International Journal of Science and Research (IJSR)
ISSN (Online): 2319-7064
Index Copernicus Value (2015): 78.96 | Impact Factor (2015): 6.391

Why is User's Expertise Important for Implementation of Regional Asset Information Systems: Case in Indonesia

Alifah Maulida Yuwana[1], Alwan Sri Kustono[2]

[1]University of Jember, Post Graduatee Programs, Jln. Kalimantan 37 Jember Indonesia 68111

[2]University of Jember, Acoounting Department, Jln. Kalimantan 37 Jember Indonesia 68111

Abstract: ***This paper examines the factors that explain variations in new information systems acceptance. Results of this study identify three variables contributing to acceptance: perceived usefulness, attitude, and expertise. We found expertise has effect on employer's anxiety. Finally, anxiety and perceived usefulness have effect to attitude. Implications for local government are offered on user acceptance of new information systems of local financial reporting.***

Keywords: perceived usefulness, attitude, employee's anxiety, expertise, SIMBADA

1. Introduction

Reforms in the public sector are directed at improving the efficiency, effectiveness and accountability of financial management. In Situbondo Regency, to ensure accountability for the management of fixed assets, the District Government implements the Regional Goods Management Information System (SIMBADA). SIMBADA operators consist of various educational backgrounds and expertise. Users of Goods staff responsible for managing the local fixed assets in the respective regional work unit (OPD) are required to be able to use the SIMBADA application. Successful implementation of SIMBADA is important to the accountability of local financial reporting.

One of factors that play an important role in the successful application of information technology is acceptance of information systems technology by the user. User is one of the important aspects to be considered in the application of it. The readiness of users to receive such technology has a major influence in determining whether or not the application of the technology is successful.

The existence of problems SIMBADA acceptance as a new instrument in the activities of regional financial management, should be considered carefully by local government. Therefore, before making efforts to develop and implement it, must consider multi dimensional variables that may influence it.

Many research results indicate a positive relationship between investment in IT with economic and financial profitability and added value [9, 10, 11, 12, 13]. Research on user acceptance in the use of technology is done by using Technology Acceptance Model (TAM). TAM offers a powerful and simple explanation for technology acceptance and user behavior [14]. TAM is based on Theory of Reasoned Action (TRA) [15]). TRA states that a person will receive a computer if the computer provides benefits to the wearer. Based on TRA, users of information system technology is determined from individual perceptions and attitudes that will ultimately shape a person's behavior in the use of an information systems technology. TAM is specifically used in the field of information systems to predict acceptance and use in individual user jobs [7].

Ratnaningrum [8] reveals that both perceived ease of use and perceived usefulness have significant positive effect on the attitude towards using internet banking directly. Both of perceived ease of use and perceived usefulness also have significant positive effect on actual usage internet banking directly. Attitude toward usage has positive effect on actual usage.

Based on TAM approach, this study aims to examine the personal factors of employees (expertise, perceived usefulness, and attitude) on the success (acceptance) SIMBADA. The expected contribution of research results is useful to be the basis for the implementation of the information system. Understanding of the factors that affect the acceptance of a system will increase the effectiveness, effectiveness, and efficiency of SIMBADA implementation.

Previous research [1,2] indicate the variables that affect the acceptance of the use of computer technology. A review of these studies led to the conclusion of the influence of attitude, perceived usefulness and user anxiety. In addition, the variables of expertise (ability to operate) allegedly have influence either directly or indirectly to the acceptance of information systems.

The research questions is whether an attitude, expertise in information technology systems, and the perceived benefits of employees affect the acceptance of SIMBADA information systems implementation.

2. Development of Hypothesis

The attitude is the individual characteristics developed through a process of social interaction. Attitude encourages and guide behavior. Individual establish a positive attitude towards the object that works for their needs.

In line with the definition, in the implementation of information systems, each individual has a different attitude. This attitude will affect the individual interpretation. Attitude is influenced by perceived usefulness. Attitude to information systems indicates a person's reaction to evaluate, like, or do not like to use the system.

Hypothesis 1: attitude influences acceptance of SIMBADA implementation

Perceived usefulness is defined as the level of a person believes that the use of these things will improve performance [4]. Perceived usefulness affect the acceptance of a person against a system perceived support measuring the value of output.

The phenomenon of the perception of usefulness and perceived ease of operation of the system also occur in some organization such as disclosed in the research [3,4]. Overall, the study concluded that perceived benefits and perceptions of ease of operation of the system affect the attitude of employees in using the new system. Yusoff et al. [6] states that if users are easy to use, they will be more willing to use it to find information that is ordered to improve the quality of their tasks.

Hypothesis 2: perceived usefulness influences the attitude of employees.

Some studies show the influence of computer variable anxiety against perceived usefulness and acceptance. Computer anxiety defined as the tendency of an individual to be easy, or afraid to use computers. In line with that, Davis et. al [5] suggests that significant anxiety computer technology acceptance testing.

In some employees, the adoption of a new technology will provide a fear. This fear is influenced by the question of whether I can, whether I will not make mistakes, and whether this does not harm me. Anxiety is a top predictor of perceived usefulness and indicating that usefulness is intervening variables between anxieties with reception. Individual will favor technologies that can produce outcomes as expected.

Hypothesis 3: Anxiety influences the level of perceived usefulness of employees

Hypothesis 4: Anxiety influences the attitude of employees

Nelson [16] demonstrates empirical evidence that the acceptance of information systems depends on (1) the technology itself, and (2) the expertise or individual ability to use technology. Experience and computer training was found to have a negative relationship with the computer anxiety and positively associated with perceived usefulness.

The development of the ability to use the computer will cause changes to the employee's metaphor in viewing and interacting with the computer. This will shift the employees of the so-called user into end user computing. These two definitions include a range of different meanings. Users are limited to people who use computers only as users or people who need the software to finish the job.

Hypothesis 5: employee's expertise influences anxiety level of SIMBADA usage

Hypothesis 6: employee's expertise influences acceptance of SIMBADA

3. Research Methods

3.1 Population and Sample

The data were collected using questionnaires distributed to OPD in Situbodo district. The questionnaire was given to employees who are involved directly or indirectly in the implementation SIMBADA through snowball method.

The total questionnaires collected were 119 respondents, including unfilled questionnaires. From 119 questionnaires, female respondents were 9 people (7.5%) and men as many as 110 people (92.5%). Age of respondents ranged from 20 years to 45 years with an average age of 37.6 years. After the numbers of completed questionnaires were filled as many as 18 sets, so the questionnaire that can be used is 101.

4. Hypothesis Testing

Hypothesis testing is done by using structural equation modeling (SEM). The test results are shown in table 1.

Table 1: Hypothesis Testing Results

Variables	*Estimate*	*SE*	*CR*	*P*
Anxiety ←expertise	0.287	0.102	2.814	0.005
Acceptance ← expertise	0.528	0.108	4,871	0.000
Anxiety ←perceived usefulness	-0.652	0.101	6.483	0.000
Attitude ←anxiety	-1.268	0.077	16528	0.000
Attitude ←perceived usefulness	0.281	0.064	4.389	0.000
Acceptance ←attitude	0.485	0.059	8.164	0.000

Hypothesis 1 states that the attitude influences the acceptance of information systems implementation. Table 4 shows that the attitude affect the acceptance of the new system implementation on the significance of p = 0.00. This means that the first null hypothesis is rejected.

Hypothesis 2 states that the perceived usefulness influences attitude. Table 4 shows that the score of significance to influence the perception of perceived usefulness is p = 0.00. These results strengthen support for the rejection of the second null hypothesis.

Hypothesis 3 states that anxiety about SIMBADA influences the level of perceived usefulness. The data in Table 4 shows the level of anxiety affects the attitude at a significance level of p = 0.00. It can be concluded that the third null hypothesis was successfully rejected. Hypothesis 4 states that anxiety about SIMBADA influences attitude. Scores of significance of the test results showed p = 0.00. This means that the fourth null hypothesis is rejected.

Hypothesis 5 states that the skills of employees in information technology affect the level of anxiety of employees against the implementation of information systems. The test results in Table 1 show that the relationship is significant at p = 0.00. In other words, the fifth null hypothesis is rejected. Hypothesis 6 states that the skills of employees in information technology affect the acceptance of information systems. The test results show the score p = 0.00. It can be concluded that the sixth null hypothesis rejected.

5. Discussion

Six hypotheses tested were successfully supported at a 0.05 level of significance. This shows that the implementation of SIMBADA needs to consider certain factors. One's expertise (ability) plays an important role in the successful implementation of the new system. A person's expertise leads to confidence to engage.

The above test results show that the variables of expertise in information systems usage are exogenous variables that have a major contribution to the acceptance of an information system. Identified path pattern is user expertise affects the degree of anxiety, and then affects perceived usefulness, perceived usefulness influences attitudes, and attitudes affect the acceptance of information systems. Thereby understanding how the construct of user expertise is very important as it is the variable of the cause of other variables.

It can be concluded that factor expertise is important for the implementation process of SIMBADA in Situbondo District. Some factors that can be concluded is that for the implementation of information systems training needs to be held so that operators or users feel able to easily use it.

In the early stages of implementation carried out adequate mentoring so that users are not afraid to use and try. This step should not be done intensively if the training has succeeded in enabling users to use it proficiently.

6. Conclusions and Limitations

This study was conducted to examine the factors that affect the acceptance of information systems. The results indicate the presence of significant factors. A person's skill will increase one's acceptance of the new system. Similarly, the influence of attitude and perceived usefulness significant influence.

It can be concluded that factor expertise is important for the implementation information systems. Such convenience encourages a person to use it. Training needs to be held so that operators or users good feelings to use it.

Pattern relationship between variables depicted direct linear relationship. The phenomenon of moderation symptoms failed to be captured in this study. The relationship between long working variables and expertise is expected to be moderated by skill variables. Future research can be done by examining the effects of this moderation.

References

[1] Igbaria, Magid. “An examination of the factors contributing to microcomputer technology acceptance”. Accounting, Management, and Technology. Vol 4. No. 41994.
[2] Kustono, Alwan Sri, ‘Faktor-faktor yang mempengaruhi implementasi sistem akuntansi’. Media Akuntansi. Juni. 2000.
[3] Ndubisi, Nelson Oly., Dan Queenie Sinti. ‘Consumers Attitudes, System’s Characteristics And Internet Banking Adoption In Malaysia’, Management Research News, Vol. 29, No. 1/2, Pp. 16-27. 2006.
[4] Li, M., Ye, L.R. “Information Technology And Firm Performance: Linking With Environmental, Strategic And Managerial Contexts”, Information And Management , Vol. 35, N. 1: 43 - 51. 1999.
[5] Davis, F. D. ‘Perceived usefulness, perceived ease of use, and user acceptance of information technology’. MIS Quarterly, 13(3), 319–339. 1989
[6] Yusoff, Yusliza Mohd., Zikri Muhammad., Ermy Syaifuddin Pasah., Dan Emmaliana Robert, ‘Individual Differences, Perceived Ease Of Use, And Perceived Usefulness In The E-Library Usage’, Computer And Information Science, February, Vol. 2, No. 1, Pp. 76-83. 2009.
[7] Jogiyanto. Sistem Informasi Keperilakuan. Yogyakarta. Penerbit: Andi. 2007.
[8] Ratnaningrum, Luh Putu Rara Ayu. Aplikasi Model Tam Terhadap Pengguna Layanan Internet Banking Di Kota Denpasar. Tesis. Universitas Udayana. 2013.
[9] Menachemi, N., Burkhardt, J.;Schewchuk, R.; Burke, D.; Brooks, R.G. “Hospital Information Technology And Positive Financial Performance: A Different Approach To Finding Roi”, Journal Of Healthcare Management, Vol. 51, N. 1: 40-59. 2006:
[10] Huang, C.J.; Liu, C.J.): “Exploration For The Relationship Between Innovation, It And Performance”, Journal Of Intellectual Capital , Vol. 6, N. 2: 237 252 Http://Dx.Doi.Org/10.1108/14691930510592825. 2005.
[11] Ravichandran, T.; Lertwongsatien, C, “Effect Of Information Systems, Resources And Capabilities On Firm Performance: A Resource Based Perspective”, Journal Of Management Information Systems, Vol. 21: 237-276. 2005.
[12] Bharadwaj, A.S., “A Resource -Based Perspective On Information Technology Capability And Firm Performance: An Empirical Investigation”, Mis Quarterly , Vol. 24: 169 - 196. Http://Dx.Doi.Org/10.2307/3250983. 2000.
[13] Brynjolfsson, E.; Hitt, L, “Computing Productivity: Firm Level Evidence”, The Review Of Economics And Statistics , Vol. 85, N. 4: 793-808. Http://Dx.Doi.Org/10.1162/003465303772815736. 2003
[14] Venkatesh, V., & Davis, F. D., “A theoretical extension of the technology acceptance model: Four longitudinal filed studies”. Management Science, 46, 186–204. 2000
[15] Azjen, I. From intention to action: A theory of planned behavior. New York, Spring. 1995
[16] Adams, D. A., Nelson, R. R., and Todd, P. A, “Perceived Usefulness, Ease of Use, and Usage of Information Technology: A Replication”, MIS Quarterly, 16(2), 227-247. 1992