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Abstract Indra Sungkana Nugraha¹,
Apriani Dorkas Rambu Atahau²

¹Magister Management Satya
Wacana Christian University

²Department of Management,
Faculty of Economics and Business,
Satya Wacana Christian University
Jl. Diponegoro 52-60, Salatiga,
50711, Indonesia

✉ Corresponding Author:

Apriani Dorkas Rambu Atahau:

Tel. +62 298 311881;

Fax. +62 298 321 212

E-mail: apriani@staff.uksw.edu



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**Indra Sungkana Nugraha (Indonesia),
Apriani Dorkas Rambu Atahau (Indonesia)**

The Use Analysis of Internet Banking among SMEs Entrepreneurs

Abstract

The increasing number of financial transaction activities resulted in people to require a payment means that was fast, safe and efficient in making transactions. Internet banking as one of the modern financial transaction means offered many conveniences in the activities. We investigated the factors that influenced the interests that had an impact on the behavior of SMEs in using internet banking. The samples of this research were 129 SMEs entrepreneurs who used internet banking in Salatiga. By using TAM modification namely Trust and Risk in Technology Acceptance Model (TRiTAM) and also actual system usage variable, we found that pertinence perception, convenience perception, attitude, and trust were factors that affected interest and affected the behavior of internet banking usage in transaction activities. The implication of this research was that the relationship among trusts, risk, and technology acceptance model with transaction behavior and internet banking could be mediated by customer interest.

Keywords: Actual System Usage; Attitude; Convenience Perception; Interest; Pertinence Perception; Trust and Risk in Technology Acceptance Model (TRiTAM)

JEL Classification: G41, G21

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Abstrak

Meningkatnya kegiatan transaksi keuangan membuat masyarakat menginginkan suatu alat pembayaran yang cepat, aman, dan efisien dalam bertransaksi. Internet banking sebagai salah satu solusi alat transaksi keuangan modern menawarkan banyak kemudahan dalam kegiatannya. Kami menginvestigasi faktor-faktor yang memengaruhi minat yang berdampak pada perilaku UMKM dalam menggunakan internet banking. Sampel penelitian ini adalah 129 responden para pelaku UMKM pengguna internet banking di Kota Salatiga. Dengan menggunakan modifikasi TAM yaitu Trust and Risk in Technology Acceptance Model (TRiTAM) dengan menambahkan variabel actual system usage, kami menemukan bahwa persepsi kegunaan, persepsi kemudahan, sikap, dan kepercayaan merupakan faktor yang memengaruhi minat serta berdampak pada perilaku penggunaan internet banking untuk kegiatan transaksi pembayaran. Implikasi penelitian ini adalah bahwa hubungan antara trust, risk, and technology acceptance model dengan perilaku bertransaksi dengan internet banking dapat dimediasi oleh minat nasabah.

Kata Kunci: Actual System Usage; Sikap; Persepsi Kegunaan; Minat; Persepsi Kemudahan; Trust and Risk in Technology Acceptance Model (TRiTAM)

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The increase of needs for life is in line with the high economic transactions in the community. The high number of financial transactions make people require a payment means that is safe, fast, and efficient in making transactions. The changes in economic transactions continue to change along with technological developments, people's lifestyles, and payment systems. The payment system experiences development: first using cash, at present people prefer conducting transaction activities using internet banking services or commonly called as e-banking as banking activities through internet media.

Previous researches in the use of internet banking show various results. The research of Jamieson & Lui (2003) with a contribution of samples on SMEs entrepreneurs states that risk perception influences the intensity to do transactions using *internet banking*. The research by Kesharwani & Bisht (2012) conducted in India states that trust and risk perceptions have an impact on the use of internet banking. In line with Kesharwani & Bisht (2012), Sulastini & Warmika (2014) research shows that there is a trust significant positive influence in using internet banking. However, research by Panggalih & Baridwan (2013) shows that subjective norms, trust, and risk perceptions do not have effects on the interest in using internet banking services. The difference of the researches results can occur between one researcher and another because of possible differences in sample, time, and location of the research. Based on this phenomenon, this study aims to analyze the factors that influence interest that have an impact on the behavior of SME entrepreneurs in using internet banking services.

This study used Trust and Risk model in Technology Acceptance Model (TRiTAM) in the context of the application of information systems, especially internet banking to develop research models and incorporate additional factors that had been empirically tested. Technology Acceptance Model (TAM) is developed based on the Theory of Reasoned Action (TRA). This theory is made based on

certain beliefs of individuals forming attitudes towards an object, by interest in behaving towards the object. It is because interest is the main determinant of real behavior. Davis (1989) adapts the TRA by developing two main things that are considered important in the use of technology, namely trust in the use of technology and ease of using technology.

TAM is widely used in various studies regarding the adoption of information technology, including the use of internet banking. The main reason for using the TAM model is due to the simplicity (parsimony) and the ability to explain (explanatory power) cause-effect relationships (Davis, 1989). Modification of the TAM model was once carried out by Venkatesh & Davis (1996) by adding a trust variable with the title Trust enhanced Technology Acceptance Model, which examined the relationship between TAM variables and trust. Another modification of TAM that has been carried out is (TRiTAM) conducted by Jamieson & Lui (2003). Both use variables of trust and risk perception with TAM variables.

Trusts and risks are relevant to TAM because to adopt a new technology especially related to payments via the internet; trust is needed among the users. Trust is important considering the issue of security and confidentiality of personal and financial data in internet banking is often questioned by customers before they decide to use internet banking (Pinontoan, 2013). Some studies show that trust is important in online banking because transactions conducted through online banking contain sensitive information and parties involved in it are concerned about information security of money transferred via the internet (Kesharwani & Bisht, 2012). In the use of internet banking, there is a state of physical separation between banks and individuals and the absence of physical interaction between individuals and bank employees in internet banking causing a unique situation, so that the trust of individuals is the most important for banks. Internet banking has high uncertainty because the parties involved in

transactions that use this service are not in the same place. Meanwhile, according to Safeena, Kammani, & Date (2011), risk perception factors are used because even though internet banking provides convenience and fast transactions, customers are still less interested in adopting due to security and privacy reasons. When associated with culture in Indonesia that is characterized by communal and informal, the adoption of internet payments for SMEs in Indonesia has a high risk if the SMEs entrepreneurs only follow the advice of relatives and colleagues.

This research is relevant to do because the development of technology in the financial sector (FinTech) has consequences in the way of doing the business of SMEs, which are generally still late in adopting technological advances in their business processes. The use of financial technology such as internet banking offers a variety of convenience and speed in banking transactions.

The contribution of this study compared to previous research is the adoption of the internet banking topic which is relevant to the phenomenon of financial technology development at this time where Indonesia is the fourth country in the world with the most population using internet services. Based on user data from 6 major banks in Indonesia, in 2014 the total number of internet banking users reached 10 million users. According to the prediction of Sharing Vision, the number of internet banking users would increase to 12.2 million users (www.sharingvision.com). Ironically, the high number of internet banking users is not followed by SMEs entrepreneurs in Indonesia. According to Minister of Communication and Information, Rudianta, there are many business people, especially in regions who are not yet interested in using the internet for transactions, whereas SMEs can contribute more than 58 percent of Indonesia's GDP (www.cnnindonesia.com). It is said again by the Minister of Communication and Information, Rudiantara that technology can become an enabler and provide added value to lo-

cal industry agents and society in general. Many advantages offered by internet banking services have not been widely used by SMEs. Thus, this study aimed to investigate the factors that influenced interest that had an impact on the behavior of SMEs in using internet banking. To find out the factors, hypotheses are formulated to support the results of this study.

HYPOTHESES DEVELOPMENT

Nasri & Charfeddine (2012), in their research state, that convenience perception influence attitudes in using internet banking services in Saudi Arabia while Jacky & Lin (2016) find that convenience perception does not affect the attitude of using the energy management system. Research by Nasri & Charfeddine (2012) mentions the positive influence of convenience perception of use on the attitude of using technology. Regarding internet banking, attitude refers to the positive or negative impact of the use of internet banking services as a means of payment or other transactions.

Based on the statements described above, it can be concluded that if SMEs entrepreneurs believe that the technology is easy to use, individual attitudes will arise to adopt the technology. Conversely, if the individual feels that the information system or technology is difficult to understand or difficult to use, it will have a negative impact on the attitude of individuals to adopt the technology. Financial transactions using internet banking services are considered to be easier to use than having to use cash and meet directly so that the convenience will later affect the individual's attitude in financial transactions with consumers using internet banking services. Therefore the hypothesis is:

H₁: convenience perception has a positive effect on the attitude of SMEs entrepreneurs in making transactions using internet banking services

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Pertinence perception is associated with the view that the benefits of using technology can improve individual performance, the work performance of people who use it.

The benefits can be measured through the frequency of use and variations of applications that are run. According to Davis (1989), pertinence perception is defined as the level of individual trust on the ability of technology to improve work performance in the organization. Thus, the perception of benefits or pertinence relates to productivity and work effectively as a form of the benefits of the technology used (Irmadhani & Nugroho, 2012). Based on TAM's past studies, the first underlying relationship is that convenience perception and pertinence perception will have an impact on improving user attitudes towards use. Several previous studies also show that pertinence perception has a positive effect on the attitude of using technology (Nasri & Charfeddine, 2012; Chin & Lin, 2016). An individual will receive a system if the system is easy to apply. Thus, the individual's attitude towards the use of internet banking services shows how far the individual accepts or rejects internet banking technology. Acceptance of the technology is also based on the effect of pertinence perception on attitude. Two attitudes of beliefs (pertinence benefit and ease of use) widely used as the basic acceptance determinants of the information system. Based on TAM theory, pertinence perception is one of two keys to measuring the effect of attitudes on the pertinence of new technology. The pertinence perception shows that the higher the pertinence level will have a positive impact on the attitude of individuals adopting internet banking technology. Based on the above explanation regarding the use of internet banking services, if the user, in this case, is the SMEs entrepreneurs feel that there is pertinence to make the work more effective, the users will receive the technology. Then the second hypothesis in this study is:

H₂: pertinence perception has a positive effect on the attitude of SMEs entrepreneurs in doing transactions using internet banking services

Previous research shows that pertinence perception has a significantly greater correlation with the use system than convenience perception. Convenience perception is considered useful by individuals if system usage can improve performance. An example is using internet banking services will make transactions faster and save time so that SMEs business entrepreneurs can increase their productivity. Some users of job content, especially those that involve the use of technology or computers, become more productive when using additional devices. Davis (1989) stated that "... making a system easier to use, all else held constant and should make the system more useful. The converse does not hold, however". According to Davis (1989), there is a direct effect between convenience perceptions towards pertinence perception. In other words, between two systems offering identical functionality, the users must find one that is easier to use which is more useful.

Convenience perception of use has a direct impact on perceived use. The easier the technology is used, the greater the expected benefits of technology related to performance improvement is. Thus, it can be concluded that there are allegations of convenience perception affecting the pertinence perception of SMEs entrepreneurs in making transactions using internet banking. It is because the simplicity of a system can improve performance and technology as it is more useful and profitable if it is easier to use. Based on this, the third hypothesis in this study is:

H₃: convenience perception has a positive effect on the pertinence perception of SMEs entrepreneurs in transactions using internet banking services

Pertinence perception of technology refers to the ability of technology in improving the performance and work performance of people who use it. When SMEs entrepreneurs believe that technology has a pertinence or benefit, there will be an interest in using it.

Previous research by Nasri & Charfeddine (2012) shows that there is a positive influence on pertinence perception on the interest in using internet banking. Based on TAM theory, it is said that pertinence perceptions can directly affect interest. From the description above, the fourth hypothesis in this study is:

H₄: pertinence perception has a positive effect on interest in using internet banking services

Attitude towards behavior is defined by Davis (1989) “an individual’s positive or negative feelings about performing the target behavior.” Interest is related to effort and willingness to learn and look for something. Besides, interest is an individual’s encouragement in achieving certain goals. SMEs entrepreneurs will give a positive attitude towards certain behaviors if SMEs entrepreneurs believe that the adoption of the technology will provide positive results. Individual attitudes that support the use of information systems technology will automatically encourage the use of information systems technology. In TAM theory it is said that interest is strongly influenced by attitude. When SMEs entrepreneurs have a positive attitude, this will have a positive impact on the interests of SMEs entrepreneurs in making transactions using internet banking. Some previous studies showed that the attitude of using internet banking had a positive effect on the interest in using internet banking (Nasri & Charfeddine 2012).

H₅: attitudes have a positive effect on the interests of SMEs in doing transactions using internet banking services

Trust can be interpreted as mental or verbal statements relating to individual specific knowledge and assessment of some ideas or things. Trust has three characteristics, namely ability, virtue, and integrity.

As one of the main foundations in the business world, building trust in long-term relationships

between companies and customers is an important factor to create a sense of security, mutual trust, and loyalty. With trust, there will be an interest in adopting technology and then applying it in daily life. Therefore, it is necessary to instill trust in SMEs entrepreneurs in making transactions using internet banking services to the new technology can be easily accepted. Trust perception of SMEs in using internet banking services will affect their interests, especially because of uncertainty conditions and risks inherent in internet-based service systems. Szopinski (2016) states that the factors that influence internet banking in Poland are internet use, utilization of other banking products and trusts, so the sixth hypothesis in this study is:

H₆: trust has a positive effect on SMEs interest in doing transactions using internet banking services

In online transaction activities, this risk perception acts as certain subjectivity from the loss of purchases that are considered in online transactions. This study tries to understand the attitudes of individuals involved in doing transactions via the internet. It appears that risk is one of the main concerns that individuals consider. Individuals do not want to shop online because of high-risk perception concerns about product quality, new payment methods, shipping options, and information content. The description can be drawn from the conclusion that the internet is considered a risky medium. It means that most individuals think that the risk in online shopping is greater than the benefits in purchasing decisions.

The perception of risk itself strongly influences the inability to deal with risk. This risk perception is an interpretation of the risk situation based on the experience or belief that is owned. In online transactions, the risk perception of arises when there are doubts about the possible outcome of the transaction.

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Yousafzai & Mirella (2012) research results show that groups of customers in England who have concerns about the use of internet banking are the group that most rejects the use of internet banking. The smaller the risk perception of an individual is, the greater the level of trust, and vice versa is.

There are fears of risk in adopting internet banking. It is suspected that it will affect the interests of SMEs entrepreneurs in doing transactions using internet banking services. This risk perception makes individuals do not have an interest in adopting new technology, especially internet banking. Thus, the conclusion is that if security risks can be minimized, then individuals will be more confident to adopt internet banking. Based on the description, the seventh hypothesis in this study is:

H₇: risk perception negatively affects the interests of SMEs entrepreneurs in doing transactions using internet banking services

Interest is a behavioral tendency to keep using a technology (Davis, 1989). Interest in computer technology can be indicated from several things such as the desire to add supporting devices, motivation to keep using technology, and the individual's desire to perform certain behaviors.

Behavior is an action taken by individuals to fulfill their goals. Actual system use or actual usage behavior is conceptualized first in the form of measuring the frequency and duration of use of a technology (Davis, 1989). The real condition of the use of a system is related to the ease of use of the system and the ability of the system to increase productivity.

There is a difference between interest and actual behavior. Interest is still limited to the individual's desire to conduct behavior while the actual system use is a real action or activity in using a particular system. It means that individuals beliefs about the use of information technology will increase their interest and in the end, the individuals will use information technology in their works.

It is estimated that SMEs entrepreneurs who have an interest in doing transactions using internet banking services will affect the behavior of individuals in using the technology (actual system use). This effect can be seen from the frequency of use and the length of use. Based on the description above, the eighth hypothesis in this study is:

H₈: interest has a positive effect on the actual system use of SMEs entrepreneurs in doing transactions using internet banking services

METHODS

The population in this study were the SMEs in Salatiga with purposive sampling technique. The criteria or considerations that the researcher used to select samples in this study were SMEs entrepreneurs in Salatiga who had done transactions using internet banking services.

The samples studied were 129 SMEs. According to Hair et al. (2010), the number of research samples to test hypotheses using Structural Equation Model (SEM) were between 100-200 samples, but for research with partial least square, a small number of research samples was required (Ghozali, 2011). Data collection was carried out in 2 ways, namely giving 150 questionnaires online and offline. The number of questionnaires distributed was 150 because it was the median value in the range of 100-200. The offline method was done in 2 ways, the first was to go directly to the respondent to fill in the questionnaire and the second was to leave the questionnaires in one of the state-owned banks to be filled by SMEs entrepreneurs when conducting transactions in the bank's customer service section. Online questionnaires were given to SMEs entrepreneurs who tended to prefer or were accustomed to using electronic devices in their daily activities by providing a website link to be filled online. After filling out the online questionnaire then the SMEs entrepreneurs were asked to forward the online questionnaire link to the community so that it was easy to collect data. The 150 questionnaires distrib-

uted, the number of questionnaires that returned and processed was 129 questionnaires.

The analysis carried out included convergent validity test and discriminant validity test which aimed to see the correlation between indicators in a construct with indicators from other constructs.

The analysis technique used was Partial Least Square (PLS). Before the causality model was tested to see the results of the hypothesis, the first step was to test the validity and reliability with the requirements for research that was confirmatory the value of the loading factor that must be more than 0.7 and the value of the loading factor between the values of 0.6-0.7 for exploratory research was still acceptable.

The first stage in the evaluation of the structural model (inner model) was to see the R-square value for each endogenous latent variable as the predictive power of the structural model. The calculation of effect size (f-square effect size) was then performed to see the magnitude of the contribution of each predictor latent variable to the R-square value of the criterion variable. According to Sholihin & Ratmono (2013), effect size can be categorized into 3, namely weak (0.02), medium (0.15), and large (0.35). Finally, measurement model evaluation and the structural model were carried out using goodness fit index.

RESULTS

The number of respondents and the return of the questionnaire in this study can be seen in Table 1.

Table 1. Number of Respondents and Questionnaire Returns

Information	Number
Number of offline distributions	100
Number of online distributions	50
Total questionnaire	150
Number of online questionnaires return	50
Number of offline questionnaires return	79
Number of offline questionnaires that do not return	21
Number of questionnaires processed	129

The characteristics of the respondents in Table 2 showed that female respondents were more than male ones. From the educational background, the majority of respondents were S1 or undergraduate graduates. From the age range, the majority of respondents were between 20-25 years old. It indicated that the use of internet banking for SMEs entrepreneurs was dominated by young people. The characteristics of respondents based on monthly income were dominated by respondents who earned between 2,000,000-3,000,000 with the most type of business was from convection as many as 40 respondents or 31.01 percent. There was a tendency for entrepreneurs from young people who had just established a business in recent years. It was proven by the average businessmen establishing their business in the years between 2010-2017 which was 106 people or 65.4 percent of the total number of respondents. Respondents from the trade business sector (trade) dominated the business field, namely 54.9 percent of the total number of respondents.

Table 2. Characteristics of Respondents

Characteristics	Number of Respondents	Percentage (%)
Gender		
Male	63	48.8
Female	66	51.2
Last Education		
Primary school	1	0.80
Junior High school	4	3.10
Senior High School / Vocation	56	43.4
Diploma	1	0.80
Bachelor degree / Undergraduate	66	51.2
Master Degree / Post graduate	1	0.80
Age		
<20 years	2	1.60
> 40 years	19	14.7
20-25 years	50	38.8
26-30 years	31	24.0
31 - 35 years	14	10.9
36-40 years	13	10.1

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Monthly Income		
> 5,000,000	37	22.8
1,000,000-2,000,000	16	9.90
2,000,000-3,000,000	40	24.7
3,000,000-4,000,000	17	10.5
4,000,000-5,000,000	19	11.7
Business Year Establishing		
<1990	3	1.90
1990-1999	5	3.10
2000-2009	15	9.30
2010-2017	106	65.4
Type of Business		
Personal Services	25	15.4
Public Services	1	0.60
Trade	89	54.9
Agriculture	14	8.60

Table 3 showed the variables description of pertinence perception, convenience perception, attitude, interest, risk perception, trust, and actual system use were discussed in the following section of descriptive statistical analysis both on the overall variables and for each indicator of the variables studied based on the minimum value, maximum value, mean, and standard deviation.

Descriptive statistical data showed (Table 3) the mean or average overall items of the pertinence perception variable were 4.24 located in the interval from 4.15 to 4.42 which meant that some respondents had a high pertinence perception. Of the six indicators of pertinence perception indicator number, 1 had the highest mean that was 4.35. It meant that some respondents believed that using internet banking would shorten the work time.

Convenience perception variable had an average of 4.11 and was located in intervals from 4.15 to 4.42 which meant that some respondents had a high convenience perception. Of the five indicators in convenience perception variable, indicator number 4 had the highest average value that was 4.33. It meant that some respondents agreed that transactions using internet banking were more flexible.

Attitude variable had an average of 4.11 and was located in intervals from 4.15 to 4.42 which meant that some respondents had a high attitude. Of the three indicators in the attitude variable, indicator number 1 had the highest average value that was 4.16. It indicated that some respondents agreed that using internet banking was a good idea.

Interest variable had an average of 4.15 and was located in intervals from 4.15 to 4.42 which meant that some respondents had a high attitude so that of the three indicators in the interest variable, indicator number 1 had the highest average value namely 4.15. It indicated that some respondents intended to use internet banking.

Trust variable had an average of 3.85 and was located in intervals from 3.06 to 3.32 which meant that some respondents had a moderate attitude. Of the 3 indicators in the trust variable, indicator number 1 had the highest average value namely 4.04. It indicated that some respondents agreed and believed transactions using internet banking services could keep the interests of SMEs agents well.

Risk perception variable had an average of 2.78 and was located in the interval from 2.51 to 2.78 which meant that some respondents had a low-risk perception. Of the 3 indicators in the risk perception variable, indicator number 3 had the highest average value that was 2.99. It indicated that some respondents agreed that using internet banking was risky.

Actual system use variable had an average of 3.50 and was located in the interval from 3.33 to 3.60 which meant that some respondents had medium actual use system. Of the 2 indicators in the actual system use variable, indicator number 1 had the highest average value that was 3.68 which meant that some respondents agreed that the frequency of internet banking usage in transactions increased.

Table 3. Descriptive Statistics of Research Variables

Empirical Indicator	Min	Max	Mean	Std. Dev.
Pertinence Perceptions				
Transactions using internet banking will accelerate my work	3.00	5.00	4.35	0.62
Transactions using internet banking will improve my performance	3.00	5.00	4.12	0.64
Transactions using internet banking will increase productivity	3.00	5.00	4.14	0.65
I feel that transactions using internet banking are more effective than having to pay directly	3.00	5.00	4.28	0.71
I feel that using internet banking will simplify my work	2.00	5.00	4.29	0.64
I feel that internet banking is useful for my work	3.00	5.00	4.28	0.61
Average of pertinence perception	2.83	5.00	4.24	0.64
Convenience Perception				
I feel that transactions using internet banking are easy to learn	2.00	5.00	4.10	0.67
I feel that transactions using internet banking can be controlled	2.00	5.00	3.94	0.65
I feel that transactions using internet banking are clear and understandable	2.00	5.00	4.10	0.60
I feel that transactions using internet banking are more flexible	3.00	5.00	4.33	0.67
I feel that internet banking is easy to understand, so I am skilled at using it	2.00	5.00	4.09	0.66
Average of convenience perception	2.20	5.00	4.11	0.65
Attitude				
I feel that using internet banking is a good idea	3.00	5.00	4.16	0.62
Using internet banking is a fun thing for me	2.00	5.00	4.11	0.64
Using internet banking is my desire	2.00	5.00	4.06	0.68
Average of attitude	2.33	5.00	4.11	0.65
Interest				
I intend to use internet banking	2.00	5.00	4.19	0.64
I plan to use internet banking in banking transactions	3.00	5.00	4.15	0.56
I am thinking of suggesting other people use internet banking,	3.00	5.00	4.10	0.61
Average of interest	2.67	5.00	4.15	0.60
Trust				
I believe transactions using internet banking services can protect my interests well,	2.00	5.00	4.04	0.63
I believe transactions using internet banking services can truly be trusted	2.00	5.00	4.01	0.70
I believe in the information provided by internet banking services	2.00	5.00	4.02	0.63
My tendency to trust transactions using internet banking services	2.00	5.00	3.95	0.64
Trusting internet banking services is not difficult	2.00	5.00	3.88	0.71
I feel safe placing personal information on internet banking services	2.00	5.00	3.81	0.67
I do not believe transactions using internet banking services	1.00	5.00	3.22	1.07
Average of trust	1.86	5.00	3.85	0.72
Risk Perception				
I feel there is a certain risk when I use internet banking	1.00	5.00	2.83	0.82
I feel a loss when using internet banking	1.00	5.00	2.51	0.81
I feel that using internet banking is risky	1.00	5.00	2.99	0.89
Average of risk perception	1.00	5.00	2.78	0.84
Actual System Use				
I feel the frequency of internet banking usage in transactions is increasing	1.00	5.00	3.68	0.78
Every time I use internet banking I use it for a long time	1.00	5.00	3.33	0.96
Average of actual system use	1.00	5.00	3.50	0.87
Total Average	2.10	5.00	3.90	0.70

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Convergent validity test results showed that all indicators had fulfilled one of the conditions of convergent validity because the loading value of all indicators was greater than loading value minimum limit required and the value of Average Variance Extracted (AVE) was greater than the minimum limit that was more than 0.5 (Hair et al., 2010). Discriminant validity was also fulfilled because the cross-loading value of the indicators used was not greater than the loading value to the construct. In the convergent validity test, it could be known the correlation between the indicators used in a construct. The loading factor value had to be more than 0.7 for confirmatory research, and the loading factor value between 0.6-0.7 for exploratory research was still acceptable.

Table 4 showed that of the total 29 indicators there were two indicators that did not meet the requirements, namely the variable PR2 (-0.61) < 0.6. The second indicator was indicator T7 (0.05) < 0.6. To get good and valid research results, the two indicators were omitted so that after being removed it would look like in Table 5.

Table 5 showed that the loading value of all indicators was greater than the loading value minimum limit required. It showed that all indicators had fulfilled one of the conditions of convergent validity.

The next step was reliability testing that aimed to determine the consistency of the question items used. In the reliability test with two methods namely

Table 4. Loading Factor Value

	PU	A	PEU	PR	T	BI	ASU
PU1	0.73	0.09	0.12	0.06	0.02	-0.28	-0.03
PU2	0.83	0.33	0.06	-0.03	-0.18	-0.22	0.07
PU3	0.85	-0.06	-0.06	0.00	0.00	-0.02	0.11
PU4	0.72	-0.20	-0.08	0.00	0.32	0.21	-0.02
PU5	0.82	-0.07	-0.03	0.00	-0.02	0.13	-0.04
PU6	0.76	-0.11	-0.01	-0.03	-0.11	0.21	-0.11
A1	0.09	0.79	0.23	-0.07	0.02	-0.11	-0.08
A2	-0.11	0.87	-0.05	-0.02	0.03	-0.29	0.02
A3	0.03	0.86	-0.16	0.09	-0.05	0.39	0.06
PEU1	0.17	-0.34	0.82	0.11	0.02	-0.08	-0.03
PEU2	-0.16	0.36	0.73	-0.16	0.05	-0.16	-0.10
PEU3	0.20	0.22	0.83	0.02	0.13	-0.08	-0.05
PEU4	0.21	-0.33	0.71	0.00	-0.27	0.65	0.02
PEU5	-0.23	0.54	0.80	0.01	0.05	-0.27	0.15
PR1	-0.29	0.12	0.01	0.84	0.16	-0.12	0.06
PR3	0.02	-0.01	-0.04	0.92	0.02	-0.02	0.01
PR2	-0.38	0.16	-0.04	-0.61	0.26	-0.19	0.11
T1	-0.06	-0.10	0.35	-0.09	0.74	0.12	-0.12
T2	0.08	-0.13	0.27	0.10	0.81	0.08	0.05
T3	0.01	-0.03	-0.03	0.13	0.84	0.16	0.18
T4	0.13	0.18	-0.20	-0.06	0.88	-0.06	-0.04
T5	0.06	0.05	-0.19	-0.07	0.76	-0.29	-0.15
T6	-0.29	0.02	-0.16	-0.06	0.71	-0.01	0.07
T7	0.43	0.07	-0.24	0.70	0.05	-0.02	-0.02
BI1	0.11	0.33	-0.11	0.09	-0.12	0.84	0.04
BI2	0.10	0.04	0.04	-0.02	-0.12	0.88	0.04
BI3	-0.24	-0.41	0.08	-0.08	0.27	0.76	0.05
ASU1	0.22	-0.10	-0.07	0.18	-0.04	0.07	0.89
ASU2	-0.22	0.10	0.07	-0.18	0.04	-0.07	0.89

Cronbach’s alpha and composite reliability it could be concluded that this research had fulfilled the reliability requirements because the value of Cronbach’s alpha was > 0.70, so the indicators in this study were good and had the accuracy to measure each construct in the research.

The value calculation results of Goodness of Fit (GoF) index showed that the model was included in the large category because it had a GoF value = 0.39, which was greater than 0.36. R-square value for each endogenous latent of pertinence perception, attitude, interest, actual system use variable in sequence was 0.49 (moderate), 0.60 (strong), 0.63 (strong), and 0.13 (weak). The effect size (f-square effect size) was calculated to see the magnitude of the contribution of each latent predictor variable to the R-squares value of the criterion variable. The results of f-square effect size can be seen in Table 6.

To test the causality relationship directly, a causality model was tested. This research was expected that using the causality test model could determine the effect of the variables described in the model. The result of the calculation is presented in Table 7.

Based on Table 7, it could be seen that all hypotheses were accepted except the risk perception hypothesis towards the transaction interest of small and medium micro entrepreneurs using internet banking services. The hypothesis of risk perception towards the interests of small and medium micro entrepreneurs was rejected because SMEs assumed that the benefits obtained were greater than the risks borne. Short interviews with respondents showed that risk perception must have existed and been ready to anticipate so that inevitably SMEs players would use it because it had become a necessity. If

Table 5. Loading Factor Value after the Indicator is Omitted

	PU	A	PEU	PR	T	BI	ASU
PU1	0.73	0.09	0.12	0.08	0.01	-0.28	-0.04
PU2	0.83	0.32	0.06	0.03	-0.20	-0.22	0.09
PU3	0.85	-0.06	-0.06	0.02	-0.01	-0.02	0.12
PU4	0.72	-0.20	-0.07	-0.03	0.33	0.21	-0.03
PU5	0.82	-0.07	-0.03	-0.04	-0.01	0.13	-0.05
PU6	0.76	-0.11	-0.01	-0.06	-0.09	0.20	-0.11
A1	0.09	0.79	0.23	-0.05	0.02	-0.11	-0.08
A2	-0.11	0.87	-0.06	-0.03	0.04	-0.29	0.02
A3	0.03	0.86	-0.15	0.08	-0.06	0.40	0.05
PEU1	0.18	-0.34	0.82	0.11	0.02	-0.08	-0.03
PEU2	-0.20	0.37	0.73	-0.18	0.07	-0.17	-0.09
PEU3	0.05	-0.22	0.83	0.05	0.11	-0.08	-0.05
PEU4	0.17	-0.32	0.71	-0.07	-0.25	0.65	0.01
PEU5	-0.20	0.53	0.80	0.06	0.02	-0.27	0.16
PR1	-0.13	0.06	0.02	0.92	0.06	-0.06	0.04
PR3	0.13	-0.06	-0.02	0.92	-0.06	0.06	-0.04
T1	-0.09	-0.10	0.35	-0.11	0.74	0.12	-0.12
T2	0.09	-0.13	0.27	0.10	0.81	0.08	0.04
T3	0.02	-0.04	-0.03	0.12	0.83	0.17	0.17
T4	0.12	0.18	-0.20	-0.06	0.88	-0.06	-0.04
T5	0.06	0.06	-0.20	-0.07	0.76	-0.30	-0.15
T6	-0.24	0.01	-0.18	0.01	0.72	-0.02	0.08
BI1	0.14	0.32	-0.11	0.13	-0.14	0.84	0.04
BI2	0.09	0.04	0.04	-0.03	-0.12	0.88	-0.08
BI3	-0.26	-0.40	0.07	-0.10	0.29	0.76	0.05
ASU1	0.20	-0.11	-0.05	0.12	-0.03	0.08	0.89
ASU2	-0.22	0.10	0.07	-0.18	0.04	-0.07	0.89

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the results of this study were associated with the results of research by Citradika (2018), it was alleged that it was also related to changes in the surrounding environment that required time efficiency in settlement of payment transactions and the efforts of SMEs to adjust to the demands of the changes. Ease of access to banks for complaints, if there were problems in transactions using internet banking, was a factor why customers were not afraid to use internet banking so that risk perception did not affect in doing transactions using internet banking.

DISCUSSION

Convenience perception has a positive effect on the attitude of small management enterprises (SMEs) in making transactions using internet banking services. It shows that the ease of using internet banking among SMEs has a positive attitude towards its relation to transactions using SMEs. This is also in line with the researches results of Medyawati, Christiyanti, & Yunanto (2011) that convenience perception perceived is positively and significantly

related to the attitude of SMEs doers in doing transactions using internet banking services. The level of education is also considered to help the community in determining the costs or benefits obtained in a behavior. The majority of respondents have education 66.51 percent of the undergraduate level. This influence is also not out of the majority of users in the young age so that it will seek an efficient way, especially in an online purchase.

Pertinence perception has a positive effect on the attitude of small management enterprises (young) in making transactions using internet banking services because the benefits of internet banking themselves have been directly benefited by SMEs entrepreneurs so that they will have a positive effect on user attitudes. A fast and efficient era demands SMEs entrepreneurs to be technologically literate so that transactions can be done quickly. The use of internet banking among SMEs entrepreneurs is also influenced by the age factor because the age majority of users are young. When it is added the age of less than 20 to the age of 30 is as much as 64 percent.

Table 6. F-square Effect Size Value

Variable	Pertinence	Attitude	Convenience	Risk	Trust	Interest	Actual
Pertinence Perceptions			0.49				
Attitude	0.31		0.29				
Convenience Perception							
Risk Perception							
Trust							
Interest	0.13	0.39		0.01	0.11		
Actual System Use						0.13	

Table 7. Evaluation of the Weight of the Causality Test Regression

Hypothesis	Path Coefficient	P Value	Label	Test Result
Attitude ← Pertinence Perception	0.44	0.00	***	Accepted
Interest ← Pertinence Perception	0.20	0.01	**	Accepted
Interest ← Attitude	0.51	0.00	***	Accepted
Pertinence Perception ← Convenience Perception	0.70	0.00	***	Accepted
Attitude ← Convenience Perception	0.41	0.00	***	Accepted
Interest ← Risk Perception	-0.02	0.39		Not Accepted
Interest ← Trust	0.17	0.03	*	Accepted
Actual System Use ← Interest	0.37	0.00	***	Accepted

Noted: (*) \pm 0.1; (**) \pm 0.05; (***) \pm 0.01

Convenience perception has a positive effect on pertinence perception of small and medium scale enterprises (SMEs) in making transactions using internet banking services. The easier the operation of internet banking is, the more attractive to greater use is. This is reinforced by Davis (1989), who says that there is a direct effect between convenience perception and pertinence perception. In other words, between 2 systems offering identical functionality, users must find one that is easier to use which is felt more useful.

Pertinence perception also has a direct positive effect on the interests of SMEs in making transactions using internet banking services. This is in line with the results of previous studies by Nasri & Charfeddine (2012) and Chin & Lin (2016). The feeling of wanting to use internet banking is influenced by pertinence perception because the more perceived the pertinence of the device is the tendency of users to use or interest in using will also be high.

Attitudes also have a positive effect on the interests of SMEs in doing transactions using internet banking services. It is because SMEs entrepreneurs want to get benefit from the system used, so it can be said that individuals will do something if they have a desire from within themselves. Interest is related to attitude because there is an attitude tendency in the subject to accept, reject an object that is good or not good. The object here is internet banking so that the interesting tendency of SMEs entrepreneurs in Salatiga to use internet banking because they feel happy and it is a good idea in the ease of transactions.

Trust has a positive effect on the interests of SMEs entrepreneurs in making transactions using internet banking services. With the trust in transactions using internet banking, SMEs entrepreneurs have an interest in using it.

The hypothesis of risk perception is rejected against the interests of micro and small and medium entrepreneurs because SMEs entrepreneurs assume that the benefits obtained are greater than the risks

borne. Based on a short interview with respondents it is said that risk perception must exist and are ready to anticipate so that inevitably SMEs entrepreneurs will use it because it has become a necessity. Ease of access to banks for complaints if there are problems in transactions using internet banking is a factor why customers are not afraid to use internet banking. Thus, the risk perception does not affect in doing transactions using internet banking.

Interest also affects the actual system use of small-medium scale enterprises (SMEs) entrepreneurs in doing transactions using internet banking services. Having high interest will also influence the behavior of respondents to use internet banking. Based on the results of descriptive statistics the frequency of use has an average of 3.68 and the length of use of 3.33 in a high enough category so that it proves that behavior is influenced by interest.

CONCLUSION AND SUGGESTIONS

Conclusion

This research complements previous research on internet banking usage. A research conducted by Panggalih & Baridwan (2013) states that trust and risk perception do not have effect on the interest in the use of internet banking services, while a research conducted by Sulastini & Warmika (2014) shows the results that trust has a significant positive effect on interest in using internet banking and risk perception has a significant negative effect. This research shows that TRiTAM theory which is a theory development of Technology of Acceptance Model from Davis (1989), is relevant to accommodate both of the research gaps. Variables of risk perception and trust are the main considerations in virtual transactions such as internet banking due to distance factors, technological capabilities in facilitating transactions, services that do not face to face with the bank contain risks for internet banking users. Thus, it can be concluded that the relationship among trust, risk, and technology acceptance

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model with decisions or behavior in dealing with internet banking can be mediated with customers interest in using internet banking.

Suggestions

This research is not without limitations. Taking samples, purposive sampling is still considered inadequate to accurately describe the condition of respondents. There is no complete guarantee that a

representative sample is like a random or random sample. It is recommended that further researches in sampling choose to use convenience sampling technique. It is because taking samples from individuals is known. Although there are deficiencies in this study, the researcher believes that this study provides additional evidence to previous researches that examine the factors that influence interest in using TRiTAM theory so that it has an impact on internet banking usage behavior.

REFERENCES

- Citradika, D. P. (2018). Transaksi non tunai pada UMKM batik Pekalongan: Sebuah tinjauan empiris. *Thesis*. Magister Manajemen Fakultas Ekonomi dan Business. UKSW. Salatiga.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(5), 319-339. <http://dx.doi.org/10.2307/249008>.
- Ghozali, I. (2011). *Structural Equation Modelling Metode Alternatif dengan Partial Least Square*. Edisi Ketiga. Semarang: Badan Penerbit Universitas Diponegoro.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis*. Seventh Edition. New Jersey: Prentice Hall.
- Irmadhani, & Nugroho, M. A. (2012). Pengaruh persepsi kebermanfaatan, persepsi kemudahan penggunaan dan computer self efficacy, terhadap penggunaan online banking pada mahasiswa S1 Fakultas Ekonomi Universitas Negeri Yogyakarta. *Kajian Pendidikan Akuntansi Indonesia*, 1(3), 1-20. Retrieved from: <https://journal.uny.ac.id/index.php/jkpai/article/view/882>
- Chin, J., & Lin, S. C. (2016). A behavioral model of managerial perspectives regarding technology acceptance in building energy management systems. *Sustainability*, 8(641), 1-13. <https://doi.org/10.3390/su8070641>.
- Jamieson, R., & Lui, H. K. (2003). TriTAM: A model for integrating trust and risk perceptions in business-to-consumer electronic commerce. *BLED 2003 Proceedings*. 16th Bled E-Commerce Conference E-Transformation. Slovenia.
- Kesharwani, A., & Bisht, S. S. (2012). The impact of trust and perceived risk on internet banking adoption in India: An extension of technology acceptance model. *International Journal of Bank Marketing*, 30(4), 303-322. <https://doi.org/10.1108/02652321211236923>.
- Medyawati, H., Christiyanti, M., & Yunanto, M. (2011). E-banking adoption analysis using technology acceptance model (TAM): Empirical study of bank customers in Bekasi City. *2011 International Conference on Innovation, Management, and Service*, 14, 91-95.
- Nasri, W., & Charfeddine, L. (2012). Factors affecting the adoption of internet banking in Tunisia: An integration theory of acceptance model and theory of planned behavior. *The Journal of High Technology Management Research*, 23(1), 1-14. <https://doi.org/10.1016/j.hitech.2012.03.001>.
- Panggalih, R. G., & Baridwan, Z. (2013). Minat individu terhadap penggunaan internet banking: Pendekatan modified theory of planned behavior. *Jurnal Manajemen Pemasaran Universitas Brwajaya*, 1(2), 1-20. Retrieved from: <http://jimfeb.ub.ac.id/index.php/jimfeb/article/view/589>.
- Pinontoan, W. (2013). Pengaruh e-banking, kualitas pelayanan, kualitas komunikasi, dan kepercayaan terhadap loyalitas nasabah pada PT. Bank Mandiri Cabang Manado. *Jurnal EMBA*, 1(4), 192-201. Retrieved from: <https://ejournal.unsrat.ac.id/index.php/emba/article/view/2650>
- Safeena, R., Kammani A., & Date, H. (2011). Internet banking adop-

- tion in an emerging economy: Indian consumer's perspective. *International Arab Journal of e-Technology*, 2(1), 56-63.
- Sholihin, M., & Ratmono D. (2013). *Analisis SEM-PLS dengan WarpPLS 3.0: Untuk hubungan nonlinear dalam penelitian sosial dan bisnis*. Yogyakarta: Penerbit Andi.
- Sulastini, N. P., & Warmika, I. G. K. (2014). Aplikasi TAM, persepsi risiko, dan kepercayaan dalam menjelaskan niat menggunakan internet banking. *E-jurnal manajemen Universitas Udayana*, 3(4), 1100-1118. Retrieved from: <https://ojs.unud.ac.id/index.php/Manajemen/article/view/7584>
- Szopinski, T. S. (2016). Factors affecting the adoption of online banking in Poland. *Journal of Business Research*, 69(11), 4763-4768. <http://dx.doi.org/10.1016/j.jbusres.2016.04.027>
- Venkatesh, V., & Davis, F. D. (1996). A model of the antecedents of perceived ease of use: Development and test. *Decision Sciences*, 27(3), 451-481. <https://doi.org/10.1111/j.1540-5915.1996.tb00860.x>.
- Yousafzai, S., & Mirella, Y. S. (2012). Understanding customer-specific factors are underpinning internet banking adoption. *International Journal of Bank Marketing*, 30(1), 60-81. <https://doi.org/10.1108/02652321211195703>
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