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The Behavior of Government Vendor Project in Using E-Procurement System A Case Study of Construction Project Vendors in West Nusa Tenggara

Hendra Satria Pramdani¹
Achmad Nurmandi²
Email:hendra.satriapramdana@gmail.com
Universitas Muhammadiyah
Yogyakarta

History

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ABSTRACT

E-procurement system is a procurement of goods/services implemented by using information systems and electronic transactions conducted by LPSE as an organizer and vendor as provider of goods /services. This study aims to predict and explain the determinants of interest in the behavior and behavior of users in using e-procurement by employees at construction companies that are suppliers for West Nusa Tenggara Provincial Government in the procurement system of goods/services. The research method used is quantitative method by distributing questionnaires to 114 respondents who work and have position as manager, assistant manager, supervisor and staff. This research develops Unified Theory of Acceptance and Use of Techonology (UTAUT) and Information System Success Model, then data is processed using Partial Least Square (PLS). The result of this research shows that performance expectancy, Effort expectation, system quality act as determinant interest behavior with value of R2 0.441 while conditions that facilitate and interest behavior as determinant of behavior of usage with value R² 0,277. Meanwhile, the results of the UTAUT model development and information success model in this study can explain and predict the uncertainty that often arises when individuals transact electronically through the E-procurement system.

Keyword: E-procurement, UTAUT, information systems success model, PLS

ABSTRAK

Sistem e-procurement adalah pengadaan barang / jasa yang dilaksanakan dengan menggunakan sistem informasi dan transaksi elektronik yang dilakukan oleh LPSE sebagai penyelenggara dan vendor sebagai penyedia barang / jasa. Penelitian ini bertujuan untuk memprediksi dan menjelaskan faktor-faktor penentu minat pada perilaku dan perilaku pengguna dalam menggunakan e-procurement oleh karyawan di perusahaan konstruksi yang merupakan pemasok untuk Pemerintah Provinsi Nusa Tenggara Barat dalam sistem pengadaan barang / jasa. Metode penelitian yang digunakan adalah metode kuantitatif dengan menyebarkan kuesioner kepada 114 responden yang bekerja dan memiliki posisi sebagai manajer, asisten manajer, penyelia dan staf. Penelitian ini mengembangkan Unified Theory of Acceptance dan Use of Techonology (UTAUT) dan Model Keberhasilan Sistem Informasi, kemudian data diproses menggunakan Partial Least Square (PLS). Hasil penelitian ini menunjukkan bahwa ekspektasi kinerja, ekspektasi usaha, kualitas sistem bertindak sebagai penentu perilaku minat dengan nilai R² 0,441 sedangkan kondisi yang memudahkan dan menarik minat perilaku sebagai penentu perilaku penggunaan dengan nilai R² 0,277. Sementara itu, hasil pengembangan model UTAUT dan model keberhasilan informasi dalam penelitian ini dapat menjelaskan dan memprediksi ketidakpastian yang sering muncul ketika individu bertransaksi secara elektronik melalui sistem E-procurement.

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INTRODUCTION

Electronic procurement as known e-Procurement is the platform for procurement of goods/services implemented using information systems and electronic transactions. Those system are refers to Internet-based information and communication systems to carry out the stages of the procurement process including negotiation, ordering, receiving, and post-purchase review. According in technically process, e-procurement is handled by LPSE where by the task is to make an announcements, documents process, offerings, finalization and determine the project holder. E-procurement can be running when the provider or vendor participant is completed. The quantity of participants is determined by joined provider who offer the project.

According to the data of the *Association Of Internet Service Providers Indonesia* (APJII) in 2013 showed that the utilization of information systems in the procurement of goods/services in West Nusa Tenggara (as known by NTB) only amounted about 12.5% performed of the total procurement of goods/services. The e-procurement system in West Nusa Tenggara is started on 2011, but its still half of using internet basic. The LPSE office in West Nusa Tenggara also increase their ability to using full services procurement on 2014. E-procurement system in NTB still gained many lack in term of processing about transparency and accountability. Udoyono (2012) mention that when the procurement still runing with manual system, these found many misappropriated decision and foul in many aspect. So within the platform of electronic in procureting the goods and services, government can be decrease any fraud that was easily found in the system process and can used the budget more effectively reach 10 to 50%.

In order to using information systems in local government behavior is aims to decreased lack that can be found in transparency and accountability of procurement. Within the information system also can increasing the individual ability and behavior of the staff's performance. Behavioral interest more intensive in the person's desire in using the information system. According to Hartono (2008), the biggest cause of failure of the acceptance of information systems is not caused by technical quality nor information produced but more failure to aspects of behavior. The challenges faced in information systems are related to the changes that occur with the application of information systems in the form of individual interests that lead to denial of the information system so it does not run as expected.

Suhardjanto (2009) was founding the behavior user that the determinants of individual behavior interest can more easily to increased their performance in information system. These study uses the concept of characteristics developed by Emery as a measure of the quality of information systems. Suhardjanto (2009) concluded that content, accuracy, form, ease of use, and accuracy affect the quality of an information system which will affect the acceptance of vendors in using e-procurement. Also according to Yustanti (2016) was conducted a study about the affected factor of user satisfaction about e-procurement. Thus research was used t-test by using measurement system on end-user computing success by Torkzadeh and Doll (1988) and also using TAM developed by Davis F.D (1989). The results showed that usability, ease of use, content, accuracy, format, ease and timeliness affect the user computing satisfaction.

In other hand, this study will be focused on the formulation that can engaging the interest and behavior of people for receiving and using technology-based on information systems. The existence of information systems is not always accepted positively by individuals. The emergence of individual problems is complaints in the process using the information systems, finding the trouble of using the

information system and the lack of individual's understanding also a factors that affected the individual's interest by using information system. Various theories of behavior (behavioral theory) is widely used to examine the process of adoption, individual acceptance, and the successful implementation of technology-based information systems.

LITERATURE REVIEW

1. The concept of E-procurement

E-procurement is the procurement of goods / services that are implemented using electronic information and transaction systems in accordance with the statutory provisions. Nightisabha, *et al.*, (2009) describes the *e-procurement* is an activity carried out by the public sector both the central and local governments and public institution including State Owned Enterprises (SOEs) to take advantage of the Internet system that was developed by the Institute for Procurement Policy / Government services (LKPP) with the provisions of legislation. Then according Nurmandi (2014) With the adoption of electronically, it is expected to reduce corruption in the procurement sector, this is because it has reduced the intensity of provision of goods and services directly because all procurement steps are done electronically via the internet.

E-procurement very important for the organization because it offers benefits through increased efficiency process purchase and reduction price, improving collaborative relationships, and opportunities which is significant for improve pe services internal and status function purchase (Croom and Brandon, 2005). The use of e-procurement can also increase transparency, reduce auction cycle time, save taxpayer money, empower bidders, eliminate cartel contractors, improve availability of management and accounting information (Síñgh and Devendra, 2013; Oketch, 2014).

Meanwhile, according to Udoyono (2012) *e-procurement* is an integrated *data base* system and internet-based wide area network communication system in part or whole process of purchase of goods / services. Based on the definition of *e-procurement* from various sources can be concluded that *e-procurement* is the procurement of goods / services begins with the registration process, the auction and everything related to providing goods / services conducted *online* or *realtime*.

E-procurement system is a breakthrough developed by the government in establishing *good governance*. However, in the process of implementation of e-procurementnot without obstacles. Barriers faced by human factors and technical factors such as infrastructure and system quality. The success of e-procurement implementation will not succeed without regard to these constraints. This study focuses on the human factor as the end user of the e-procurementsystem, by explaining any factors that affect an individual's interest in using the e-procrurement.

2. Theory behaviorism in acceptance of information systems

Behavioral information systems theory rests on one of the streams that behaviorism psychology (*behaviorism*). Behaviorism are schools of psychology that studies the behavior that can observed and measured. This stream is found behavior can be studied and explained scientifically. Behaviorism emphasis on response - the response p Behaviors that can be observed and measured. Behaviorism shows that the peril I was in response to stimuli that can be learned (Al-famin, 2012).

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Acceptance of information systems cannot be separated from organizational behavior, because behavior of information systems to learn how the organization should develop an information system to direct individual behaviors in interacting with the system to facilitate their system goals (Kazi 2013). Behavioral information system explain user behavior information system of the psychological aspect becomes important because human beings interact with information systems pose a problem due to the emergence of behavioral concerns of individuals who are not able to use information systems, their refusal or reluctance to use information systems. This is evidenced by the risk of changes that occur when the application of the system of individual resistance that causes rejection and the system does not run as expected.

<u>Singh (2011)</u> explains that the information behavior system arise due to realize the importance of individual-individual in the organization and information systems into parts that can not be separated because they are organizational components interact with each other. Models in behavioral information systems focus on anticipated behavioral interests using information systems.

The theory of behavioral information systems can be divided into two groups (Hartono, 2008). The first group developed a modeling theory look antecedents of the emergence of individual behavior (including the Unified Theory of Acceptance and of Technology) and a second group developed a modeling theories that look at the impact of the implementation of technology-based information on individuals and organizations (among others DeLone and McLean *information system success model*).

3. UTAUT Theory (Unified Theory of Acceptance and Use of Technology)

Many models to evaluate the acceptance of the use (user acceptance) a new technology. Venkatesh et al. (2003) proposed a model, namely the unification theory acceptance and use of technology was then used his native language, ie the Unified Theory of Acceptance and Use of Technology (UTAUT). In UTAUT models, there are determinants that act as the basis for the individual towards the use of specific technology-based information systems that will ultimately determine the interests and behavior of use. Interest is the cause of the individual to take real action which is the action of use (Al-Awadhi and Morris, 2008). Venkatesh et al. (2003), in the model UTAUT, build main receipt expectancy performance (performance expectancy), effort expectancy (effort expectancy) and social influence (social influence). The construct is a determining factor of interest in behavioral (behavioral intention) These behavioral and interest will affect the behavior of the use (use behavior). Conditions that facilitate (facilitating conditions) is also a major truck KONS affecting usage behavior.

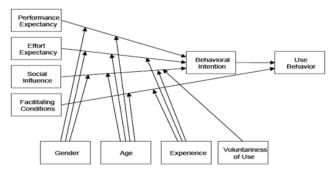


Figure 1. Model UTAUT

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Performance expectancy is defined as an individual's level of confidence in the extent of use of the system will help it to gain an advantage in the job (Venkatesh et al., 2003). Based on the testing of the construct UTAUT, performance expectancy is the only construct significantly over time and proven to bring attention behavior. Effort Expectancy is defined as the perceived level of user convenience in using information system (Venkatesh et al., 2003). Effort Expectancy in UTAUT is one factor that proved to bring attention behavior. Social influence how tall a person is defined as people prepare interests trusted by others will influence him to use e-procurement. Facilitating Conditions that facilitates the use of information technology is the degree to which a person believes that organizational and technical infrastructure exists to support the use of the system. Conditions that facilitate the use of information technology are the degree to which believe that organizational and technical infrastructure exists to support the use of the system.

4. Information systems success model (Information System Success Model)

Some researchers developed a model of information systems success. One model of the famous success of information systems is the D and M Information System Success Model developed by DeLone and McLean (1992). In the D and M Information System Success Model developed by DeLone and McLean (1992) there are six (6) constructs are: Information quality, System quality (system quality), Use of information (information use), User satisfaction, Individual impacts, and Organizational impact (organizational impact).

DeLone and McLean (2003) modeling technology context (quality systems and quality of information) affect the behavioral interest or usage behavior. This model is a renewal of the D and M *Information System Success Model* DeLone and McLean 1992. Second, the behavior of the use of information technology is one appropriate measure for measure the success of technology-based information systems. Based on this, researchers enhance UTAUT models to scrutinize the D and M *Information System Success Model* (DeLone and McLean, 1992 and 2003), which later became a model study investigators.

In this study only use constructs to measure the quality of electronic procurement system. Constructs for assessing the quality is the construct that is quality information (*information quality*) and the quality system (*quality system*). Quality information is a desirable characteristic of information products. The quality system is the desired characteristics of the information system itself. The use of information is the consumption of users over the output of information systems. User satisfaction is the top user response usefulness of the information system.

Research methods

This research uses causal research method, study causality is a study that shows the direction of the relationship between constructs free with bound constructs, in addition to measuring the strength of the relationship (Kuncoro, 2003). This research belongs to survey type, ie research used in large and small populations, but that data studied is data from samples taken from the population, so found relative events, distribution and interconnections construct. The population in this study are employees who work and have a position as assistant manager, supervisor or staff. Consideration of researcher choose West Nusa Tenggara as the study area for the *first*, West Nusa Tenggara is an object of research. Second, in West Nusa Tenggara there are a lot of standing branches and centers construction companies. Third, in the last

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five years, infrastructure development in West Nusa Tenggara Province has increased rapidly. Building construction projects are built to cover e-government buildings, parks, renovation of schools, roads, markets all of these projects is a form of procurement of goods / services in West Nusa Tenggara. The sampling technique used was purposive sampling. Criteria samples used by researchers to determine the sample in this research. First, individuals who use e-procurement procurement ba rang / services. Second, individuals have a minimum of 1 year working experience in the use of e-procurement. Before data collection, this study must first conduct a pilot test. Respondents who have taken are employees of construction companies that use e-procurement by 30 respondents. The results of the pilot test showed items questionnaire is valid and reliable. This study questionnaire deploy as many as 161 questionnaires to construction. Number of questionnaires received 1 26 or 7 8% of the total questionnaires were distributed and only 11 4 questionnaire or 70% to use while the remaining 14 questionnaires or 8% cannot be used because the data is incomplete. This study uses analysis Partial Least Squares (PLS) with tools such as program SmartPLS 3.0. According to Hartono and Abdillah (20 15: 161) PLS is one of the alternative methods of statistical Structural Equation Modeling (SEM) based variants are designed to complete multiple regression when there is a specific problem in the data, such as the sample size is small, the data is lost (missing values) and multicollinearity. PLS analysis consists of two sub-models of the measurement model or models outer and inner structural model or models (Ghozali and Heng, 2014: 7). The measurement model is used to test the validity and reliability, while the structural model is used for causality test.

Results and Discussion

1) Descriptive statistics

The data collection in this research is done by distributing questionnaires distributed directly to construction companies located in West Nusa Tenggara. Respondents in this study are construction companies that use e-procurement and become providers (suppliers) to the Government of West Nusa Tenggara province. The number of medium-scale construction company located in West Nusa Tenggara as many as 161 companies. This study took a sample of the employees in every construction company, with main respondents who occupy positions as managers, assistant managers, supervisor and staff. So the total respondents in this study were 161 respondents.

Table 1. Summary of Questionnaire Distribution and Returns

No	Information	amount	Percentage
1	Questionnaire Distribution	161	100%
2	The questionnaire did not return	35	21.7%
3	The questionnaire returned	126	78.3%
4	Questionnaire can not be processed	14	8.7%
5	Questionnaires can be processed	114	70.8%

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Respondents who participated in this study has a position as a manager as much as 3 or 3%, assistant manager as much as 9 respondents or 7.9%, *supervisor* 60 respondents or 52.6% and a staff of 42 respondents 36.8%. Gender in this study indicate that the participation of male respondents more than female respondents, as many as 82 people or 72% and female respondents as many as 32 people or 28%. The age of respondents in this study is very mature, because their age between 31-40 years. as many as 58 respondents or 50.88%. The level of education shows that most of the respondents who have diploma or D3 certificate are 69 persons or 60,53%, while the rest have undergraduate or bachelor degree as much as 40 people or 35,09%. All respondents in this study have used *e-procurement*. A total of 47 respondents or 41.23% using *e-procurement* is more than 4 years, this shows that the respondents are experienced in using *the e-procurement* system.

Table 2. Descriptive Statistics Constructs

Construct	N	Min.	Max.	Average	Std.Deviation
OAK	114	2	5	3.982	0.740
EU	114	1	5	3.719	0.665
KS	114	3	5	3.868	0.690
KI	114	3	5	3.833	0.774
KF	114	2	5	3.745	0.838
MK	114	3	5	3.614	0.762
PP	114	3	5	3.863	0.919

Source: Primary Data Processed 2017

Description: EK: Ekspektasi Kegunaan. EU: Ekspektasi Usaha, KS: Kualitas Sistem, KI: Kualitas Informasi, KF: kondisi yang memfasilitasi, MK:Minat Behavior, PP: perilaku penggunaan

Table 2 shows a sample answer was average > 3 of the 5 top-scale construct performance expectations, Effort expectations, system quality, information quality, facilitating conditions, behavioral interest, and behavioral usage. This means that the samples tend to agree that the system can improve performance, easy to operate, it is necessary organizations support and individuals in the vicinity, it is necessary facilities to support and sample agreed system influences organizational performance. An average of 3 out of 5 semantic difference scales on the quality system quality information construct indicates the sample is concerned with the process and the resulting output of the system. The average of 4 on the construct of behavioral interest and usage behavior indicates the sample is very interested and often uses a technology-based accounting information system.

2) Model Evaluation

Evaluation model in this research is conducted through the *outer* and *inner models*. *Outer model* or models of measurement is a stage for evaluate the validity and reliability of a construct. *Outer models* evaluated using parameter *Average Variance Extracted* (AVE), *Communality, Outer Loading, Loading Cross, Cronbach Alpha* and *Composite Reliability. Inner Model* or structural model is a stage to evaluate the relationship between construct. *Inner Model* parameters were evaluated using R² coefficient comparing *path* between *t-statistics* with *t-table* for testing hypothesis.

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Outer Model

Outer models describing how the relationship between the indicator with the construction. Outer model is a measurement model to assess the validity and reliability models. The validity test is conducted to find out the ability of the research instrument to measure what should be measured. This research uses construct validity test. The validity of the construct shows how well the results obtained from the use of a measurement fit the theories used to define a construct

1) Convergent Validity Test

Convergent validity is related to the principle that the measurements of a construct should be highly correlated. *Rule of thumb* used in the convergent validity test is *loading factor* of more than 0.7, more than 0.5 *communality* and *Average Variance Extracted* (AVE) of more than 0.5. Convergent validity of test results can be seen in Table 3 the results of the algorithm on its *outer models*.

2) Test Discriminant Validity

Discriminant validity views with *cross loading* values and roots AVE. Discriminant validity occurs when two different instruments that measure constructs predicted two uncorrelated produce scores that are not correlated.

In Table 3 *cross loading* showed that all indicators of each construct that has a value above 0.7 measured in accordance with the rule of thumb. This means that all indicators of each construct have passed the validity test so that the data is considered valid. In addition to viewing the table cross loading, discriminant validity is done by comparing the value of the root of AVE by the correlation between the value of other latent constructs.

3) Test Reliability

Reliability test used to measure the consistency of the respondents in answering the research instrument reliability test can be used by using two methods, the *Cronbach's alpha* and *composite reliability*.

In Table 3 are known *Cronbach's alpha* values of more than 0.6 and more than 0.7 *composite reliability*. Hair et al (2008) in Hartono and Abdillah (2015: 196) explains that the *rule of thumb* value of *Cronbach's alpha* or *composite reliability* must be greater than 0.7 even if the value of 0.6 is acceptable. This indicates that the indicators used in this study have passed the reliability test so that the data is considered reliable and the data can be used in the next testing stage.

Table 3. The result of the algorithm

Construct	AVE	Composite Reliability	Cronbach's	R Squared
			Alpha	
OAK	0.809	0.944	0.922	
EU	0.564	0.795	0.736	

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KS	0.788	0.937	0.910	
КІ	0.762	0.941	0.922	
KF	0.747	0.922	0.889	
MK	0.782	0.915	0.859	0.441
PP	0.893	0.962	0.940	0.277

Table 3 above shows the results of the algorithm after the removal of one of the indicators of Effort expectancy. Table 3 shows the change value AVE and *communality* to construct Effort expectations with a value greater than 0.5 so it complies with the *rule of thumb*. Therefore, new test results show that the convergent validity.

Discriminant validity occurs when two different instruments measuring two predicted constructs are not correlated resulting in uncorrelated scores (Hartono and Abdillah, 2015). In Table 3 shows that all the indicators of each construct that has a value above 0.7 measured in accordance with the *rule of thumb*. This means that all indicators of each construct have passed the validity test so that the data is considered valid. In addition to viewing the table *cross loading*, discriminant validity is done by comparing the value of the root of AVE by the correlation between latent constructs more

Table 4. AVE and AVE root values

Construct	AVE	AVE root
ОАК	0.809	0.899
EU	0.564	0.750
KS	0.788	0.887
KI	0.762	0.872
KF	0.747	0.864
MK	0.782	0.884
PP	0.893	0.944
PP	0.893	0.944

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Inner Model

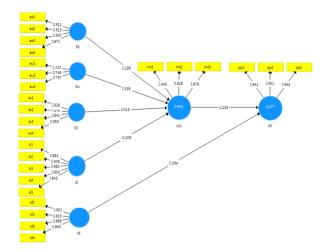


Figure 2. Structural Model

Evaluation of structural models (*Inner model*) can be done by looking at the value of *R-squares* (R ²⁾ to construct the dependent, the coefficient of *the path* or *t-values* of each *path* to test the significance of inter-construct the structural model (Hartono and Abdillah, 2015: 197). The value of R ² is used to detect variations in the construct changes are independent of the dependent constructs. At 5:13 the picture shows the value of R ² to the interest of behavioral s ebesar 0. 441, meaning that the construct changes dependent variation can be explained by the independent constructs amounted to 44.1%, the value of R ² ap restricted usage behavior of 0. 277, meaning that variations dependent constructs changes can be explained by independent construct is equal to 27.7%. while the rest is explained by other constructs outside the proposed model. Meanwhile, the *path* coefficient value of this research is intended by the value of *t-statistic* greater than *t-table* (> 1.64).

Construct Hypothesis **Original Sample T-Statistics P-Values** Conclusion Н1 EK -> MK 0.289 2,821 0.003 Be accepted H2 EU -> MK 0.156 2.867 0.004 Be accepted KS -> MK Н3 0.415 4,028 0.000 Be accepted KI -> MK 0.208 3,082 0.000 Be accepted H5 KF -> PP 0.394 4,010 0.000 Be accepted MK -> PP 0.234 2,524 0.012 Н6 Be accepted

Table 5. Correlation between constructs

2. Hypothesis Testing Results

Performance Expectance on Behavior Interest

Hypothesis 1 (H1) states that performance expansion has an effect on the interest of behavior in using e-procurement. Test results in table 5.7 shows the t-statistic value of 2.821 (> 1.64) and the value

of p-value 0.003 (<0.05) can be concluded H1 is supported. The beta coefficient value of 0.289 indicates that performance expectancy has a positive effect on behavior interest using e-procurement.

The results of this study provide empirical evidence that vendors believe that by using e-procurement in performing their tasks they can complete the work faster, improve performance, increase productivity, and increase effectiveness as expected (Venkatesh et al., 2003). Vendors who benefit from e-procurement systems such as improving tender offer performance, can improve transparency and accountability of auctions, flexible timing of auctions and increased efficiency of the auction process will intend to use the e-procurement system. By sensing the usefulness of the e-procurement system, vendors will try to always try the e-procurement system.

Effort Expectancy on Interest in Behavior

Hypothesis 2 (H2) states that Effort expansion affects the interest of behavior in using e-procurement. Test results in Table 5.7 shows the t-statistic value of 2.867 (> 1.64) and the value of p-value 0.004 (<0.05) can be concluded H2 is supported. The beta coefficient value of 0.156 shows that the perception of Effort expansion has a positive effect on the interest of behavior using e-procurement.

The results of this study provide empirical evidence that vendors feel confident that the use of e-procurement system in carrying out its activities can facilitate its work because it assumes the use of e-procurement system can be easy to operate, instructions in the system easy to understand, facilitate in the search for information needed and easily become skilled in using the system (Venkatesh et al., 2003). By feeling the ease of using e-procurement system, vendors will strive to always use e-procurement system.

Quality of System Against Behavior Interest

Hypothesis 3 (H3) states the quality of the system affect the interests of behavior in using e-procurement. Test results in Table 5.7 show the t-statistic value of 4,028 (> 1.64) and p-value 0,000 (<0,05) can be concluded H3 is supported. The beta coefficient value 0.415 indicates that the quality of the system positively affects behavioral interest using e-procurement.

The results of this study provide empirical evidence that vendors have confidence in the quality of the system in using e-procurement system. the quality of e-procurement system is able to provide good service, fast response in case of error and comfortable when using the information system in the form of e-procurement. Al Khattab, et al (2015) explains that individual beliefs in transactions with government are caused by factors such as structure, systems and services that create a safe and reliable environment.

Quality of Information on Interest in Behavior

Hypothesis 4 (H4) states that the quality of information affects the interests of behavior in using e-procurement. The test results in Table 5.7 show the t-statistic value of 3.082 (> 1.64) and the p-value 0,000 (<0,05) can be concluded H4 is supported. The beta coefficient value of 0.208 indicates that the quality of information positively affects the interest of behavior using e-procurement.

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The results of this study provide empirical evidence that vendors have the confidence that the quality of information in the e-procurement system is good enough. The quality of information from the e-procurement system is capable of providing good information, providing clear navigation and interesting and easy-to-understand format. Convenience to the information system is needed because with the convenience there is no difficulty that arises in the auction process between government and provider of goods / services.

Conditions That Facilitate Usage Behavior

Hypothesis 5 (H5) states that facilitating conditions affect the behavior of use against the use of e-procurement. The test results in Table 5.7 show the t-statistic value of 4,010 (> 1.64) and the p-value 0,000 (<0,05) can be concluded H5 is supported. The beta coefficient value of 0.394 indicates that the facilitating conditions positively affect the behavior of use using e-procurement.

Empirical evidence of current research has implications that company management should provide resources or all support facilities to use technology-based accounting information systems (Wang and Shih, 2009). First, the hardware used is adequate hardware and keep up with the latest technological developments. Secondly, individual users of technology-based procurement systems should be provided with sufficient knowledge by the company's management of the operational and technological base used by training. Third, it is necessary to have expert individuals in technology who are ready to help the individual users of technology-based systems if the individual users of the system are experiencing difficulties or errors (Venkatesh et al., 2003).

Interest in Behavior Against Usage Behavior

Hypothesis 6 (H6) states that interest in behavior affects the behavior of the use of e-procurement. Test results in table 5.7 shows the t-statistic value of 2.524 (> 1.64) and p-value value 0.012 (<0.05) can be concluded H6 is supported. The beta coefficient value of 0.234 shows that the interest of behavior has a positive effect on usage behavior using e-procurement.

From several studies that have been done obtained empirical evidence that interest behavior positively affect the behavior of the use of information systems based on technology. Current research, in the context of implementing the e-procurement system, also provides empirical evidence consistent with these studies. Fetherman and Pavlou (2003) explain that interest may influence usage behavior to adopt information systems by individuals in situations of uncertainty, discomfort, anxiety, and conflict. High and low interest is a determinant that can influence the usage behavior in using e-procurement system. Thus, it can be concluded that interest behavior is a determinant factor of the use of vendor behavior to the procurement system of goods and services electronically.

3. Model after testing

In this study there are constructs of performance expectancy, Effort expectations, facilitating conditions, behavioral interests and user behavior taken from UTAUT developed

by <u>Venkatesh et al. (2003)</u>. while additional constructs in the technological context of system quality and information quality are adapted from the De Lone and McLean Models (2003). Based on the results of research models used known that the quality of the system is the most influential determinant of interest behavior. Meanwhile, Effort expectancy is the weakest determinant of its influence on the interest of behavior.

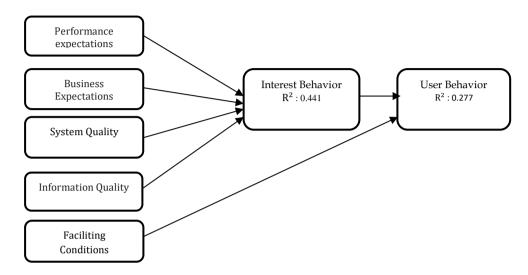


Figure 3. Model After Testing

Conclusion

The results of this study indicate that perceptions of performance expansion, Effort expectations, system quality, quality of information as determinants of behavior interest in using electronic procurement system, while conditions that facilitate and interest behavior is determinant of the behavior of the use of electronic procurement system. This shows that these constructs are able to explain and predict the vendor's acceptance of using the e-procurement system. The results of this study indicate that the quality of the system is the main construct that affects behavior interest. This means that the vendor sees the most important thing for the electronic procurement system is the quality of the system and beneficial to him in support of his work. Vendors believe that by using e-procurement systems in performing their tasks they can complete the work faster, improve performance, increase productivity, and improve effectiveness as expected. Meanwhile, Effort expectancy is the weakest determinant of its influence on behavioral interest. The weak influence of Effort expectations indicates that the information system is generally less complicated to use, the ability of employees to learn high and gain support from corporate management and technology staff. All of these reasons cause the influence of Effort expansion into significant behavioral interest but the effect is weak.

Usefulness of e-procurement system is an important thing and become a consideration for Electronic Procurement Service (LPSE) as system operator in developing and designing system to be right target for the wearer. So that the system created to provide maximum service and benefits for the providers of goods / services in the process of bidding or auction project procurement of goods / services. Ease of use shows e-procurement system should be easy to operate, instructions in the system easy to understand especially for employees who are not professionals in the field of information systems to facilitate employees in using information systems.

REFERENCES

- Al-Ajam, A., dan Nor K.M. 2013. <u>Evaluation of Internet Banking Services Adoption Among Yemeni Customers</u>. Journal of Business & Management 2, No.6. p39-48.
- Al-Fahim, N. H. 2012. Factor Affecting the Adoption of Internet Banking Amost IIUM' Students:

 <u>A Structural Equation Modeling Approach</u>. Journal of Internet Banking and Commerce 17, No.3, p1-14.
- Ahn, T., Ryu, S., dan Han, I. (2004), "<u>The Impact of the Online and Offline Features on the User Acceptance of Internet Shopping Mall</u>", Electronic Research and Application, Elsevier, Vol. 3, pp. 405-420
- Al-Khattab, A., Hasan A., Mahmaoud A., Khamis A., and Faten H. 2015. *The Effect of Trust and Risk Perception on Citizen's Intention to Adopt and Use E-Government Services in Jordan*. Journal of Service Science and Management 8, p279-290.
- Azmi, A.C., dan Bee, N.G. 2010. *The Acceptance of the e-Filing System by Malaysian Taxpayers: a Simplified Model*. Electronic Journal of e-Government 8, No.1, p13-22.
- Agustina, Ruslinda. 2014. <u>Determinan Minat Individu dan Pengaruhnya Terhadap Perilaku Penggunaan Sistem Informasi Berbasis Teknologi</u>. Tesis Universitas Brawijaya.
- Baridwan, Z. 2009. Sistem Akuntansi : Penyusunan Prosedur dan Metode Edisi Kelima. Yogyakarta : BPFE.
- Carmendi, M.Z. 2012. Faktor-Faktor yang Mempengaruhi Penerimaan Terhadap Sistem E-Procurement dengan Technology Acceptence Model Pada Industri Kelistrikan. Tesis. Universitas Indonesia.
- Chan, S., dan Lu, M. (2004), "Understanding Internet Banking Adoption and Use Behavior: A Hong Kong Perspective", Journal of Global Information Management, Vol. 12(3), pp. 2-43
- Cho, Y. C. dan Agrusa, J. (2006), "Assessing Use Acceptance and Satisfaction Toward Online Travel Agencies", Information Technology dan Tourism, Vol. 8, pp. 179-195
- Duy, N.K. 2012. <u>Factors Affecting Behavioral Intentions Toward Mobile Banking Usage: A Study Of Banking Customers In Ho Chi Minh City</u>. Thesis University Of Economics Ho Chi Minh City.
- Ghozali, I., dan Hengky L. 2015. *Partial Least Squares Konsep. Teknik dan Aplikasi Menggunakan Program SmartPLS 3.0 Untuk Penelitian Empiris*. Semarang: Universitas Diponegoro.
- Gefen, D., Karahana, E., dan Straub, D. W. (2003), <u>"Trust and TAM in Online Shopping: An Integrated Model"</u>, MIS Quarterly, Vol. March, pp. 55-90
- Hartati, ery. <u>"analisis faktor-faktor yang berpengaruh terhadap efektivitas penerapan e-government dengan menggunakan metode utaut (unified theory of acceptanced use of technology) di kota palembang.</u> "semnas teknomedia online 1.1 (2013): 29-7.
- Hartono. 2008. Sistem Informasi Behavior. Yogyakarta: Andi.
- Hartono dan Abdillah, W. 2015. Partial Least Square (PLS) Alternatif Structural Equation Modeling (SEM) dalam Penelitian Bisnis. Yogyakarta: Andi.
- Hausman, a. V. Dan siekpe, j. S. (2008), <u>"the effect of web interface features on consumer online purchase intention"</u>, journal of business research, elsevier

- Kaufaris, m. (2002), <u>"customer trust online: examining the role of experience with the website"</u>, information system research, vol. 13(2), pp. 205-223.
- Kazi, A.K. 2013. <u>An Emperical Study of Factors Influencing Adoption of Internet Banking among Students of Higher Education: Evidence from Pakistan.</u> Journal of Internet Banking and Commerce 18, No. 2, p1-13.
- Lembaga kebijakan pengadaan barang/jasa pemerintah (lkpp). 2009. <u>Implementasi e-procurement sebagai inovasi pelayanan publik</u>. Jakarta.
- Leng, G.S. 2011. <u>An Exploration Of Social Networking Sites (SNS) Adoption In Malaysia using Technology Acceptance Model (TAM), Theory Of Planned Behavior (TPB) and Intrinsic Motivation</u>. Journal of Internet Banking and Commerce 16, No. 2, p1-27.
- Nasution, s.p. 2012. <u>Evaluasi pengadaan barang/jasa pemerintah secara elektronik (e-procurement)</u> <u>pada lpse kementerian keuangan</u>. Tesis. Universitas indoenesia.
- Nurmandi, a., & kim, s. (2015). <u>Making e-procurement work in a decentralized procurement system: a comparison of three indonesian cities</u>. International journal of public sector management, 28(3), p198-220.
- Oketch, C.A. 2014. *Implementation Of The Government Electronic Procurement System In The County Of Mombasa, Kenya*. Tesis. University Of Nairobi.
- Ozkan, S., dan Irfan E.K. 2011. <u>E-Government Adoption Model Based On Theory Of Planned Behavior: Empirical Validation</u>. Government Information Quarterly 28, p503–513.
- Pennington, r., wilcox, d., dan grover, v. (2003), <u>"the role of system trust in business to consumer transaction"</u>, journal of management information system, vol. 20(3), pp. 197-226.
- Pujani, v. Dan xu, j. (2005), <u>"e-commerce in indonesian smes: toward a research model of website success"</u>, ieee, vol. 5, pp. 762-767
- Ranatarisza, Mirza dan Max Advian. 2013. Sistem Informasi Akuntansi dan Aplikasi Administrasi Bisnis. Malang: Universitas Brawijaya Press.
- Rose, r.c., kumar n., dan george p.w. 2009. <u>Empirical evaluation of the electronic procurement system acceptance in malaysia.</u> European journal of scientific research; vol.29 no. 1, pp.100-112.
- Safeena, R., Hema D., Nisar H., dan Abdullah K. 2013. <u>Combination of TAM and TPB in Internet Banking Adoption</u>. International Journal of Computer Theory and Engineering 5, No. 1, p146-150.
- Sari, a. K. 2013. Determinan minat perilaku wajib pajak dalam menggunakan e-filing sebagai layanan aplikasi perpajakan (studi empiris di kediri). Tesis. Universitas brawijaya.
- Sentosa dan Nik. 2012. <u>Examining A Theory Of Planned Behavior (TPB) And Technology Acceptance Model (Tam) In Internet purchasing Using Structural Equation Modeling.</u> Journal of Arts, Science & Commerce 3, No. 2, p62-77.
- Singh, inder dan devendra k.p. 2011. *Employees adoption of e-procurement system: an empirical study*. International journal of managing information technology, vol. 3 issue 4, p85.

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- Setyadiharja, r., budiman, s., karim, z. A., matridi, r. A., junriana, f., & nurmandi, a. (2014). <u>E-procurement system technology: an analysis in electronic procurement service unit (lpse) of kepulauan riau province</u>. The asian journal of technology management vol, 7(2), p93-107
- Sugiyono. 2013. Metode Penelitian Kuantitatif Kualitatif dan R&D. Bandung: Alfabeta.
- Suki dan Ramayah. 2010. <u>User Acceptance of the E-Government Services in Malaysia: Structural Equation Modelling Approach.</u> Interdisciplinary Journal of Information, Knowledge, and Management 5, p395-413.
- Sumarto, P.H., Eko P., dan Dewi K. 2012. <u>Antecedents of Trust and Its Impact on Loyalty: An Empirical Study on E-Commerce's Customer in Surabaya</u>. International Journal of Information and Communication Technology Research 2, No. 2, p122-128.
- Venkatesh, v., morris, m. G., davis, g. B., and davis, f. D. 2003. "*user acceptance of information technology: toward a unified view*," mis quarterly(27:3), pp. 425-478.
- Vijayasarathy, l. (2004), "predicting consumer intention to use on-line shopping: the case for an augmented technology acceptance model", information & management, elsevier, vol. 44, pp. 747-862.