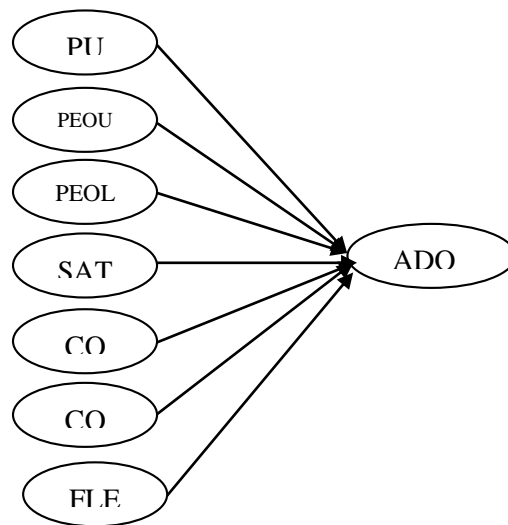## 3. DATA ANALYSIS AND RESULTS

This research using a quantitate method. This study using above theoretical model and hypotheses by using the questionnaire and Structural Equation Model (SEM). The variable in the model are adopted from existing research literature home and abroad, the respondents were requested to grade item on five-point scale. The item related to Intention to use mobile commerce and factors influencing the intention decision were rate by using a five-point likert scale. 1 represented Strongly Disagree, 2 as Disagree, 3 as Not Sure, 4 as Agree, and 5 as Strongly Agree. Intention to use mobile commerce is the dependent variable in this study and other independent variables used in this study are perceived usefulness, perceived ease of use, perceived easy to learning, satisfaction, compatibility, consistency, flexibility and adoption m-commerce.

An empirical data for this study was collected via internet survey and supplemented paper base questionnaire. The statistic found most respondents age in Y generation range is between 16 and 35. The users have some demographic characteristics of young, high education level and who have workers.

Analysis of measurement model, was used to build conceptual model of the measurement model in this study, the fit indexed between in data and proposed measurement model was generated by SPSS 20. So only fully completed 155 questionnaires were processed using SPSS version 20. Response rate was 99.98 percent linear regression was used for statistical testing of data. Variables were tested for reliability using SPSS and all values were above 0.7 and more. This is sufficient according to M. Syah [8], and for each variable Cronbach's alpha values are given below at Table I.

TABLE I.   Reliability Statistic

Variable name	Table Column Head	
	No. items	Cronbach's Alpha
Perceived usefulness	9	0.809
Perceived easy to use	12	0.793
Perceived easy to learning	5	0.859

Variable name	Table Column Head	
	No. items	**Cronbach's Alpha**
Satisfaction	10	0.802
Compatibility	7	0.826
Consistency	4	0.889
Flexibility	6	0.840
Adoptions	8	0.816

Structural Equation Modeling (SEM) using SPSS AMOS 20 revealed sufficient evidence of goodness-of-fit between the measuring models and the sample data (factor validity test). Structural model created by latent variables to check the hypotheses of research was tested by utilizing the maximum-likelihood calculation technique Subsequent structural test produced good fit statistics $\chi 2/df$ =3168.769, CMIN/df = 1.878 RMSEA=0.052, CFI=0.983 GFI=0.934 NFI= 0.937.

Result of hypotheses show this study, the H_1: *usability has a relationship of behavior and determines in adopting M-commerce among Generation Y in Indonesia* generated the second highest regression weight of 0.889 a significant regression, generated the highest regression and amongst the various determinants. This result replicated Batti Tariq [9] and Chung Kim Choy [3], that compatibility affects behavioral intention to adopt M- commerce. The H_2: *Easy of use has a relationship of behavior and determines in adopting M-commerce among Generation Y in Indonesia* generated a significant regression weight of 0.645. Respondents indicated that it would be easy for them to learn (mean=8.754). These findings reflected the techno savvy characteristics of the Y Generation. The H_3: *easy of learning has a relationship of behavior and determines in adopting M-commerce among Generation Y in Indonesia* (regression weight=0.178), possibly because M-commerce is currently in its infancy in Indonesia. The H_4: *satisfaction has a relationship of behavior and determines in adopting M-commerce among Generation Y in Indonesia* was also supported (regression weight=0.788) a significant regression and suggesting that behavioral intent to adopt M-commerce among the Y Generation in Indonesia. There was positive support for H_5: *Compatibility has a relationship of behavior and determines in adopting M-commerce among Generation Y in Indonesia* (regression weight=0.122). The H_6: *consistency has a relationship of behavior and determines in adopting M-commerce among Generation Y in Indonesia*, generated a positive to support adopt m-commerce in Indonesia (regression weight= 0.247). Finally, the H_7: *flexibility has a relationship of behavior and determines in adopting M-commerce among Generation Y in Indonesia* generated the highest regression (regression weight= 0.140). This study showed a variable usability has a highest significant support to customer behavior to adopt m-commerce Indonesia. The second to support is variable satisfaction to adopt m-commerce in Indonesia and the third variable is ease of use. This study showed customer behavior to adopt m-commerce among Y generation in Indonesia.

4. CONCLUSION

This study showed that perceived customer behavior with perceived usefulness, easy to use, easy to learning, satisfaction, compatibility, consistency and flexibility are positive relationship of behavioral intent to adopt M-commerce among the Y Generation in Indonesia. This study showed to us a perceived usefulness, easy to use, easy to learning, satisfaction, compatibility, consistency and flexibility has important determinants of behavioral intent to adopt M-commerce among the Y Generation in Indonesia. Implications for marketers and mobile service providers are discussed. The limitations of this study are that it has not yet explore other potential factors (technology enabler, network aggregator, content provider and wireless operators) that may determine behavioral intention towards the adoption of M-commerce.

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