p-ISSN 2085-4277 | e-ISSN 2502-6224 http://journal.unnes.ac.id/nju/index.php/jda

Testing of Technology Acceptance Model on Core Banking System: A Perspective on Mandatory Use

Burhan Suryo Ambodo, Rudy Suryanto, Hafiez Sofyani⊠

Department of Accounting, Faculty of Economics, Universitas Muhammadiyah Yogyakarta, Indonesia Jl. Lingkar Selatan, Kasihan, Bantul, Yogyakarta 55183, Indonesia

DOI: http://dx.doi.org/10.15294/jda.v9i1.12006

Received: 8 October 2016. Revised: 23 December 2016. Accepted: 14 February 2017. Published: 31 March 2017

Abstract

This study aims to examine the acceptance of Core Banking System (CBS) which is mandatory use software. The objects of this research are teller, customer service, and back office Branch of Bank BPD DIY Wonosari. Data were measured using Likert scale in five range value. A number of 49 data were analyzed using Partial Least Square (PLS). The results showed that ease of use had no positive effect on symbolic adoption; attitudes toward usage and perceived conformance has a positive effect on symbolic adoption, ease of use and perceived compatibility has no effect on attitudes towards usage. Usability, satisfaction and compatibility that are felt to positively affect attitude toward usage. In the information technology model that is mandatory use, it is important to note the symbolic adoption of information technology therefore the performance of the user (employee/employee) can remain good. In particular for banking institutions that using CBS, it is important to improve the use of CBS, user satisfaction and CBS conformity with business processes, given the current banking business processes that are constantly expanding, there is no possibility of adjusting CBS to business processes at later.

Keywords: Perceived Ease of use; Perceived Usefulness; Satisfaction; Perceived Fit; Perceived Compatibility

How to cite (APA 6th Style)

Ambodo, B. S., Suryanto, R. & Sofyani, H. (2017). Testing of Technology Acceptance Model on Core Banking System: A Perspective on Mandatory Use. *Jurnal Dinamika Akuntansi*, 9(1), 11-22.

INTRODUCTION

The development of Information Technology (IT) which is so rapidly provides many conveniences on various aspects of business activities (Indriantoro, 2000). According to Hartono and Abdillah (2011) information technology has changed from the role of efficiency to a strategic role. The role can be seen from the role of IT as a key driver of the business transformation process that is important for the organization. Described by Indriantoro (2000) that the application of IT for the company has an important role and can be a centre of business strategy to gain competitive advantage, not least in the banking industry. The application of IT in the banking world has been realized with the emergence of Core Banking System (CBS).

CBS is a core system used by banks to serve all integrated banking transactions between the activities of transactions recording (front office) and transactions processing (back office) as well

Hafiez Sofyani (⊠) E-mail: hafiez.sofyani@gmail.com

as other management information system functions such as accounting, fund management, credit management, and so forth (Yasa, 2015). From here, it can be concluded that the core banking system is very vital owned by a bank because it also includes a centralized and integrated reporting and information system. The core banking system generally consists of several integrated functions or modules, including: credit module (loan), fund module (deposit), accounting module (general ledger), remittance module, and so on. The core banking system is also designed to be easily integrated with other applications such as consumer banking, corporate banking, treasury, risk management, etc.

According to Sekundera (2006) banks must make a measurement / analysis on the success of IT implementation to improve productivity, service quality and competition ability. Analysis on the end user acceptance is one form of examination that knows the direction of user behaviour whether to reject or accept. Venkatesh and Morris (2000) state that so far TAM (Technology Acceptance Model) is a concept that is best considered in explaining user behaviour on a new information technology system. Starting from Sekundera's suggestion (2006) hence this research will examine the acceptance of core banking system at the object of the Regional Development Bank (BPD) in the Special Region of Yogyakarta with TAM model. Research on TAM in the core banking system is still rare conducted in Indonesia, especially in banks with regional bank level, in this case BPD. Meanwhile, core banking can be said to be the backbone of the information technology (IT) infrastructure in the bank by storing transaction records of all customers as well as the processing transactions.

Mistake of input or abuse of the transaction will affect the quality of financial and nonfinancial information used for the benefit of internal or external bank. In addition, minor damage in the core banking system may cause the entire bank system is disturbed (crash) that will threaten the bank's reputation (Joharudin, 2013). Hartono and Abdillah (2011) explain that IT is applied together with humans as users, humans interact with IT will certainly cause problems of behaviour. Many systems fail to use because users do not behave according to the organization, whereas investing on the procurement of an IT is not cheap (Arifin & Pratolo, 2012; Putra & Alfian, 2015). CBS merupakan suatu sistem yang bersifat *mandatory* sehingga penggunanya tidak ada pilihan dalam penggunaannya ketika melaksanakan pekerjaan, sehingga keberterimaan sistem *mandatory* akan mempengaruhi banyak hal dalam suatu entitas. Permasalahan dalam penelitian ini adalah bagaimanakah keberterimaan CBS dalam lingkungan *mandatory* dilihat dari aspek TAM. CBS is a mandatory system so that its users have no choice in its use when carrying out the work, so that the acceptance of the mandatory system will affect many things in an entity. The problem in this research is how the acceptance of CBS in mandatory environment is seen from TAM aspect.

Both in overseas and in Indonesia for the purpose for examining the acceptance of an IT and for the purpose of the TAM model development itself. For example referring research conducted by Davis (1989), Doll and Torkzadeh (1998), Vijayasarathy (2004), Nah *et al.* (2004), Saadé and Bahli (2005), Govindaraju *et al.* (2006), Hendrawati (2013), Devi and Suartana (2014) and Dalimunthe and Wibisono (2014). Various studies have given different results so that researchers want to re-examine the acceptability of a system in the view of TAM in the environment that is mandatory. The difference between this research and previous research mentioned above that is in this research used benchmark of user acceptance developed by Nah *et al.* (2004). User acceptance model developed by Nah *et al.* (2004) is an extension of the Technology Acceptance Model (TAM) by adding perceived fit and perceived compatibility variables and replacing behavioural intention variable in TAM with symbolic adoption variable that are more perceived to explain behaviour in mandatory environments.

Furthermore, this research is done in a mandatory use environment or the user does not have the ability to resist using the system. To strengthen the level of acceptance in this study then added another external variable. In the mandatory environment, the intensity of the system use cannot be a benchmark, hence than done the addition of variable in the form of satisfaction because this variable felt able to strengthen the disclosure of user behaviour (Sekundera, 2006). This is reinforced by the opinion of Doll and Torkzadeh (1998) which explains that the satisfaction of the user (satisfaction) is one indicator of the successful of information system use.

This study aimed to determine the acceptability of the core banking system in a mandatory environment so this research is expected to be able to contribute in the study of the TAM theory, especially in IT context based on mandatory use. In practice, the result of this study can provide a practical insight about the acceptance of the core banking system run by BPD DIY. Specifically, the result of this research can benefit for the IT division to understand better behavioural aspect of the system users, so that it can be a suggestion in the preparation of policies related to the implementation of the core banking system, especially in the modification and development of this system in the future. Specifically this study aims to test 8 (eight) hypotheses proposed, namely: H₁: Perceived Ease of use system has a positive effect on symbolic adoption system;

H_a: Attitude toward use system has a positive effect on symbolic adoption of system use;

 H_{3} : Perceived compatibility system has a positive and significant effect on symbolic adoption system;

 H_4 : Perceived Ease of use system has a positive effect on symbolic adoption through attitude toward system use;

H₅: Perceived Usefulness system has a positive effect on attitude toward use system;

H₆: Satisfaction has a positive effect on attitude toward use system;

H₇: Perceived fit system has a positive effect on attitude toward use system;

 H_8 : Perceived compatibility system has a positive effect on symbolic adoption through attitude toward system use system

METHODS

In this research, the unit that becomes research object is the acceptance of core banking system at Bank BPD DIY Wonosari Branch on work unit of Teller Service, Customer Service, and Transaction Processing and Accounting. The sample of this study involves all employees who perform the activities of transaction recording (front-office) that is the work unit of Teller Service and Customer Service and transaction processing (back-office) is the work unit of Transaction Processing and Accounting. To be able to obtain the number of sufficient and fast sample then submission of the questionnaire is done by going directly to the respondent. The number of questionnaires which is back must have been in accordance with the recommended number of limits to be used for testing with the Partial Least Square (PLS) method, which ranges from 30 to 100 questionnaires (Ghozali, 2006). In this study used the model adopted and has been adapted to research of Technology Acceptance Model (TAM) conducted by Nah *et al.* (2004) in the environment of information system use which has mandatory use by adding satisfaction variable.

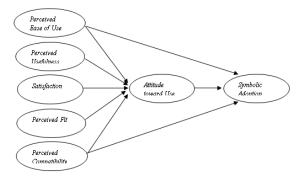


Figure 1. TAM Research Model Source: Nah *et al.*, 2004 Data searched by using questionnaire. The question of each variable has been validated from previous studies. Items for measuring satisfaction and variables in TAM which are developed (Nah *et al.*, 2004). The measurement of each variable uses a Likert scale of 1 to 5 where the number 1 means strongly disagree (STS), 2 means disagree (TS), 3 means uncertain (TP), 4 means agree (S), and 5 means strongly agree (SS). Operational of variable used is as follows:

Ease of use, ease of use is defined as a level of individual trust that by using technology will lead them free from physical and mental efforts (Gardner & Amoroso, 2004). So if the system is more easy to be used then mentally users will be encouraged to accept ideas / thought in adopting and implementing innovation.

Usefulness. According to Suhartini and Handayani (2009), Usefulness is a level in a person thinking that uses a system will improve his/her performance. So if the system users feel that the system can improve his/her performance indirectly will affect on the user mental to accept ideas / thought in adopting and implementing innovation.

Perceived Compatibility. Perceived compatibility as one's perception that the system used is consistent with the way of working that is desired/ liked, and working experience (Nah *et al.*, 2004). In theory, if the user perceives the system used in accordance with the wishes of the way they work then in a manner, the user will receive the system.

Perceived Fit. According to Nah *et al.* (2004) defines Perceived fit from the user's point of view, as one's perception that the system used is in accordance with the business process of the company. So if the user is increasingly understand that the use of the system accordance with their corporate business then mentally users will be encouraged to accept ideas / thought in adopting and implementing innovation.

Satisfaction. Satisfaction is how the system satisfies the user and the efficiency and effectiveness that the user perceives from the system. Logically the higher the level of the usability system then mentally the user will be encouraged to accept ideas / thought in adopting and implementing innovation (Sukendra, 2006).

Attitude Toward Use. Attitude Toward Use is conceptualized as an attitude towards the use of a system in the form of acceptance or rejection as a result of when a person uses a technology in his/her work (Davis, 1989). The indicator of this variable is the understanding that the use of the system is a good choice and the user's mental feels the system is supporting his work.

Symbolic adoption . Symbolic adoption is the motivation or inclination of a person mentally to accept ideas / thought in adopting and implementing IT innovations (Nah *et al.*, 2004). Indicator of this variable is user enthusiasm, user mental, and user desires.

This study used descriptive statistics analysis which was useful to give illustration or description about the construct of research variables which were: perceived ease of use, perceived usefulness, perceived compatibility, perceived fit, satisfaction, attitude toward use system, and symbolic adoption. This study used a frequency distribution table which showed the values of mean, standard deviation, minimum, and maximum (Ghozali, 2006).

Hypotheses test in this research was done by PLS (Partial Least Square) analysis tool. PLS (Partial Least Square) is a structural equation analysis of SEM (Structural Equation Modelling) based on variance that simultaneously could conduct measurement model testing (outer model) and structural model testing (inner model) .Outer model was used for validity and reliability test, while inner model was used for causality test (hypothesis testing with prediction model) (Hartono & Abdillah, 2009).

Path analysis model of all latent variables in PLS (Partial Least Square) consisted of: Data Validity Test. Convergent validity in PLS could be known by looking at 2 outputs: Indicator of the validity (outer loading), and AVE value (Ghozali, 2015). The measurement model with indicator reflection was assessed based on the correlation between the item score / component score. Individual reflexive size was said high if they correlated more than 0.70 with the construct wanted to be measured. The second validity method was discriminant validity used PLS could be known by looking at 2 outputs: Cross loading (compared the correlation between constructs)

and compared the correlation between constructs and AVE roots presented in Fornell-larcker criterium table. The measurement model with reflective indicator through the assessment based on cross loading in which the measurement was larger than the size of other constructs, then it showed that the latent constructs predicted the size better than the size on others blocks. Fornell-larcker criterium was measured based on diagonal / Higher AVE quadratic values compared to correlation values (Fornel & Lacker, 1981).

| Parameter | Rule of Thumb |
|----------------------------------|--|
| Loading factor | >0.70 for confirmatory research > 0.60 for Explatory Research |
| AVE value | >0.50 for each variable |
| Cross loading Fornell-larcker | >0.70 for each variable |
| | Loading factor AVE value Cross loading |

Table 1. Summary of Rule of Thumb of Measurement Model Evaluation

Data reliability test was done by looking at Composite reliability, was indicator block that measured a construct could be evaluated with two sizes of composite reliability and croncbachs alpha. This study used Composite Reliability which was often called Dillon Goldstein's to measure reliability. The use of Cronbanch's Alpha to examine construct reliability generated by PLS was slightly under-estimate so it was suggested to use Composite Reliability. Rules of thumb used to assess the reliability on the Composite Reliability or Dillon-Goldstein's table was the value of Composite reliability> 0.70 (Ghozali, 2015).

Table 2. Summary of Rule of Thumb of Measurement Model Evaluation

| | Parameter | Rule of Thumb |
|-------------|------------------------|---------------------------------|
| Reliability | Composite reliability | >0.70 for confirmatory research |
| | | > 0.60 for Explatory Research |
| Source: a | adopted from Chin,1998 | in Ghozali and Latan, 2015 |

Hypothesis testing in this study used Bootstrapping method. Structural model evaluation used R-Square for dependent construct and t test as well as significance and coefficient of structural path parameters. Structural model in smartPLS 3.0 was evaluated by using R^2 for the dependent construct, path coefficient value or t-value of each path for significance test between constructs in the structural model. The value of R^2 was used to measure the level of variation of the independent variable changes to the dependent variables. The higher the value of R^2 meant the better the prediction model of the research model proposed. Path coefficient value or inner model showed the level of significance in the hypothesis testing. As for score or value of T-statistic, it must be more than 1,96.

RESULTS AND DISCUSSION

This study was conducted at PT. Bank BPD DIY Wonosari Branch and sub-branch office. The respondents in this study were employees of PT. Bank BPD DIY which included front office, Back office and marketing. Data collection of this research used questioner which spread in period 21st January until 20th February 2016. This research used Bank BPD DIY Wonosari Branch as research object and employees of the Bank as its respondents. Data of questionnaires spread result and Demographics of the Respondents could be seen in Tables 3 and 4.

| Information | Total | Percentage |
|--|-------|------------|
| Total Questionnaires which was spreading | 70 | 100 % |
| Total returned | 53 | 76 % |
| Total not returned | 17 | 24 % |
| Total could not be processed | 4 | - |
| Total Questionnaires could be processed | 49 | - |

 Table 3. The Level of Questionnaires Return

The Result of Convergent Validity Test (Convergent Validity)

Convergent Validity related to the principle that the measures (manifest variables) of a construct which were supposed to be highly correlated. Convergent Validity Test of reflexive indicators of SmartPLS 3.0. The result of testing by using PLS (Partial Least Square) indicated that the indicator on the table 4.5 of Outer Loading showed the value of Outer Loading> 0.70. In Table 4.6 of Average Variance Extracted showed the value of Outer Loading> 0.50, so in this case all constructs could be said valid.

| Information | Total | Percentage |
|------------------------|-------|------------|
| Number of Sample | 49 | 100 % |
| Sex | | |
| Male | 29 | 60 % |
| Female | 20 | 40 % |
| | | |
| Age | | |
| 20-30 years | 25 | 51 % |
| 31-40 years | 21 | 42 % |
| 40-50 years | 3 | 7% |
| | | |
| Years of Service | | |
| Under 10 years | 42 | 85 % |
| 10-20 years | 4 | 8 % |
| 21-30 years | 3 | 7 % |
| 31-40 years | - | - |
| | | |
| Department of Work | | |
| Teller | 7 | 14~% |
| Customer service | 6 | 12 % |
| Transaction processing | 2 | 4 % |
| Accounting | 10 | 20 % |
| Credit | 13 | 27 % |
| Marketing | 6 | 12 % |
| Others | 5 | |

The Result of Discriminant Validity Test (Discriminant Validity) Discriminant validity related to the principle that the measures (variable manifestation) of

different construct should not be correlated high. The method to examine discriminant validity with reflexive indicators was by looking at the value of cross loading for each variable should be> 0.70 and compared the correlation between constructs with AVE roots presented in the Fornell-larcker criterium table. The result of test by using SmartPLS 3.0 showed that the existing indicators in Table 4 of Loading Factor showed the value of convergent validity> 0.70. The test also showed reflective indicator through an assessment based on cross loading in which a larger measurement would occur in the variable construct on the variable which it constructed, rather than the size of the other construct. In addition, the result of Fornell-larcker test (Table 5) showed if a diagonal/ AVE quadrate value was higher than the correlation values. The result of the test indicated that all latent constructs predicted the size better than the size of the other constructs predicted the size better than the size of the other constructs predicted the size better than the size of the other constructs predicted the size better than the size of the other constructs predicted the size better than the size of the other constructs predicted the size better than the size of the other constructs predicted the size better than the size of the other constructs predicted the size better than the size of the other constructs predicted the size better than the size of the other constructs (Fornel & Lacker, 1981).

| | Attitude | Ease of | Perceived | Perceived | Satis- | Symbolic | Useful- |
|---------------------------------|------------|---------|---------------|-----------|---------|----------|---------|
| | toward Use | Use | Compatibility | Fit | faction | Adoption | ness |
| Attitude toward Use | 0.826 | | | | | | |
| Ease of Use | 0.402 | 0.807 | | | | | |
| Perceived Compat- ibility | 0.408 | 0.253 | 0.775 | | | | |
| Perceived Fit | 0.398 | 0.093 | 0.420 | 0.759 | | | |
| Satisfaction | 0.264 | 0.108 | 0.036 | -0.200 | 0.802 | | |
| Symbolic Adoption | 0.674 | 0.426 | 0.630 | 0.346 | 0.059 | 0.882 | |
| Usefulness | 0.612 | 0.461 | 0.504 | 0.288 | 0.121 | 0.587 | 0.802 |

Table 5. Fornell-larcker

The Result of Reliability Test

Reliability test was conducted to examine the reliability of a construct. Reliability test was conducted to prove the accuracy, consistency, and exactness of the instrument in measuring the construct. To measure the reliability of a construct by using reflexive indicator program could be done in two ways that is by Cronbanch Alpha and Composite Reliability or often called Dillon -Goldstein. Nevertheless, the use of Cronbanch Alpha to examine the reliability of the construct would give a lower value (Ghozali, 2015). Therefore, this study used Composite Reliability to examine the reliability of data. From the test result, it indicated that the existing indicators in Table 4.9 of Composite Reliability had Composite Reliability value> 0.70 so in this case, the variables of ease of use, usefulness, satisfaction, perceived fit, perceived compatibility, attitude toward use, and symbolic adoption were reliable.

Structural Model Evaluation (Inner Model)

Structural model was evaluated by using R^2 for the dependent construct, t test, as well as the significance and coefficients of the structural path parameters. Test result of R^2 showed the value of 0.512 for Attitude Toward Use (Y2) and 0.622 for Symbolic Adoption (Y1). From the data, it could be concluded that ease of use (X1), usefulness (X2), satisfaction (X3), perceived fit (X4), perceived compatibility (X5) variables had an effect of 51.2% toward Attitude Toward Use (Y2) and the remaining 48.8% was affected by other variables outside this study. Furthermore, the effect of ease of use (X1), perceived compatibility (X5) variables to Symbolic Adoption (Y1) was 62,2% and the rest 37,8% affected by variable outside this study.

The Result of Hypothesis Test

In testing the hypothesis of this study used t test to find out whether independent variables individually had a significant impact on the dependent variable, as well as to prove which variable was the most dominant. The result of t statistical test could be seen in Table 6, which if the value of t-statistic was greater than 1.96 then Ha was accepted and H₀ was rejected. Whereas if the value of t-statistic was smaller than 1.96 then H₀ was accepted and Ha was rejected.

From the result of hypothesis 1test, it could be concluded that ease of use variable had no significant effect to symbolic adoption. The result of this study was in line with research conducted by Aditya (2013) which stated that there was no effect of ease of use on the acceptance of e-banking system. Another study that was also consistent with this study was Suhartini and Handayani's research (2009) which stated that perceived ease of use did not directly affect the acceptance (acc) of university information system in Surabaya. This study was in contrast to research conducted by Handayani (2013). However, this study was not in line with Nugroho (2012) who concluded that ease of use was an indication of ease experienced by users in studying individually how to operate technology or information system. So it could be said if the user felt that the system was easy then the system could be received symbolically. The rejection of this hypothesis indicated that the increase or decrease in the ease of the CBS system did not effect on the mental motivation in the idea or thought to reject or accept the CBS system.

According to Gefen and Straub (1997) in Hartono (2007) examined the effect of gender differences on system acceptance. The result of the study stated that women were more affected by ease of use and subjective norms while men tend to be affected by Perceived Usefulness. The opinion of Davis (1986) stated that a difficult system would remain be accepted by the end user if the system was felt still useful which meant the ease did not affect the acceptance. From the explanation, it was assumed that the rejection occurred because the comparison of the number of respondents between gender was not balanced. Thus, if it referred to the opinion of Davis (986) and saw the number of respondents in this study consisting of 29 men and 20 women, it could be the reason why ease of use was not so influential on symbolic acceptance. This result could also be seen as a reinforcement of the context of this study, in which system testing was conducted on a mandatory system. Thus, the users have no choice to continue using the system or not. Hypothesis 1 was not supported that was ease of use did not affect on the symbolic adoption, then the mediation effect of attitude toward use variable on the relationship of the two variables could not be done (Hartono & Abdillah, 2009).

| Hypothesis | Infor- mation | Direc- tion | Coef- ficient | T Stat. | Sig. | Conclu- sion |
|---|------------------|----------------|------------------|---------|--------|-------------------|
| Ease of Use -> Symbolic Adoption | H1 | + | 0.141 | 1.274 | 0.101 | Not Ac- cepted |
| Attitude toward Use -> Symbolic Adoption | H2 | + | 0.450 | 3.781 | 0.000* | Accepted |
| Compatibility -> Symbolic Adoption | H3 | + | 0.410 | 4.157 | 0.000* | Accepted |
| Ease of Use -> Attitude toward Use | H4 | + | 0.150 | 0.822 | 0.206 | Not Ac- cepted |
| Usefulness -> Attitude toward Use | H5 | + | 0.411 | 2.988 | 0.001* | Accepted |
| Satisfaction -> Attitude toward Use | H6 | + | 0.259 | 2.305 | 0.011* | Accepted |
| Perceived Fit -> Attitude toward Use | H7 | + | 0.307 | 2.420 | 0.008* | Accepted |
| Compatibility -> Attitude toward Use | H8 | + | 0.025 | 0.182 | 0.428 | Not Ac- cepted |

| Table | 6. | The | Result | of Hy | potheses | Test |
|-------|----|-----|--------|-------|----------|------|
|-------|----|-----|--------|-------|----------|------|

From the result of hypothesis 2 test, it was concluded that attitude toward use variable had a significant positive effect on symbolic adoption. The result of this study was in line with research conducted by Sulistriyarini (2013) which stated that attitude toward use had a direct effect on the acceptance. Attitude Toward Use was often called a user attitude that is conceptualized as an attitude in the form of acceptance or rejection as a result of a person using a technology in his/ her work (Davis, 1989). From the result of this study, Attitude Toward Use implied the attitude that using CBS for employees of Bank BPD DIY Wonosari branch was a good choice and support their works. Thus, it could be said that if the user accepted the attitude as a result of the use of CBS then there was a tendency for a person mentally to accept ideas / thought in adopting and implementing a system (Symbolic adoption).

The result of hypothesis 3 test indicated that variable of perceived compatibility had a significant positive effect on symbolic adoption. This was in line with the research conducted by Utomo (2013) which stated that there was a significant effect of compatibility on the acceptance of information system innovation. This study was in line with Govindaraju *et al.* (2006) who found that the acceptance of end user on ERP system implementation in the mandatory context was directly affected significantly by ERP compatibility which was perceived. Perceived Compatibility referred to the appropriateness of system innovation with existing values, user trust with ideas and needs before the introduction of the new innovations (Cho, 2006; Irfani, 2009). Compatibility in this study was implicated into several indicators such as the appearance and conformity of the system to other systems they used to use before. Therefore, if the user felt that the system was compatible with other systems they normally used or the system had a similar look with the user's wishes, then one's motivation or inclination mentally to accept ideas in adopting and implementing a system became larger.

The requirement to examine the effect of mediation on hypothesis 4 was the support for hypothesis 1 (Hartono & Abdillah, 2009). However, since in this research was not supported, the mediation effect of attitude toward use variable on the relationship between ease of use and symbolic adoption variable could not be conducted. The test conducted on hypothesis 4 was only an ease of use test as an antecedent of attitude toward use which further affected the symbolic adoption. The rejection that occurred in hypothesis 4 could be caused by the information system used by the bank BPD DIY Branch Wonosari was a technology designed for operational activities of Bank BPD DIY Wonosari branch especially in which there was no other suitable option/ alternative which could be run by BPD DIY.

The result of hypothesis 5 test stated that usefulness variable had a significant positive effect on attitude toward use. The result was in accordance with research conducted by Kharisma and Zaki (2014) which stated that usefulness had an effect on the attitude of information system users. Another research that supported was research conducted by Utamaningsih (2008) which stated that system usefulness through attitudes had an effect on the acceptance of an information system. The usefulness that the user believed could enhance his or her work performance encouraged the user psychologically to accept the use of IT in his/her work (Carlesto, 2006). This study implied that using the system was a good choice and supported their work. Then the usefulness perceived by the user would affect on one's motivation or tendency mentally to accept ideas in adopting and implementing a system became larger through user attitudes.

The result of hypothesis 6 test found that satisfaction variable had a significant positive effect on attitude toward use. This study was in accordance with the result of research conducted by Rahadi (2014), Pamugar and Winarno (2014) and Kustono (2011) who also found that satisfaction had a significant effect on user performance. It could be concluded that the higher one's satisfaction in using IT, his/her motivation or tendency mentally to accept ideas in adopting and implementing a system became larger.

The result of hypothesis 7 test showed that perceived fit variable had a significant positive effect on attitude toward use. The result of this research was in accordance with the research conducted by Nah *et al.* (2004). According to Nah *et al.* (2004) when an IT was in need by the

company in conducting the business activities and IT built was in accordance with the wishes of the users, then the attitude of the user would accept the implementation. While, the result of hypothesis 8 test stated that perceived compatibility variable did not have significant effect to attitude toward use. The result of this research was similar with the research conducted by Govindaraju *et al.* (2007) which stated that ERP compatibility directly affected symbolic system acceptance in mandatory environments but did not have a significant effect on attitude toward use as an intervening variable. According to Nah, *et al.* (2004) Perceived compatibility was defined as one's perception that the IT used was consistent with the way of working desired / liked and working experience.

The rejection which occurred in hypothesis 8 may be due to experience factors in the past and system conformity to previous values in the eyes of the user. It was necessary to know that the respondents (users) in this study 51% were employees aged 20-30 years with years of service under 10 years which working by using CBS in bank BPD DIY was their first experience. So far, it could be concluded that the respondents were not able to show their influence in a manner to accept IT, in this case CBS, because they have never used the same system before. The implication of this finding was that the recruitment process of new employees in BPD DIY particularly and other Banks generally, paid attention to the characteristics of prospective employees. Preferably those who had past experience about the CBS system include training in the study period, informal training and other training. The goal for the user (employee) could be used as a source of information about the compatibility of IT with the acceptance of IT, which would then relate to performance in work. Since H8 was not supported, the basic assumption of a mediation effect test on hypothesis 8 could not be done (Hartono and Abdillah, 2009) as well as the mediation effect on Hypothesis 4.

CONCLUSIONS

This research is conducted to find out the effect of ease of use, usefulness, satisfaction, perceived fit, perceived compatibility, and attitude toward use to direct symbolic adoption. In addition, the indirect effect of ease of use and compatibility through attitude toward use on the acceptance of Core Banking System (CBS) in BPD DIY Gunung Kidul uses Total Acceptance Model (TAM) approach. Based on the data collected a number of 49 data was processed using PLS (Patrial Least Square) resulted in the following conclusions: (1) Ease of use has no positive effect on symbolic adoption; (2) Attitude toward use has a positive effect on symbolic adoption; (3) Perceived compatibility has a positive effect on symbolic adoption; (4) Ease of use has no effect on attitude toward use; (5) Usefulness has a positive effect on attitude toward use; (6) Satisfaction has a positive effect on attitude toward use; (7) Perceived fit has a positive effect on attitude toward use; and (8) Perceived compatibility has no positive effect on attitude toward use.

The implication of the research result is in the IT model that is mandatory use, it is important to be noticed the symbolic adoption on IT so that the performance of the user (employee) can remain good or high. Symbolic adoption itself is influenced by attitude toward use system which in this research is influenced by usability (usefulness), user satisfaction (satisfaction) and conformity system with business process run (perceived fit). Therefore, in particular for banking institutions that use CBS, it is important to improve the use of CBS, user satisfaction and CBS conformity with business process, considering the current banking business process that is constantly expanding, it is possible to adjust CBS to business processes later.

This study has several limitations, among others: TAM model built and the variables included could be already too common studied by other researchers. Yet, the advantages of this research was done on Core Banking System Bank which is still rarely studied. Therefore, further research is expected to increase the antecedent variable or reduce the independent variables that affect on the symbolic acceptance, where the external variable can still affect among others, subjective norms, cognitive style, individual impact, and organizational impact. Secondly, this

research uses small sample because the research is only done in BPD DIY Gunung Kidul. Further research is expected to add more research samples to get a broader research condition description of the research object. Fourth, further research can use objects in a voluntary use environment or the user is given the freedom to reject the system implementation. Finally, this research is only conducted with survey model that may give rise to normative bias, so the further research should use other approaches, such as mixed research method in order to dig up more comprehensive research result (Sofyani and Akbar, 2013; 2015).

REFERENCES

- Arifin, J. F., & Pratolo, S. (2015). Pengaruh Kualitas Sistem Informasi Keuangan Daerah Terhadap Kepuasan Aparatur Pemerintah Daerah Menggunakan Model Delone dan Mclean. Jurnal Akuntansi Dan Investasi, 13(1), 28–34.
- Atalay, M., Anafarta, N., & Sarvan, F. (2013). The Relationship Between Innovation and Firm Performance: An Empirical Evidence from Turkish Automotive Supplier Industry. *Procedia-Social and Behavioral Sciences*, 75, 226–235.
- Charleston, M. A., & Perkins, S. L. (2006). Traversing The Tangle: Algorithms and Applications for Cophylogenetic Studies. *Journal of Biomedical Informatics*, 39(1), 62–71.
- Chauhan, S. (2015). Acceptance Of Mobile Money By Poor Citizens Of India: Integrating Trust Into The Technology Acceptance Model. *Info*, 17(3), 58–68.
- Dalimunthe, N., & Wibisono, H. (2014). Analisis Penerimaan Sistem E-Learning SMK Labor Pekanbaru dengan Menggunakan Techology Acceptance Model (TAM). Jurnal Sains Dan Teknologi Industri, 11(1), 111–117.
- Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, 319-340.
- Devi, N. L. N. S., & Suartana, I. W. (2014). Analisis Technology Acceptance Model (TAM) Terhadap Penggunaan Sistem Informasi di Nusa Dua Beach Hotel & Spa. *E-Jurnal Akuntansi*, 6(1), 167–184.
- Doll, W. J., & Torkzadeh, G. (1988). The Measurement of End-user Computing Satisfaction. *MIS Quarterly*, 259–274.
- Fagan, M., Kilmon, C., & Pandey, V. (2012). Exploring The Adoption Of A Virtual Reality Simulation: The Role Of Perceived Ease Of Use, Perceived Usefulness And Personal Innovativeness. *Campus-Wide Information Systems*, 29(2), 117–127.
- Gardner, C., & Amoroso, D. L. (2004). Development of an instrument to measure the acceptance of internet technology by consumers. In *System Sciences, 2004. Proceedings of the 37th Annual Hawaii International Conference on* (p. 10–pp). IEEE.
- Gefen, D., & Straub, D. W. (1997). Gender Differences in The Perception and Use of E-mail: An Extension to The Technology Acceptance Model. *MIS Quarterly*, 389–400.
- Ghozali, I. (2008). *Structural equation modeling: Metode alternatif dengan partial least square (pls)*. Semarang: Badan Penerbit Universitas Diponegoro.
- Ghozali, I., & Latan, H. (2015). Partial Least Squares, Konsep, Teknik dan Aplikasi Menggunakan Program Smartpls 3.0 untuk Penelitian Empiris. Semarang: Badan Penerbit UNDIP.
- Govindaraju, R., Indriany, N., & Bruijn, E. J. (2007). Studi Mengenai Penerimaan istem ERP: Enhancement Terhadap Model Penerimaan Sistem ERP Berbasis Technology Acceptance Model. In Proceedings of the 4th National Engineering Conference 2007, Industrial Engineering in a Competative and Borderless World (pp. 654–664).
- Hartono, J., & Abdillah, W. (2011). Sistem Tata kelola Teknologi Informasi. Yogyakarta: Andi Offset.
- Hendrawati, T. (2013). Analisis Penerimaan Sistem Informasi Integrated Library System (INLIS): Studi Kasus di Perpustakaan Nasional RI. Jakarta: Visi Pustaka.
- Indriantoro, N. (2000). Pengaruh Computer Anxiety Terhadap Keahlian Dosen Dalam Penggunaan Komputer. Jurnal Akuntansi Dan Auditing Indonesia, 4(2), 191–210.
- Johharudin. (2013). Media Baru Dan Industri Perbankan: Studi Kasus Tentang Pemanfaatan Media Baru Oleh Bank BPD DIY. Yogyakarta: Universitas Gajah Mada.
- Kesharwani, A., & Singh Bisht, 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.

- Kharisma, B. dan Z. (2014). Minat Keperilakuan Individu Menggunakan Sistem Online Shopping: Pendekatan Modifikasi Technology Acceptance Model dan Theory of Planned Behavior. *Kharisma, Betha Dan Zaki.*, 3(1), 34–47.
- Kustono, A. S. (2012). Pengaruh Keahlian Pengguna Terhadap Kinerja Sistem Informasi Dengan Variabel Intervening Partisipasi, Kecemasan, Kepuasan, Derajat Penerimaan, dan Ketidakpastian Kerja. *OPTIMAL: Jurnal Ilmiah Ekonomi Manajemen Dan Kewirausahaan*, 5(1), 34–48.
- Nah, F. F.-H., Tan, X., & Teh, S. H. (2004). An Empirical Investigation on End-users' Acceptance of Enterprise Systems. *Information Resources Management Journal (IRMJ)*, 17(3), 32–53.
- Nugroho, A. W., & Syafruddin, M. (2012). Model Tingkat Penerimaan Sistem Informasi Berbasis Online dengan Metode Integrasi TAM dan TPB, Studi Empiris pada SIMAWEB FEB UNDIP. Semarang: Fakultas Ekonomika dan Bisnis.
- Pamugar, H., Winarno, W. W., & Najib, W. (2014). Model Evaluasi Kesuksesan dan Penerimaan Sistem Informasi E-Learning pada Lembaga Diklat Pemerintah. *Scientific Journal of Informatics*, 1(1), 13– 27.
- Putra, W. M., & Alfian, M. (2016). Pengujian Kesuksesan Implementasi Sistem Informasi Akuntansi Lembaga Keuangan Mikro: Modified Delone Mcleon Model. Jurnal Akuntansi Dan Investasi, 17(1), 53–65.
- Rahadi, D. R. (2014). Pengukuran Usability Sistem Menggunakan Use Questionnaire pada Aplikasi Android. *Jurnal Sistem Informasi*, 6(1).
- Rajapathirana, R. P. J., & Hui, Y. (2017). Relationship Between Innovation Capability, Innovation Type, and Firm Performance. *Journal of Innovation & Knowledge*, *16*(2), 345–459.
- Saadé, R., & Bahli, B. (2005). The Impact of Cognitive Absorption on Perceived Usefulness and Perceived Ease of Use in On-Line Learning: an Extension of the Technology Acceptance Model. *Information & Management*, 42(2), 317–327.
- Sekundera, P. L. (2006). Analisis Penerimaan Pengguna Akhir dengan Menggunakan Technology Acceptance Model dan End User Computing Satisfaction terhadap Penerapan Sistem Core Banking pada Bank ABC. Semarang: Program Pascasarjana Universitas Diponegoro.
- Sheng, X., & Zolfagharian, M. (2014). Consumer Participation In Online Product Recommendation Services: Augmenting The Technology Acceptance Model. *Journal of Services Marketing*, 28(6), 460–470.
- Sofyani, H., & Akbar, R. (2013). Hubungan Faktor Internal Institusi dan Implementasi Sistem Akuntabilitas Kinerja Instansi Pemerintah (SAKIP) di Pemerintah Daerah. *Jurnal Akuntansi Dan Keuangan Indonesia*, 10(2), 184–205.
- Sofyani, H., & Akbar, R. (2016). Hubungan Karakteristik Pegawai Pemerintah Daerah dan Implementasi Sistem Pengukuran Kinerja: Perspektif Ismorfisma Institusional. Jurnal Akuntansi dan Auditing Indonesia, 19(2), 153–173.
- Suhartini, D. & Handayani, W. (2009). *Model Penerimaan Teknologi Informasi oleh Dosen Pada Perguruan Tinggi Di Surabaya*. Surabaya: University of Pembangunan Nasional Veteran
- Sulistriyarini, S. (2013). Pengaruh Minat Individu Terhadap Penggunaan Mobile Banking: Model Kombinasi Technology Acceptance Model (TAM) Dan Theory Of Planned Behavior (TPB). *Jurnal Ilmiah Mahasiswa FEB*, 1(2).
- Tong, X. (2010). A Cross-National Investigation Of An Extended Technology Acceptance Model In The Online Shopping Context. International Journal of Retail & Distribution Management, 38(10), 742– 759.
- Utaminingsih, W. (2008). Analisis Penerimaan Teknologi Informasi Di Pt. MRA Dengan Menggunakan Technology Acceptance Model (Tam). Jakarta: Universitas Gunadarma
- Utomo, A. (2013). Analisis Factor Penentu Yang Memoengaruhi Minat Kaum Muda Untuk Mengadopsi layanan Mobile Banking. *Jurnal Sistem Informasi*, 6(1)
- Venkatesh, V., & Morris, M. G. (2000). Why Don't Men Ever Stop to Ask for Directions? Gender, Social Influence, and Their Role in Technology Acceptance and Usage Behavior. *MIS Quarterly*, 24(1), 115.
- Vijayasarathy, L. R. (2004). Predicting Consumer Intentions to Use On-Line Shopping: The Case for an Augmented Technology Acceptance Model. *Information & Management*, 41(6), 747–762.
- Yasa, A. A. I. (2015). Faktor-Faktor yang Mempengaruhi Kepuasan Pengguna Core Banking System di Bank BPD Bali. *Jurnal Manajemen Dan Bisnis*, 12(1), 87–98.