JURNAL AKSI (Akuntansi dan Sistem Informasi). 2019. Vol. 4 No. 2

JURNAL AKSI
Akuntansi dan Sistem Informasi
http://aksi.pnm.ac.id

Effect of Individual Characteristics on Perception of Usability and Perception of Ease in Use of Mobile Commerce

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ARTICLE INFO

Keywords:
Technology Acceptance Model (TAM), *mobile commerce*, perceived usefulness, perceived ease-of-use, age, *gender*

Article History:
Received: May 24, 2019
Accepted: August 27, 2019

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ABSTRACT

This research study discusses the differences in individual characteristics associated through the use of mobile commerce with the perception of usefulness (Usefulness) and perceptions of convenience (Easy to Use) by converting the Technology Acceptance Model (TAM) model developed by Davis in 1989. The research was conducted at the Faculty of Economics and Business Universitas Brawijaya Malang using the survey method. The researcher received a response of 35 accounting students who used mobile commerce services. The researcher used the SPSS Software application to study the research data. This study uses the Multivariate Analysis of Variance (MANOVA) test. The results of the analysis for this model reveal the use of mobile commerce services there are individual level differences in the use of m-commerce (perceptions of usability and perceived ease) in each individual category of respondents' characteristics (Age, Gender, Innovation). The implications of this study are relevant to management and system analysis for benefit factors and consider the use of use in using and developing mobile commerce transactions.

INTRODUCTION

Information Technology (IT) has become a major requirement today. This is evidenced by the many companies that adapt technology with the times. Basically, the technology was formed to facilitate humans. Technological developments also bring extraordinary benefits for the advancement of human civilization. Companies in the world, want to transform themselves into a global power generation business through large investments in business information technology (IT), one of which is in the field of cellular commerce or m-commerce. According to Yang (2005) based on Barnes (2002), m-commerce is all business activities and processes related to commercial transactions carried out through wireless communication devices. Wireless devices can be exemplified such as cellphones, laptops, PDAs, and all other electronic devices that can be connected to wireless services (Leung and Antypas, 2001 in Yang, 2005). M-commerce was born after E-commerce which is generally done through the internet.

The birth of m-commerce was mainly driven by the high level of mobile users throughout the world. According to the Ministry of Communication and Information Technology (Kemenkominfo) said that the penetration of the number of internet users in Indonesia has reached 57% of the population, or roughly reached nearly 137 million users. This figure is fantastic considering that earlier this year APJII (Association of Indonesian Internet Service Providers) recorded the number

p-ISSN: 2528-6145, e-ISSN: 2541-3198 Accredited Fifth Grade by Ministry of Research, Technology and Higher Education of The Republic of Indonesia, Decree No: 3/E/KPT/2019

Cite this as: Lila Widya Rahajeng[1)] and David Kaluge. (2019). Effect of Individual Characteristics on Perception of Usability and Perception of Ease in Use of Mobile Commerce. JURNAL AKSI (Akuntansi dan Sistem Informasi), Vol. 4 (2). http://doi.org/ 10.32486/aksi.v4i2.335

of Internet users in the new homeland in figures starting at 71 million and it is estimated that by the end of the year many new figures reached around 80 of millions of users (Kompas, 2014). Comparing with so many uses of IT gadgets today it should be easier to make transactions, but so far the users of m-commerce services are still not the worst. Not many consumers use m-commerce in business transactions because many consumers use transactions manually.

Based on this phenomenon, researchers want to find out what perceptions influence someone to use m-commerce. This study refers to the research conducted previously by Yang (2005) on several perceptions that influence attitudes towards the use of m-commerce in Singapore. Researchers conducted the same research, which is about the attitude of several perceptions that influence the use of m-commerce, but the research was conducted in Indonesia. In his research, Yang (2005) uses variable attitudes towards the use of m-commerce as the dependent variable, perceived usefulness and perceived convenience as intermediary variables, as well as individual characteristics that include innovation, adoption of past behavior, knowledge, group technology, age, gender and specialization as an independent variable. This research is a replication of a study conducted by Yang (2005). Based on research conducted by Yang (2005), researchers took several of the same variables, namely perceived usefulness and perceived ease of use as dependent variables, and individual characteristics including age, gender, innovation as independent variables. Researchers also changed the research location, in Indonesia.

The model used in this study uses the Technology Acceptance Model (TAM) model. According to Fishbein and Ajzen (1975) in Yang (2005), TAM is a model that aims to investigate how the beliefs of individual users affect information on their decision to accept or reject the use of information systems. This statement is supported by Cheng et al. (2005) who conducted research on the use of internet banking attitudes, he said, TAM is a model that is often used to predict the acceptance and use of information systems. Another study using TAM is a study conducted by van der Heijden (2003). TAM is a theoretical and empirical research model conducted to explain the acceptance of information systems (van der Heijden, 2003). In the TAM theory in Yang's (2005) research, there are two perceptions that can influence attitudes towards use. Usability perception is defined as a person's level of trust that using certain technologies will improve performance performance (van der Heijden, 2003). Research conducted by Yang (2005) explains that perceived usefulness has a positive impact on the attitude of using m-commerce. Other researchers such as Davis (1989) also say the same thing, the perceived benefits have a significant relationship with attitudes towards the use of a system. The second perception is called perceptions of ease, which is defined as the level of a person's belief that using certain technology will be free of effort (van der Heijden, 2003). Yang (2005) suggested that perceived convenience does not affect m-commerce attitudes. This statement is supported by Davis (1989) research which states that perceived ease of use does not have a significant impact on the attitude of using a system. Another case with van der Heijden (2003). In his research, he stated that perceived ease of use has a positive influence on attitudes towards the use of a system. Perception The usefulness and perceived ease of use are influenced by seven individual characters, two of which are age and gender (Yang, 2005). According to Cutler et al in Chong (2013) found that differences in the availability and use of computers at home. They determined that the use and ownership of computers at home continued to decline with age. Older people will tend to have a higher risk of using the internet when compared to younger people based on Liebermann and Stashevsky in Chong (2013). Morris and Venkatesh in Cong (2013) age differences in technology adoption decisions, found that there was a significant direct effect on perceived usefulness among users of different age groups. Yang's research results (2005) show that age is negative on perceived benefits. Another individual character used in this study is gender. Gefen and Straub (1997) suggest that women have a positive influence on perceived benefits, while men have a positive effect on perceived ease of use. This is different from the results of Yang's (2005) study, which states that a woman has a positive influence on perceived usefulness and perceived ease of use.

Based on the background described above, the problem study is formulated as follows: (1) Is there an age difference in the perception of usefulness in the use of mobile commerce? (2) Is there an age difference in the perception of ease of use in using mobile commerce? (3) Are there gender differences in perceived usefulness in using mobile commerce? (4) Are there gender differences in the perception of ease of use in the use of mobile commerce? (5) Are there differences in innovation in the perception of usefulness in the use of mobile commerce? (6) Are there differences in innovation with the perceived ease of use of mobile commerce?

MATERIALS AND METHODS

According to Kriestian and Tanggulungan (2010), the attitude of an individual's general assessment of cognitive beliefs is built on the attributes inherent in technology. Davis (1989) found that the use of the user's overall attitude in the use of technology and information was the main factor determining whether someone was using the system. Individual behavior will be driven by motivation to get things done. Motivation theory states that individual behavior will be driven by internal and external motivation (Kwon & Chidambaram, 2000). Internal motivation is related to perceived ease of use and external motivation is related to perceived usefulness obtained. Yang (2005) states the use of m-commerce is influenced by two factors, namely the perception of usefulness and perceived convenience. To facilitate understanding of the research carried out, the following is presented in Figure 1 related to the research design framework:

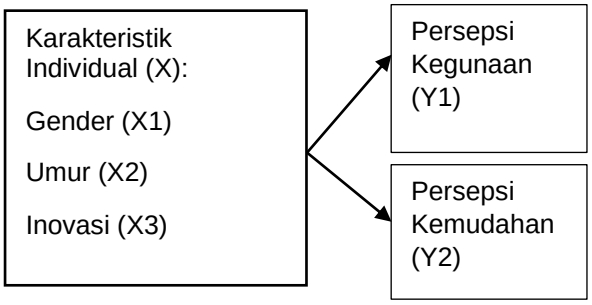

Figure 1. Research Design Framework

Usefulness

Perception of Use is defined as a person's level of trust that using a particular system will improve performance (Davis, 1989). Van der Heijden (2003) agrees with Davis, he defines the perception of someone's usefulness as the level of trust that the use of certain technologies will improve their performance and achievement. Kriestian and Tanggulungan (2010) stated that individuals who find it easy to use information technology, then the individual will more easily feel the benefits or usefulness of the technology. Chin and Todd (1995) state that uses can be divided into two categories, namely uses with an estimate of one factor and uses with an estimate of two factors (usefulness and effectiveness). The usefulness of factor estimation includes dimensions to make work easier, useful, increase productivity, increase effectiveness and develop job performance. So it can be concluded that the use of information technology can improve work performance and productivity of people who use it.

Ease of Perception (Easy to Use)

Perceived ease is defined as the extent to which a person believes that the use of a relative system does not require effort (Davis, 1989). Davis (1989) explained that the ease of use of information technology is a potential to increase the use of information technology. Individuals who feel that a technology is easy to use, the perception of ease of use will increase, and vice versa (Kriestian and Tanggulungan, 2010). Nasution (2004) based on Adam et al. (1992) states that the intensity of use and interaction between users and systems can also indicate ease of use. The more often the system used shows that the system is better known, easier to operate and easier to use by users. Based on the above definition it can be concluded that businesses will appreciate the ease of using one's time and effort in learning a system. The ease of comparison shows that people who use the system will work easier than people who don't use the system or work manually. If connected with the use of mobile commerce, this service is expected to make it easy for sellers and buyers to transact easily so that it is possible to get huge profits and their relationships become closer.

Individual characteristics

Gender

Suryadi and Idris (2004) define gender as the social connotation or gender of the community to determine social roles based on gender. In their research, Suryadi and Idris (2004) stated that gender can be divided into four gender theories, namely theories about natural nature, cultural theory, structural functional theory, and evolution theory. The theory of nature according to biological differences across gender is gender differences between men and women. Furthermore, this theory is further divided as a theory that sees nature as a natural gender difference that is not important and maintains a more theoretical view of gender differences as a result of cultural and non-natural engineering, so that gender differences do not apply universally and can be exchanged. Cultural theorists see gender as a result of cultural construction. According to this theory there is superiority of men over women because of cultural, material, or wealth construction. Gender is the result of a culture that distinguishes the social roles of men and women. Sorting social roles based on gender can be exchanged, formed and trained. Based on structural functional theory, the demand for gender equality in social roles in society is as a result of changes in the socioeconomic value structure in society. In the era of globalization which is filled with various competitions, one's role no longer refers to the norms of social life that more consider gender factors, but are determined

by competitiveness and skills. According to the theory of evolution, everything that happens in the universe does not happen automatically, but undergoes a process of evolution or change that runs slowly but surely, continuously without stopping (Suryadi and Idris, 2004). Several studies have illustrated the importance of considering gender. Gefen and Straub (1997) explain that women have a positive influence on perceived usefulness, while men have a positive influence on perceived ease. Other researchers are Venkatesh and Morris (2000) examine differences in men and women in the use of information technology. This study shows that women are more likely to use technology because it is influenced by perceptions of ease and men are more likely to use technology because of the perception of the usefulness of this technology. Sanjaya (2008) states that gender has positively influenced perceived perceived usefulness and ease. The results of the study (2005) show that women have a positive influence on perceived usefulness and perceived convenience. Based on the various studies that have been described, the following alternative hypotheses are proposed:

H1: There are gender differences in the use of perceived usefulness.
H2: There are gender differences in the use of perceived ease.

Age

According to Morris and Venkatesh (2000), this research has been prevalent in psychological research since several decades ago. Age is associated with difficulties in processing complex stimuli and allocating attention to information in a job. Until recently, age groups have been found to influence the adoption of decision technology in organizations. Wirjono also stated that the individual's age factor could weaken or strengthen the relationship between the adoption of new information systems and individual performance. Cutler et al (2003) argue that there are age differences in the availability and use of computers at home. The use and ownership of computers at home decreases steadily with age. Based on these definitions, it can be concluded that age is an individual's character that can be seen as young people and parents who are influenced by the use of information systems. Jones and Hubona (2005), whose understanding of differences and usage behavior revised technology acceptance from the assumption model. They use the Technology Acceptance Model (TAM) to determine whether the effect is external or not, which is fully mediated by the user's beliefs and attitudes.

Based on the empirical study of Jones and Hubona (2005), this research involved 106 professional and administrative staff in the IT divisions of large manufacturing companies that voluntarily use email and word processing software. Jones and Hubona (2005) also state that older workers who are resistant to change and rely less on extrinsic, performance-based rewards will have lower perceptions of usefulness for email and word processing. This shows that it is negatively related to users' perceived usefulness in e-mail and word processing programs. Jones and Hubona (2005) are not consistent with research conducted by Yi et al (2006). Yi et al (2006) examine the understanding of how the behavior of technology use affects the integrated framework. Samples were from Nanyang University of Technology, Singapore. Using online research survey methods, he collected data. His research shows that age has a significant effect on perceived benefits. Age is an intrinsic factor that is believed to influence the use of new information systems. Age differences will be associated with difficulties in processing complex stimuli and allocating attention to information (Plude and Hoyer, 1986). With respect to perceived ease of use, evidence shows that older users find it more difficult to learn and use unknown technology.

Many older workers also do not have the computer skills of younger colleagues (Agarwal and Prasad, 1999). Younger individuals are more open to new technology, media and experience. Older consumers are those who reach maturity before the digital revolution. On the other hand, they only have limited access to new technologies in various domains. Thus, older people have less favorable attitudes and greater anxiety about computers and information technology than younger people, and, therefore, are less appropriate to utilize modern technology when it is available. It is assumed that parents feel more uncomfortable and less competent and are therefore more resistant to using newer technology (Cutler et al., 2003) Therefore, in this study the researchers conducted empirical studies of attitudes that influence the use of information technology. including age as a factor Some studies have illustrated the importance of considering age Yang (2005) examines the factors that influence the adoption of M-commerce in Singapore Research sample Yang (2005) is a Singaporean student conducting research at the National University of Singapore. Yang's (2005) results show that age has a significant influence on perceived ease.

Jones and Hubona (2005) examine individual differences and usage behavior modified by the Technology Acceptance Model (TAM) Our study involved 106 professional and administrative staff in the IT division of manufacturing companies big who voluntarily use em ail and word processing.

The results show that older workers find it more difficult to learn and use new IT. The results of Jones and Hubona's research (2005) state that the elderly have an influence on perceived ease of use. Based on various studies that have been described, researchers propose the following alternative hypotheses.

H3: There is a difference in age with regard to usefulness perception.
H4: There is a difference in age with perceived ease.

Innovation

Innovation is an idea, ideas, practices or objects or objects that are realized and accepted as something new by a person or group to be adopted (Rogers, 1995). Meanwhile, Agarwal and Prasad (1999) state that personal innovation in technology reflects the degree to which individuals are willing to try new information technology. Thus individuals are characterized as innovative if they are fast in adopting information technology. Agarwal and Prasad (1999) also state that personal innovativeness is treated in the information technology domain as an individual's tendency associated with positive beliefs about the use of information technology. In the application of information technology, it is necessary to pay attention to the organizational structure that accommodates the results of new innovations, the technical capabilities of human resources and the culture that exists in the organization. In the absence of a forum that accommodates the results of innovation will affect the process of innovation diffusion that raises the tendency to reject because individuals feel unclear in carrying out activities related to the results of innovation that have been adopted by the organization. According to Rogers (1995), organizations are created to handle routine tasks on a large scale through a rule about human relations.

Structure is needed to accommodate the results of innovation; in addition, it can be a link between one innovation and another innovation so that they can be interrelated which in the end will be systematically integrated. Several previous studies have shown that innovation has a positive and significant effect on perceived usefulness, including research conducted by Yang (2005) and Utama (2008). However, research conducted by Kuo and Yen (2009) shows different results, namely innovation has no effect on perceived usefulness. Kuo and Yen (2009) examine the understanding of interests and behavior to use information technology with 3G networks. In his research, researchers used the Technology Acceptance Model (TAM) with personal innovation as an understanding of the perceptions of the use of mobile commerce. Based on empirical studies from Kuo and Yen (2009) who took research subjects in Taiwan with a sample of students from five universities in Taiwan chosen at random, showing that innovation does not affect perceived usefulness. Kuo and Yen's research (2009) is not consistent with research conducted by Yang (2005). The results of Yang's (2005) research show that innovation has a significant influence on perceived usefulness.

Main research results (2008) show results consistent with Yang's (2005) research. Researchers conducted research on the influence of institutional, social and individual factors on the benefits of using information technology. Empirical studies conducted by Utama (2008) state that innovation positively and significantly influences perceived usefulness. The sample taken was lecturers at various universities in Yogyakarta and Central Java. By basing on Roger's theory of the diffusion of innovation, Agarwal and Prasad (1999) argue that individuals develop beliefs about new information technology through the incorporation of information through various channels, including mass media. They also mention that personal innovation in technology reflects the degree to which individuals are willing to try new information technology. Several previous studies have shown that innovation has a positive and significant effect on perceptions of ease, including research conducted by Yang (2005), Utama (2008), and Kuo and Yen (2009). Yang (2005) examines the factors that influence the adoption of m-commerce in Singapore. Samples from research Yang (2005) are Singaporean students who study at The National University of Singapore. The results of Yang's (2005) research show that innovation has a significant effect on perceived ease. Main research results (2008) show results consistent with Yang's (2005) research.

Researchers conducted on the influence of institutional, social and individual factors on the benefits of using information technology. Empirical studies conducted by Utama (2008) state that innovation positively and significantly influences perceived ease. The sample taken was lecturers at various universities in Yogyakarta and Central Java. Kuo and Yen (2009) examine the understanding of interests and behavior to use information technology with 3G networks. In his research, researchers used the Technology Acceptance Model (TAM) with personal innovation and cost perception as an understanding of consumer interest and behavior towards the use of 3G mobile. Based on empirical studies from Kuo and Yen (2009) who took research subjects in Taiwan, showing that innovation influences perceptions of convenience.

Based on the study described, the researcher formulated the alternative hypothesis as follows:

H5: There are differences in innovation in the perception of usefulness.
H6: There are differences in innovation with perceived ease.

In this study using quantitative research. The population used is the University of Brawijaya Accounting Department student, for the 2017/2018 academic year, Chosen as the population of accounting students in this study is based on thinking for the role of accounting students in the workforce in the future it might be linked to the development of information systems in the form of mobile commerce. In addition, students are active users of new technology and are also considered as consumers who are very influential in cellular commerce. The choice of location in the Department of Accounting, Faculty of Economics and Business, Brawijaya University based on the location close to the researchers, and the limited time and cost of researchers is also a consideration in population selection. Population sampling in this study was conducted using convenience sampling method. Convenience sampling is one type of non-probability sampling that prioritizes aspects of ease of sampling, so researchers can examine each student who meets in the Accounting Department of the Faculty of Economics and Business, Universitas Brawijaya. The number of samples in this study and produce a total sample of 35 students.

Table 1.
Number and Categories of Research Samples

Between-Subjects Factors

		Value Label	N
Karakteristik_Individual	1.00	Age	12
	2.00	Jenis Kelamin	11
	3.00	Inovasi	12

Data collection method in this research is survey method. Surveys are the main method of data collection by giving questions to each respondent. The survey was conducted by distributing questionnaires to a sample of respondents. Researchers distributed questionnaires directly to respondents for approximately one week. There are five constructs in this research, namely perception of usefulness, perceived convenience, age, gender, and innovation. From these constructs, each construct will be explained. Question items listed in the questionnaire in this study are question items based on the research of Pedersen (2005) and Wang (2005). Contour perception of usefulness, based on research Pedersen (2005). With the following indicators:

1. The use of m-commerce services increases my efficiency as a customer
2. M-commerce services are very useful for me as a customer

The construct of perceived ease according to Wang's research (2005). With the following indicators:

1. It is easy for me to learn how to use m-commerce
2. It's easy to make m-commerce services do what I want
3. I think being skilled in using m-commerce

Innovation is defined as the willingness of individuals to adopt innovative technology. In other words, innovation is the level of interest in trying new things, new concepts, or innovative services or products (Kuo and Yen, 2009). This study uses innovation variables based on the concept of Yang (2005). With the following indicators:

1. I am happy to take the opportunity.
2. I feel happy to be around people who dare to try new things.
3. I often look for information about new products.

As for knowing age, researchers chose accounting students for 1-7 semesters and respondent's gender, will be given the choice of male or female in the questionnaire. To measure gender using a nominal scale with the variable "1" as male and "0" as female. The measurement used in this study is to use a Likert scale. How to measure this scale is to confront respondents with questions and then be asked to answer questions with choices: "Strongly Disagree (SD), Disagree (D), Disagree (LA), Neutral (N), Fairly Agree (SA), Agree (A), Very Agree (SA) This answer is given a score of 1 to 7 starting from a scale of 1 that states Strongly Disagree (SD) to a scale of 7 that states Strongly Agree (SA) .The test carried out in this study is the Manova test (Multivariate Analysis of Variance) Manova test is conducted when researchers want to see differences that occur in several sample categories with the number of dependent variables more than one (metric or interval) and the number of independent variables can be one or more (non-metric or nominal) (Ghozali, 2016) To analyze this study, hypothesis testing was used using SPSS version 23 software. In this study, a condition test was performed using a box's test. Box's test was used to test MANOVA assumption which requires that the variance / covariance matrix of the dependent variable is the same (not different) Imam Ghozali (2009: 80) with a significance level above 0.05. Next multivariate test is used to test whether each factor (internal control) affects the group of dependent variables. The value seen in this table

is Hotelling's Trace in the Internal_controlling effect section. Hotelling's Trace value is used because there are only two groups of dependent variables used (liquidity and profitability ratios). Multivariate test results indicate the value of the F test for Hotelling's Trace significance at the level of 0,000.

Furthermore Manova assumes that each dependent variable has the same variance for all groups. Levene's test is used to test these assumptions with a significance of 0.05, it can be stated that the calculation results meet the manova assumptions that require similarity in variance. Next Test of between subject effects examines the effect of univariate manova for each factor on the dependent variable. The significance of the F test value is used to test this. The F test value is significant at 0,000.

RESULTS AND DISCUSSION

Manova Statistical Test Results

Based on the Manova test that has been carried out, the research results are presented in the following:

Table 2.
Box's Test Equality of Covariance Matrics

Box's Test of Equality of Covariance Matrices[a]

Box's M	41.646
F	1.066
df1	30
df2	3195.289
Sig.	.369

Tests the null hypothesis that the observed covariance matrices of the dependent variables are equal across groups.

a. Design: Intercept + Karakteristik_Individual

Box's test is used to test the MANOVA assumption which requires that the variance / covariance matrix of the dependent variable are the same (not different). It can be seen that the Box's M test value is 41,646 and the F test value is 1,066 with a significance level of 0.369 which is far above 0.05 so that the null hypothesis that the same variance / covariance matrix is accepted. The results of this test are in accordance with the MANOVA assumption so that the analysis can proceed.

Table 3.
Multivariate Tests

Multivariate Tests[a]

Effect		Value	F	Hypothesis df	Error df	Sig.
Intercept	Pillai's Trace	.998	2774.389[b]	5.000	28.000	.000
	Wilks' Lambda	.002	2774.389[b]	5.000	28.000	.000
	Hotelling's Trace	495.427	2774.389[b]	5.000	28.000	.000
	Roy's Largest Root	495.427	2774.389[b]	5.000	28.000	.000
Karakteristik_Individual	Pillai's Trace	.206	.664	10.000	58.000	.752
	Wilks' Lambda	.803	.648[b]	10.000	56.000	.766
	Hotelling's Trace	.234	.632	10.000	54.000	.780
	Roy's Largest Root	.169	.983[c]	5.000	29.000	.445

a. Design: Intercept + Karakteristik_Individual

b. Exact statistic

c. The statistic is an upper bound on F that yields a lower bound on the significance level.

Multivariate tests are used to test whether each factor (individual characteristics) influences a group of dependent variables. The value seen in this table is Hotelling's Trace in the Individual Characteristics effect section. Hotelling's Trace value is used because there are only two groups of dependent variables used (liquidity and profitability ratios). The multivariate test results showed the F test value for Hotelling's Trace was 0.632 and the significance was at the level of 0,000.

Table 4.
Leven's Test of Equality of Error Variances

Levene's Test of Equality of Error Variances[a]

	F	df1	df2	Sig.
PU1	1.165	2	32	.325
PU2	.241	2	32	.787
PE1	2.353	2	32	.111
PE2	.831	2	32	.445
PE3	1.628	2	32	.212

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + Karakteristik_Individual

MANOVA assumes that each dependent variable has the same variance for all groups. Leven's test is used to test these assumptions. Table 4 shows that for use on abbreviated use perceptions (PU). PU1, PU2 have significance of 0.325 and 0.787, and perceived ease of abbreviated (PE) PE1, PE2, PE3 have significance exceeding 0.05 namely 0.111, 0.445 and 0.212. Based on the significance value, it can be stated that the calculation results have fulfilled the MANOVA assumption that requires similarity in variance.

Table 5.
Tests of Between-Subjects Effects

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	PU1	.146[a]	2	.073	.124	.884
	PU2	1.102[b]	2	.551	1.003	.378
	PE1	.168[c]	2	.084	.160	.853
	PE2	.523[d]	2	.262	.414	.665
	PE3	1.691[e]	2	.845	1.701	.199
Intercept	PU1	1329.824	1	1329.824	2260.433	.000
	PU2	1155.243	1	1155.243	2102.432	.000
	PE1	1330.913	1	1330.913	2534.615	.000
	PE2	1295.214	1	1295.214	2049.826	.000
	PE3	1341.826	1	1341.826	2698.988	.000
Karakteristik_Individual	PU1	.146	2	.073	.124	.884
	PU2	1.102	2	.551	1.003	.378
	PE1	.168	2	.084	.160	.853
	PE2	.523	2	.262	.414	.665
	PE3	1.691	2	.845	1.701	.199
Error	PU1	18.826	32	.588		
	PU2	17.583	32	.549		
	PE1	16.803	32	.525		
	PE2	20.220	32	.632		
	PE3	15.909	32	.497		
Total	PU1	1352.000	35			
	PU2	1173.000	35			
	PE1	1350.000	35			
	PE2	1317.000	35			
	PE3	1363.000	35			
Corrected Total	PU1	18.971	34			
	PU2	18.686	34			
	PE1	16.971	34			
	PE2	20.743	34			
	PE3	17.600	34			

Test of between subject effects tests the effect of univariate anova for each factor on the dependent variable. The significance of the F test value is used to test this. The value of the F test for the relationship between individual characteristics and perceived usefulness in the use of m-commerce services can save user time (PU1) is 0.12, perceived usefulness in m-commerce services makes individuals a better customer (PU2) by 0.378. for the value of the F test between individual characters with a significant perception of ease at 0,000 perceptions of the ease of PE1 ie easy for individuals to learn how to use m-commerce is 0.853, PE2 is easy to make m-commerce services do what individuals want is 0.665, PE3 namely feeling to be skilled in using m-commerce is equal to 0.199 and significant at 0,000 which means there are differences in the use of m-commerce. The value of adjusted R squared for the use of PU1 perceptions of use is 0.054, PU2 is 0.000, and the use of ease perceptions of PE1 is 0.52, PE2 is 0.36, PE3 is 0.040 This means that individual characteristics are able to illustrate the effect of changing the use of perceived use and perceived ease of use in mobile use commerce.

Table 6.
Multiple Comparisons

Multiple Comparisons

Dependent Variable		(I) Karakteristik_Individual	(J) Karakteristik_Individual	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
PU1	Tukey HSD	Age	Jenis Kelamin	.1591	.32017	.873	-.6277	.9459
			Inovasi	.0833	.31313	.962	-.6861	.8528
		Jenis Kelamin	Age	-.1591	.32017	.873	-.9459	.6277
			Inovasi	-.0758	.32017	.970	-.8625	.7110
		Inovasi	Age	-.0833	.31313	.962	-.8528	.6861
			Jenis Kelamin	.0758	.32017	.970	-.7110	.8625
	Bonferroni	Age	Jenis Kelamin	.1591	.32017	1.000	-.6498	.9680
			Inovasi	.0833	.31313	1.000	-.7078	.8744
		Jenis Kelamin	Age	-.1591	.32017	1.000	-.9680	.6498
			Inovasi	-.0758	.32017	1.000	-.8846	.7331
		Inovasi	Age	-.0833	.31313	1.000	-.8744	.7078
			Jenis Kelamin	.0758	.32017	1.000	-.7331	.8846
PU2	Tukey HSD	Age	Jenis Kelamin	-.4167	.30942	.381	-1.1770	.3437
			Inovasi	-.0833	.30262	.959	-.8270	.6603
		Jenis Kelamin	Age	.4167	.30942	.381	-.3437	1.1770
			Inovasi	.3333	.30942	.535	-.4270	1.0937
		Inovasi	Age	.0833	.30262	.959	-.6603	.8270
			Jenis Kelamin	-.3333	.30942	.535	-1.0937	.4270
	Bonferroni	Age	Jenis Kelamin	-.4167	.30942	.563	-1.1984	.3651
			Inovasi	-.0833	.30262	1.000	-.8479	.6812
		Jenis Kelamin	Age	.4167	.30942	.563	-.3651	1.1984
			Inovasi	.3333	.30942	.868	-.4484	1.1151
		Inovasi	Age	.0833	.30262	1.000	-.6812	.8479
			Jenis Kelamin	-.3333	.30942	.868	-1.1151	.4484
PE1	Tukey HSD	Age	Jenis Kelamin	-.0985	.30248	.943	-.8418	.6448
			Inovasi	-.1667	.29583	.840	-.8936	.5603
		Jenis Kelamin	Age	.0985	.30248	.943	-.6448	.8418
			Inovasi	-.0682	.30248	.972	-.8115	.6751
		Inovasi	Age	.1667	.29583	.840	-.5603	.8936
			Jenis Kelamin	.0682	.30248	.972	-.6751	.8115
	Bonferroni	Age	Jenis Kelamin	-.0985	.30248	1.000	-.8627	.6657
			Inovasi	-.1667	.29583	1.000	-.9141	.5807
		Jenis Kelamin	Age	.0985	.30248	1.000	-.6657	.8627
			Inovasi	-.0682	.30248	1.000	-.8324	.6960
		Inovasi	Age	.1667	.29583	1.000	-.5807	.9141
			Jenis Kelamin	.0682	.30248	1.000	-.6960	.8324
PE2	Tukey HSD	Age	Jenis Kelamin	-.0152	.33181	.999	-.8305	.8002
			Inovasi	.2500	.32452	.724	-.5475	1.0475
		Jenis Kelamin	Age	.0152	.33181	.999	-.8002	.8305
			Inovasi	.2652	.33181	.706	-.5502	1.0805
		Inovasi	Age	-.2500	.32452	.724	-1.0475	.5475
			Jenis Kelamin	-.2652	.33181	.706	-1.0805	.5502
	Bonferroni	Age	Jenis Kelamin	-.0152	.33181	1.000	-.8534	.8231
			Inovasi	.2500	.32452	1.000	-.5699	1.0699
		Jenis Kelamin	Age	.0152	.33181	1.000	-.8231	.8534
			Inovasi	.2652	.33181	1.000	-.5731	1.1034
		Inovasi	Age	-.2500	.32452	1.000	-1.0699	.5699
			Jenis Kelamin	-.2652	.33181	1.000	-1.1034	.5731
PE3	Tukey HSD	Age	Jenis Kelamin	.4091	.29432	.358	-.3142	1.1324
			Inovasi	.5000	.28785	.207	-.2074	1.2074
		Jenis Kelamin	Age	-.4091	.29432	.358	-1.1324	.3142
			Inovasi	.0909	.29432	.949	-.6324	.8142
		Inovasi	Age	-.5000	.28785	.207	-1.2074	.2074
			Jenis Kelamin	-.0909	.29432	.949	-.8142	.6324
	Bonferroni	Age	Jenis Kelamin	.4091	.29432	.522	-.3345	1.1527
			Inovasi	.5000	.28785	.276	-.2272	1.2272
		Jenis Kelamin	Age	-.4091	.29432	.522	-1.1527	.3345
			Inovasi	.0909	.29432	1.000	-.6527	.8345
		Inovasi	Age	-.5000	.28785	.276	-1.2272	.2272
			Jenis Kelamin	-.0909	.29432	1.000	-.8345	.6527

Based on observed means.
The error term is Mean Square(Error) = .497.

Table 6 is used to see the difference in the average use of m-commerce on perceived usefulness and perceived convenience on each individual's characteristics. Turkey test results show there are differences in users' perceived usefulness in each group with individual characteristics of age, gender and innovation. Likewise for the use of perceived ease, it can also be seen that between individual characteristics also have differences.

CONCLUSIONS AND SUGGESTIONS

The conclusion that can be drawn from this study is to test the construction of the Technology Acceptance Model (TAM). In the Technology Acceptance Model (TAM), the perceived usefulness and perceived ease of use. Perceived Usefulness is the level of a person's belief that using a particular system will improve its performance. While the perception of ease (Easy to Use) is defined as the extent to which a person believes that the use of a relative system does not require effort. Second, the results of the study concluded that it supports the Technology Acceptance Model (TAM) model. Age is an individual characteristic of age that can be associated with young people and older people who might be affected by the use of information systems. The role of gender is to focus the difference between men and women, when a man's masculinity should be firm, competitive, and tough and women are femininity that should be simpler, gentler, and care about quality of life (Hofstede, by gender but not influenced by age. the results of the research that have been carried out, it can be concluded that there are differences in the individual level of the use of m-commerce (perceived usefulness and perceived convenience) in each of the individual categories

of respondent characteristics (Age, Gender, Innovation). used as well as in-depth analysis carried out.These results found inconsistencies in the results of this study may be because a reasonable explanation can be attributed to the homogeneity of respondents because all respondents are students of Universitas Brawijaya aged between 19-24. Third, the results of the study concluded supports the Technology Acceptance Model (TAM) model which shows that Perceived Use Perceived is influenced by researchers realizing that this research has limitations, which in this study do not focus on cellular trading services to certain wireless devices. Each wireless device certainly has its own characteristics in providing cellular trading services to users. Then the next researcher must focus more research on the characteristics of each type of wireless device. The results of this study are also expected to provide input for company management, especially online sales system analysts who carry out transactions using mobile commerce in order to pay attention to the usefulness of perception and ease perceived in implementing and developing mobile commerce transactions in the trading system.

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