# The Influence On Factors In Attitudes Toward Acceptance Of The Information System Using Technology Acceptance Model (TAM) Case Study SPAN System In Indonesia

Donny Maha Putra

**Abstract:** Theoretically and practically Technology Acceptance Model (TAM) is a model that is considered most appropriate in explaining how the user receives a system. This study aimed to analyze the factors that influence the attitudes towards the acceptance of Sistem Perbendaharaan Anggaran Negara (SPAN) using TAM approach. The problems raised in this research, aims to determine the attitude of the use of the transition process lagecy system to the new system which for many users create conflict in the process of adaptation. On the basis of this proposed theoretical models to test hypotheses using Structural Equation Model (SEM) and analysis tool using lisrel. This research was conducted in all offices DG of Treasury of Ministry of Finance with 210 respondents were chosen at random to represent each office. The results of this study prove 4 hypothesis is accepted from 8 hypothesis, namely: a) a negative affect with the results demonstrabilty, b) computer self-efficacy with the output quality, c) computer self-efficacy with the perceived ease of use, d) perceived ease of use with the perceived of usefulness. Overall indicates that the application of the SPAN system in the Ministry of Finance of In Indonesia can be accepted by users.

**Keywords:** TAM, SPAN, SEM, Accepted, Attitudes, Perceptions, Efficacy, Ease to use, Usefulness, Intention to Use

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## 1 INTRODUCTION

Government of the Republic of Indonesia through Presidential Instruction to implement the process of transformation towards e-government. To realize the establishment of e-government in the scope of the Ministry of Finance and to enable the achievement of professionalism and quality of the management of state finances, the government is implementing a project of improvement of financial management and administration of government revenue, known as GFMRAP, one of the changes is in terms of budget and treasury modernization, which is manifested in the form of implementation of Sistem Perbendaharaan Anggaran Negara, hereinafter referred to SPAN. SPAN is part of the Integrated Financial Management Information System (IFMIS) which is the country's financial management information system that is integrated, so that the implementation is able to provide the state financial management information quality. SPAN began when Boediono is still the Minister of Finance, so this has been a very long journey. We will implement in fully SPAN system in 2012 (Sri Mulyani, 2010). The initial stage of the implementation of the system will have a negative impact of the emergence of anxiety of the user at the time of the adaptation of the use of the lagecy system to the new system which resulted in influencing attitudes towards the acceptance of this SPAN system. Several studies information systems or information technology used a different approach in researching the influence attitudes and anxiety in the use and acceptance of technology (Marakas, Yi & Johnson, 1998;

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Thatcher, McKnight, Gundlach & srite, 2007), especially within the user's perception is assessed. For example, Compeau, Higgins, and Huff (1999), Chau (2001), Venkatesh (2004) Well, Tan and Teh (2004) investigated the perception prior to use of the system, Agarwal (2000), Wixom and Todd (2005) studied the attitudes and concerns after the use of the system. Venkatesh (1999) studied the attitudes and anxiety before and after the use of the system. Past research also seeks to understand and to explain the issues regarding the relationship-engagement attitude or behavior (Gallivan, 2004; Harrison, Newman & Roth, 2006) which explores the perspective of relations influence attitudes toward behavior. The use of the TAM model based on the opinions from Venkatesh and Davis (2000) which states that so far TAM is a concept that is considered the best in explaining the behavior of users to the new information technology system. According to Venkatesh and Davis (2000) TAM empirically shown to explain 40% usage intentions and behavior. Theoretically and practically TAM is a model that is considered the most appropriate in explaining how the user receives a system. TAM stated that behavioral intention to use is determined by two beliefs: first, perceived usefulness is defined as the extent to which one is sure that the use of the system will improve its performance. Second, perceived ease of use is defined as the extent to which one is sure that the system is easy to use. TAM also states that the impact of external variables such as the characteristics of the system, process development and training of the intention to use mediated by perceived of usefulness and perceived ease of use. This research is important, given the changes in the legacy system to the new system requires a process of transition, which for many users create conflict and anxiety in the process of adaptation. This condition is in accordance with what is stated by Compeau and Higgins (1995) that a critical stage in the implementation of an information technology system is a condition in which the presence of such a system is accepted or rejected by potential users.

## 2 MOTIVATION AND CONTRIBUTION OF RESEARCH

The motivation of this study is to demonstrate empirically the behavior of users on the system changes from the lagecy system to the new system and how to influence attitudes towards acceptance of the new system. The study also investigated the previous research concerns on the use of computers (Agarwal, Sambamurthy & Stair, 2000; Compeau & Higgins, 1995; Compeau, Higgins & Huff, 1999; Thatcher & Perrewe, 2002; Venkatesh & Davis, 1996), examines issues such as training , attitude, motivation and anxiety myself (Mathieu, Martineau, & Tannenbaum, 1993; Venkatesh, 2000), performance (Liu and Ma, 2006), acceptance and use of in a different technological environment to understand how to design and build a system that is easier to use and more likely to be accepted by the users. This study aims to contribute academically to previous similar studies and as input for the organization to create a strategy to SPAN implementation.

## 3 REVIEW OF LITERATURE

### 3.1 Theory of Reasoned Action (TRA)

This Model is a model widely applied during this time. This model states of the predictable consumer behavior intention of behaving that are formed through a process of rational decision. Intention to behave is a function of the overall evaluation of attitudes towards behavior plus beliefs about the hopes of the referents of such behavior is then weighed with the motivation to follow a variety of expectations. Attitudes toward the behavior is formed from a combination of strength and evaluation of one's faith. Meanwhile subjective norm is a product of the consumer confidence that is necessary to execute the behavior. In addition to behavior, this model is often applied to measure attitudes toward a particular object (Fishbein & Ajzen, 1975: 359)

### 3.2 Technology Acceptance Model (TAM)

TAM is an adaptation of the Model Theory of Reasoned Action (TRA) that has been specifically adapted to the model of information system acceptance by the user (Davis et aL, 1989). TAM has two sides of the first side of the so-called beliefs consisting of perceived usefulness and perceived ease-of-use and the second side consists of attitude, behavior intention to use and usage behavior (Straub, Limayen, Evaristo, 1995 in Petra, 2005), TAM explain the relationship between faith/ beliefs (usefulness and ease of use) with the attitude, goals or intentions of users, as well as the actual use of the system. Perceived usefulness is defined by Davis et al (1989) as the degree to which a person believes that the use of the system in particular will improve its performance. While the perceived ease of use is defined as a degree to which a person believes that the use of the system in particular will lead to a business.

### 3.3 Social Cognitive Theory and Self-Efficacy

Another theory used by the author to support this research is to utilize social cognitive theory (Bandura, 1986). This theory argues triadic relationship like that behavioral, cognitive, and environmental factors other personal events operate as interaction determinants that influence each other bidirectionally (Wood & Bandura, 1989, p. 362). This theory applies because of the relationship between cognition about one's ability to perform tasks and behaviors that involve performance.

### 3.4 Affective Behavior

This study refers to previous studies that found an association between behavioral affective and individual performance an indicator of tension in the work environment and predictors associated with employee performance (Elsbach & Barr, 1999). The emotional state has been measured as positive affectivity and negative affectivity using methods developed by (Watson, Clark, and Tellegen, 1988). Theoretical and empirical findings about the relationship of behavior comes from the theory of action that is positive or negative feelings of the individual in terms of behavior (Fishbein & Ajzen, 1975, p. 216).

### 3.5 Information System

According Gelinas et. al. (2012: 14; Azhar Susanto, 2009) an information system is a man made system that generally consists of an integrated set of computer-based components and manual components established to collect, store and manage the data and to provide output information to users. According to O'Brien and Maracas (2009: 4), the information system is an organized combination of brain ware, hardware, software, network communications, database, policies and procedures that store, retrieve, modify and produce the information within an organization. Furthermore Bentley & Whitten (2007: 6) the information system is an arrangement of people, data, processes and information technology that interact to collect, process, store and provide output in the form of information necessary to support an organization. The same thing is said by Laudon and Laudon (2012: 15) that the information system is a collection of components that are interconnected, collect or receive, process, store and produce information to support decision making and control in an organization, as well as analyzing the problem, describe things complicated and creating new products. "An information system can be technically defined as a set of interrelated components that collect (or retrieve), process, store, and distribute information to support decision making and control in an organization.

## 4 STUDY MODEL AND HYPOTHESES

Other studies have found an the association between anxiety training and computer use (Venkatesh & Davis, 1996. For example, Compeau and Higgins (1995) with the result that the support of the organization and training of anxiety affect the use of computers and individual expectations of the results (for example, the output of a system ). A long-term study of anxiety self-perception, the researchers observed a consistent positive relationship between training and the efficacy of the use of computers (Agarwal et al., 2000). Hasan (2006), then the hypothesis:

**H1:** Perceived preparation tasks affects computers self-efficacy.

Several previous studies have found that subjects with a more positive attitude better than in subjects with negative attitudes (Katz & Yablon, 2003). In another study, a positive attitude generates more positive perception of the system and increase the acceptance and use of the system (Bhattacherjee & Premkumar, 2004; Wixom and Todd, 2005). They also found that traits such as anxiety and negative affectivity is an indicator of a person's openness to the use of the system. Other findings showed that increasing experience results in a

more positive attitude and a greater willingness to accept a system, so the hypothesis is built are:

**H2:** a positive attitude affects the output quality, results demonstrability and perceived ease of use.

**H3:** a negative attitudes affect the ouput quality, results demonstrability and perceived ease of use.

Investigation of the relationship between training and anxiety themselves against computer use by individual expectations, Compeau and Higgins (1995). This study found that anxiety about the use of computers can serve as a measure of a person's emotional reaction to the results and expectations of a system. A study of other states about the efficacy of the use of computers both in general and in particular is an important indicator of the perceived cognitive effort (Agarwal et al., 2000). Another interesting aspect of this relationship is the relationship of magnitude the high rate of efficacy of the use of computers in general will lead to low levels of perceived usefulness, in other words, the relationship is negative (Chau, 2001; Hasan & Ali, 2006). On this basis the authors hypothesize:

**H4:** computer self-efficacy affects output quality and results demonstrability.

**H5:** computer self-efficacy affects perceived usefulness and perceived ease of use.

Relations hypothesis of output quality and results demonstrability for ease of use was first designed in order to respond to challenges in identifying the perceived ease of use and perceived benefits (Gefen & Keil, 1998). This relationship has been examined in another study by Venkatesh and Davis (2000), a subsequent study by Hart and Porter (2004). Both studies found that the perception is higher than the output produced and the results demonstrability by such a system would produce a higher perception of the ease of use and benefits, so the authors hypothesize:

**H6:** output quality and results demonstrability affect the perceived ease of use.

Previous research that stresses the three variables in the technology acceptance model (Davis, 1989), it was found that the perceived ease of users influence the perception of the usefulness and intention to use (Doll, Hendrickson, and Deng, 1998; Gefen, & Straub, 2003; Liu & Ma, 2006). Perception of usefulness is positively related to the intention to use (Agarwal, 2000; Li, Chua, & Lu, 2005; Venkatesh & Davis, 2000). Furthermore, Elbeltagi, McBride, and Hardaker (2005) confirms the relationship of perceived ease and perceived usefulness of the intention of using. With so authors hypothesize:

**H7:** Perceived ease of use affects perceived of usefulness.

**H8:** Perceived usefulness affect intension to use.

## THE PROPOSED OF RESEARCH MODEL
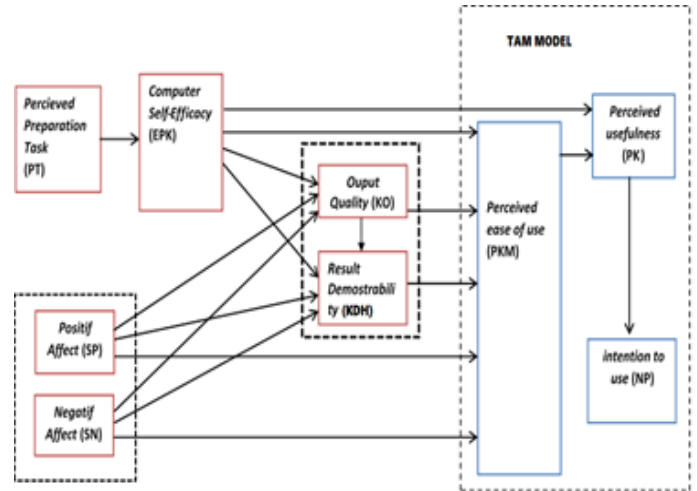


## 5 RESEARCH METHODS

This research use survey method, the instrument used to measure the research variables are instruments which were used in previous studies, making it possible to improve the validity and reliability of measurement. Measurement of each variable using a Likert scale of 1 to 5. The instrument of this study using questionnaires adopted and developed from previous research. The questionnaire in this study consists of two parts: the first part in the form of open-ended questions are questions about the identity of the respondent as the respondent's name, unit, job title, age and education last, while the second part was closed questions covering all the variables in this study. Validity and reliability were calculated using Confirmatory Factor Analysis performed using tool analysis is LISREL.

### 5.1 Unit Of Analysis

This research was conducted accross of Indonesia on branch office Directorate General of Treasury, Ministry of Finance, namely a total of 210 offices with distribution of respondents:
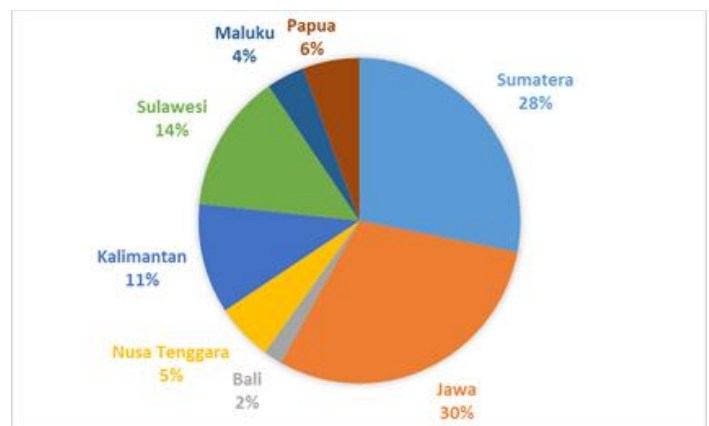


## 6 FINDING AND DISCUSSION

Because Matching the overall model using degree measure of the suitability or the goodness of fit (GOF). The models produced by SEM models in this study can be seen in the following diagram:

Chi-Square=165.95, df=118, P-value=0.00241, RMSEA=0.044
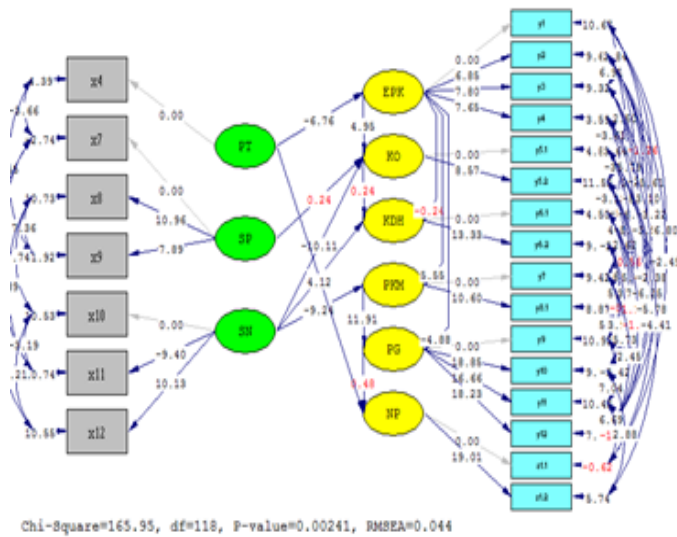
From the results of testing goodness of fit statistics can be stated that the NFI, NNFI, CFI, GFI> 0.90 and RMSEA ≤ 0.80 which indicates a good fit. While AGFI where is at 0.80 ≤ GFI ≤ 0.90 shows marginal fit. While p-value = 0.00241 indicate a match fairly. In general, concluded that the overall suitability of the model in this study is good, as presented in the following table:

| Fit Measure | Good Fit | Acceptable Fit | Score Research | Result |
|---|---|---|---|---|
| $X^2$ | $0=x^2=2df$ | $2df=x^2=3df$ | 165.95 | Good Fit |
| P value | $.05<p=1.00$ | $.01=x^2=.05$ | 0.00241 | Marginal Fit |
| RMSEA | $0=RMSEA=.05$ | $.05=RMSEA=.08$ | 0.044 | Good Fit |
| NFI | $.95=NFI=1.00$ | $.90=NFI=.95$ | 0.98 | Good Fit |
| NNFI | $.97=NNFI=1.00$ | $.95=NNFI=.97$ | 0.99 | Good Fit |
| CFI | $.97=CFI=1.00$ | $.95=CFI=.97$ | 0.99 | Good Fit |
| GFI | $-95=GFI=1.00$ | $-90=GFI=.95$ | 0.94 | Good Fit |
| AGFI | $-90=AGFI=1.00$ | $-85=AGFI=.90$ | 0.85 | Acceptable Fit |

The test results of the hypothesis proposed in this research is briefly shown in table:

| No | Path | Estimation | t-value | Conclusion |
|---|---|---|---|---|
| 1 | PT → EPK | -0.38 | -6.79 | Significant |
| 2 | SP → KO | 0.01 | 0.24 | Not Significant |
| 3 | SN → KO | -1.29 | -10.11 | Significant |
|   | SN → KDH | 0.45 | 4.12 | Significant |
|   | SN → PKM | -1.31 | -9.24 | Significant |
| 4 | EPK → KO | 1.13 | 4.95 | Significant |
|   | EPK → KDH | -25.10 | -0.24 | Not Significant |
| 5 | EPK → PKM | 1.26 | 5.55 | Significant |
|   | EPK → PG | -0.44 | -4.88 | Significant |
| 6 | KO → KDH | 22.26 | 0.24 | Not Significant |
| 7 | PKM → PG | 0.67 | 11.91 | Significant |
| 8 | PG → NP | 0.06 | 0.48 | Not Significant |

From the test results obtained by the preparation tasks influence on the computer self-efficacy is measured through indicators preparation tasks. The amount of t values of 6.79, smaller than t-table (1.96), so h0 is rejected and h1 is accepted concluded that the effect of the preparation tasks 6.79 on the computer self-efficacy. From the results if the data formed the model yields a relationship between a positive attitude and the quality of the output of the system. The value of t at 0.24, less than the t-table (1.96), so h0 accepted and h2 rejected concluded that a positive attitude does not affect the output quality. The level of influence of a negative attitude towards the output system, and perceived ease of use can be seen t values of -10.11 and -9.24, for a negative attitude towards the output quality and perceived ease of use, smaller than t-table (-1.96), whereas for a negative attitude towards the results demonstrability t value of 4.12 is greater than t-table (1.96), so h0 rejected and h3 accepted concluded that the negative attitude of 4:12 affect the ability of the results demosntrability and the negative attitude of -10.11 effect on the output quality and amounted to -9.24 against the perceived ease of use. Thus hypothesis 3 is proven. The amount of influence the computer selft-efficacy on the output quality and the results demonstrability, see the magnitude of t values of 4.95, greater than t-table (1.96), so h0 rejected and h4 accepted concluded that the computer self-efficacy affect the output quality and the intension to use, h8 unproven. While the computer self-efficacy on the results demonstrability obtained t value of -0.24 is smaller than t-table (1.96), so h0 accepted and h4 rejected, hypothesis 4 is not proven. High and low computer self-efficacy affects the perceived of usefulness and perceived ease of use of the results can be seen from t value of -4.88 which is smaller than t-table (-1.96), so h0 rejected and h5 accepted concluded that the computer self-efficacy negatively affect the perceived of usefulness , while for the computer self-efficacy to the perceived ease of use t value of 5:55 is greater than t-table (1.96), so h0 rejected and h5 accepted concluded that hypothesis 5 proven efficacy influence the use of computers for 5.55 against the perceived ease of use. Influence the quality of the output is only associated with demonstration capabilities indicator variable results. The value of t at 0.24, less than the t-table (1.96), so h0 accepted and h6 rejected concluded that the output quality does not affect the results demonstrability, hypothesis 6 unproven. The magnitude of the effect of perceived ease of use on the perceived of usefulness can be seen from the analysis, where the t value of 11.91, greater than t-table (1.96), so h0 rejected and h7 accepted concluded perceived ease of use influenced by 11.91 on the perceived of usefulness, hypothesis 7 proven. The amount of influence the perceived of usefulness of the intention to use of the analytical results obtained t value of 0:48 is smaller than t-table (1.96), so ho h8 accepted and rejected, and it can be concluded that the the perceived of usefulness does not affect the intention to use, so hypothesis 8 unproven.

## 7 CONCLUSION
This study user attitudes towards acceptance of a new information system. Overall SPAN System can be received by users. Preparation task negatively affect the efficacy of the use of computers means that the higher the level of preparation, the lower the level of anxiety felt by users of the system. These findings indicate that organizational support is indispensable in influencing the high and low levels of anxiety SPAN system users.

A positive attitude does not affect the quality of the output, the respondents believe that a positive attitude alone cannot be used as a determinant of the quality of the output of a system. The output quality must be proven results are able to increase user productivity. But the negative attitude negatively affect the quality of the output, which means that the negative attitude towards the SPAN system, the lower the quality of the output generated by the system. The computer self-efficacy affect the quality of the output. This study found that the size of one's emotional reactions to the expectations of the results of a system. This size is the basis for management in order to provide an assessment of the importance of training and other support to users. While the efficacy of computer use does not affect the ability of demonstration results, respondents believe that the efficacy of the use of computers is not a major determinant of the success of the capability of the system, the most important is the knowledge, skills and experience of the user. The efficacy of the use of computers affect the perceived ease of use and perceived usefulness in general or for specific tasks is an important indicator of perceived cognitive effort. Another interesting aspect of the relationship between the efficacy computer use to the perception of the benefits is the high level of anxiety will lead to low levels of perceived benefit. The output quality does not affect the ability of a demonstration of the results of a system, where the results of this study indicate that the relationship or the effect produced is not significant, experience and work environment of respondents did not support the user to produce results thus indirectly cannot demonstrate the ability results in accordance with expected, for the management needs to socialize and training for the implementation of a new system intensively. Perceived ease of use influence the perceived of usefulness, ease of use of the system turns on feel will improve the perception in favor of their daily work. Perceived of usefulness does not affect the intention to use the system, it is because perhaps the respondents think the intention of using the system is affected by other things such as curiosity and duty of the management. In subsequent studies need to consider a broader sampling with levels varying characteristics. Additionally need to add another variable that has not been researched in this study, for example, the level of the user's curiosity and perception in the user's obligation to use a system that has been set by management.

## REFERENCES

[1] Agarwal, R., Sambamurthy, V., & Stair, R.M. (2000). Research report: The evolving relationship between general and specific computer self-efficacy--An empirical assessment. Information Systems Research, 11(4), 418-430.

[2] Azhar Susanto. 2009. Management Information Systems: Developing, Risk, Structured Approach. First edition. Bandung: Lingga Jaya.

[3] Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. Englewood Cliffs, NJ: Prentice Hall.

[4] Bentley, Lonnie D., & Whitten, Jeffrey L. 2007. Systems Analysis and Design For The Global Enterprise. 9th Edition. New York: McGraw-Hill. International Edition.

[5] Bhattacherjee, A., & Premkumar, G. (2004). Understanding changes in belief and attitude toward information technology usage: A theoretical model and longitudinal test. MIS Quarterly, 28(2), 229-254.

[6] Chau, P.Y. (2001). Influence of computer attitude and self-efficacy on IT usage behavior. Journal of End User Computing, 13(1), 26-33.

[7] Compeau, D., Higgins, C.A., & Huff, S. (1999). Social cognitive theory and individual reactions to computing technology: A longitudinal study. MIS Quarterly, 23(2), 145-158.

[8] Doll, W.J., Hendricson, A., & Deng, X. (1998). Using Davis's perceived usefulness and ease-of-use instruments for decision making: A confirmatory and multigroup invariance analysis. Decision Sciences, 29(4), 839-869.

[9] Elbeltagi, I., McBride,N., & Hardaker,G. (2005).Evaluating the factors affecting DSS usage by senior managers in local authorities in Egypt. Journal of Global Information Management, 13(2), 42-64.

[10] Elsbach,K.D., & Barr, P.S. (1999).The effects of mood on individuals' use of structured decision protocols. Organization Sicenc, 10(2), 181-198.

[11] Fishbein, M., & Ajzen, I. (1975). Belief, attitude, intention and behavior: An introduction to theory and research. Reading, MA: Addison-Wesley.

[12] Gallivan, M.J. (2000). Examining workgroup influence on technology usage: A community of practice perspective. In proceedings of the 2000 ACM SIGCPR Conference on Computer Personnel Research (pp. 54-66). Chicago, Illinois: Association for Computing Machinery.

[13] Gefen, D., Straub, D.W., & Boudreau, M.C. (2000). Structural equation modeling and regression: Guidelines for research practice, Communications of the AIS, 4, available from cais.isworld.org.

[14] Gelinas, Ulrich & Dull, B. Richard. 2012. Accounting Information Systems. 9th Edition. USA: South Western Cengage Learning.

[15] Ghozali, Imam dan Fuad. 2005. Structural Equation Modeling: Teori, Konsep, dan Aplikasi. Semarang:Badan Penerbit Universitas Diponegoro.

[16] Hari Wijayanto, Setyo (2008). Structural Equation Modelling dengan Lisrel 8.8. Yogyakarta: Penerbit Graha Ilmu.

[17] Hasan, B. (2006). Effectiveness of computer training: The role of multilevel computer self-efficacy. Journal of Organizational and End User Computing, 18(1), 50-68.

[18] Hayashi, A., Chen, C., Ryan, T., & Wu, J. (2004). The role of social presence and moderating role of computer self efficacy in predicting the continuance usage of e-learning systems. Journal of Information Systems Education, 15(2), 139-154.

[19] Harrison, D.A., Newman, D.A., & Roth, P.L. (2006). How important are job attitudes? Meta-analytic comparisons of integrative behavioral outcomes and time sequences. Academy of Management Journal, 49(2), 305-325.

[20] Jane M. Carey , Susan S. Fiorito and Charles J. Kacmar. The influence of attitude on the acceptance and use of information systems, Journal of Information Resources Management 2009, 22(2)

[21] Katz, Y.J., & Yablon, Y.B. (2003). Online university learning: Cognitive and affective perspectives. Campus-wide Information Systems, 20(2), 48-54.

[22] Laudon, Kenneth. C & Jane P. Laudon. 2012. Mangement Information Systems: Managing the Digital Firm. 12th Edition. USA: Prentice Hall.

[23] Liu, L., & Ma, Q. (2006). Perceived system performance: A test of an extended technology acceptance model. Data Base for Advances in Information Systems, 37(2&3), 51-59.

[24] Marakas, G.M., Yi, M.Y., & Johnson, R.D. (1998). The multilevel and multifaceted character of computer self-efficacy: Toward clarification on the construct and an integrative framework for research. Information Systems Research, 9(2), 126-163.

[25] Mathieu, J.E., Martineau, J.W., & Tannenbaum, S.I. (1993). Individual and situational influences on the development of self-efficacy - Implications for training effectiveness. Personnel Psychology, 46(1), 125-147.

[26] O'Brien, James A. & Maracas, George M. 2009. Management Information Systems. 9th Edition. NY: McGraw-Hill Inc. 1221 avennue of the Americas, New York, NY, 10020.

[27] Petra S.M. Wijaya. 2005. Pengujian Model Penerimaan Teknologi Internet Pada Mahasiswa. Jurnal Riset Akuntansi dan Keuangan, Vol. I, No. I. Februari.

[28] Shroff, Ronnie H., Christopher C. Deneen and Eugenia M. W. Ng. 2011. Analysis of the Technology Acceptance Model in Examining Students' Behavioural Intention to Use an E-portfolio System" Australasian Journal of Educational Technology 2011, 27(4), 600-618.

[29] Sri Mulyani. 2010. Treasury System new Implemented. Via< http://bisniskeuangan.kompas.com/read/2010/03/02/1400 4991/Sistem.Perbendaharaan.Baru.Diterapkan>[3/2/2010] .

[30] Stone, R.W., & Henry, J.W. (2003). The roles of computer self-efficacy and outcome expectancy in influencing the computer end-user's organizational commitment. Journal of End User Computing, 15(1), 38-53.

[31] Thatcher, J.B., McKnight, D.H., Gundlach, M.J., & Srite, M. (2007). Individual and human assisted computer self-efficacy: An empirical investigation. Paper presented at the Proceedings of the Internationale Tagung Wirtschaftsinformatik, Karlsruhe, Germany.

[32] 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.

[33] Watson, D., Clark, L.A., & Tellegen,A. (1988). Devlopment and validation of brief measures of positive and negative affects: The PANAS scales. Journal of Personality and Social Psychology, 54(6),1063-1070.

[34] Wixom, B.H., & Tood, P.A (2005). A theorical integration of user satisfaction and technology acceptance. Information System Research, 16(1),85-102

[35] Wood, R., & Bandura, A. (1989). Social cognitive theory of organizational management. The Academy of Management Review, 14(3), 361-384.