Measurement of Accounting Information Systems by Adopting Delone & Mclean Models on SMEs in Badung Regency

Ni Komang Ayu Inda Rumesa¹, Dodik Ariyanto²

^{1,2} Udayana University

^{1,2} Faculty of Economics and Bussiness, Bali, Indonesia

Abstract: The success of an accounting information system used by SMEs is very important to note. There is a phenomenon of SMEs that have not yet benefited cleanly from the accounting information system after using it. Net benefits are the result of using information systems that contribute to individuals, groups and organizations. This study aims to measure the success of accounting information systems using the Delone & McLean (2003) model. The study was conducted at SMEs in Badung regency. This study took a sample using the nonprobability sampling method with accidental sampling technique. The technical analysis used is multiple linear regression analysis.

The analysis found that there was a significant influence between the Information Quality on system use and user satisfaction, service quality on system use and user satisfaction, and system usage and user satisfaction on net benefits. Thus the success rate of the accounting information system used by the Badung Regency SMEs has been classified as successful.

Keywords: System quality, information quality, service quality, system use, user satisfaction, net benefits.

I. INTRODUCTION

The accounting information system has now entered the Industrial Revolution Era 4.0 along with the launch of the "making accounting information system 4.0" Roadmap which was officially delivered by the Ministry of Industry with one of these cross-sectoral systemic accounting information, namely national digital infrastructure development. The Minister of Research and Technology of the Republic of Indonesia, Mohamad Nasir applies the accounting information system to the steps of the Badung Regent who has made an innovation to form a Research and Development Agency. This Research and Development Agency has made Badung Regency grow big based on technology and innovation (badungkab.go.id).

Badung Regency conducts various digital-based public services in order to realize Badung Smart City and Smart Society. The industry in Badung Regency must have an accounting information system to face the moment which is closely related to the digital era (badungkab.go.id). One key thing that must always be improved by every industry is the ability of data management that is safe and precise, in accordance with applicable regulations. To increase this capability, an accounting information system is needed to support the development of data management. Accounting information system is a system that collects, records, stores, and processes data to produce information for decision makers (Marshall B. Romney & Steinbart, 2003).

Small medium enterprises in general still apply simple accounting without seeing good and correct accounting standards. Mohan-Neill (2009), states that small companies still tend to be less sophisticated in financial accounting information systems. Problems will arise if the application of accounting is not done properly and correctly, especially if there is indeed no application of accounting at all. SMEs can develop and pay special attention to information technology as a source that facilitates the effective collection and use of information. One form of this attention is the use of Accounting

Vol. 7, Issue 2, pp: (1359-1371), Month: October 2019 - March 2020, Available at: www.researchpublish.com

Information Systems that were still manually then used to switch to using computers (accounting software) to facilitate the flow of company information. The ability of SMEs needs to be empowered and developed continuously by trying to reduce the obstacles experienced by SMEs, so as to be able to make a maximum contribution to improving the welfare of society (Sutaryo, 2017). The development / growth of SMEs in Badung Regency shows results that continue to increase from year to year as shown in table 1 below.

| Sub-district | 2016 | 2017 | 2018 |
|--------------|--------|--------|--------|
| Abiansemal | 7,131 | 7,219 | 7,511 |
| Mengwi | 2,096 | 2,386 | 2,782 |
| Kuta Utara | 1,345 | 1,498 | 1,969 |
| Kuta | 4,830 | 4,916 | 5,365 |
| Kuta Selatan | 424 | 496 | 739 |
| Petang | 423 | 433 | 472 |
| Total | 16,249 | 16,948 | 18,838 |

TABLE 1: THE LIST OF BADUNG REGENCY SMEs in 2016 - 2018

Source : Department of Cooperatives, SMEs, & Trade Badung Regency

According to Constitution Number 20 of 2008, Small Medium Enterprises has its own way of classifying businesses. This law divides the types of businesses in terms of net worth and turnover for a year. Criteria for Micro Businesses are those who have a net asset of no more than Rp 50,000,000 (fifty million rupiahs) excluding land and buildings where they operate; or have a maximum annual sales proceeds of IDR 300,000,000.00 (three hundred million rupiah). Small Business Criteria are those who have a net worth of more than Rp.50,000,000.00 (fifty million rupiah) up to a maximum of Rp500,000,000.00 (five hundred million rupiah) excluding land and buildings for business premises; or has annual sales results of more than Rp.300,000,000.00 (three hundred million rupiah) up to a maximum of Rp2,500,000,000.00 (two billion five hundred million rupiah). Criteria for Medium Enterprises are those who have a net asset of more than Rp.500,000,000.00 (the bundred million rupiah) up to a maximum of Rp10,000,000.00 (two billion rupiah) excluding land and buildings for business premises; or have annual sales results of more than Rp.500,000,000.00 (two billion rupiah) up to a maximum of Rp10,000,000.00 (two billion rupiah) excluding land and buildings for business premises; or have annual sales results of more than Rp.500,000,000.00 (two billion rupiah) up to a maximum of Rp10,000,000.00 (two billion rupiah) excluding land and buildings for business premises; or have annual sales results of more than Rp2,500,000,000.00 (two billion five hundred million rupiah) up to a maximum of Rp10,000,000.00 (two billion five hundred million rupiah) up to a maximum of Rp10,000,000.00 (two billion five hundred million rupiah) up to a maximum of Rp10,000,000.00 (two billion five hundred million rupiah) up to a maximum of Rp50,000,000.00 (fifty billion rupiah).

The Government has tried to establish a regulation that requires Small Medium Enterprises (SMEs) to do accounting or accounting records in their business as stipulated in the Government Regulation of the Republic of Indonesia accounting information system Number 17 of 2013 concerning the Implementation of Constitution Number 20 of 2008 concerning Small Medium Enterprises (SMEs). Article 48 states that guidance and supervision of SMES that have obtained business licenses is carried out by officials on a regular and continuous basis in accordance with their authority. Furthermore, it is emphasized in article 49 that in the framework of guidance and supervision as referred to in article 48, the holder of a business license must compile a bookkeeping of business activities. Although the rules and records of accounting are clear, there are still many business people who are reluctant to do records or bookkeeping in their business activities. Pinasti (2007) revealed that small entrepreneurs in the Indonesian accounting information system do not organize and use information in managing their businesses.

Accounting information has an important influence on achieving business success, including small businesses (Utomo, 2010). Several studies have shown that, many SMEs have slowly begun to embrace the use of information systems (World Bank, 2015). There are still many challenges faced by SMEs in using the system (Wanjau et al., 2012). A similar situation was noted by Duncombe (2009) in a study of SMEs in sub-Saharan Africa, which revealed that many of these SMEs use IS that did not meet their needs.

According to Sitoresmi (2013), states that one of the information systems that is needed is the accounting information system. Therefore the application of an effective accounting information system in a company will provide net benefits for the company and management in running their business. Net benefits are the result of using information systems that contribute to individuals, groups, and organizations (DeLone and McLean, 2003). Net benefits are the most important calculation measure in the Information System Success model because it shows the positive impact received by individuals or organizations. The high benefits obtained result in users returning to using the system and users get satisfaction from using the system. A success model of accounting information systems is said to be successful if the users of the system want to use the system and also provide user satisfaction as a function of the system.

Vol. 7, Issue 2, pp: (1359-1371), Month: October 2019 - March 2020, Available at: www.researchpublish.com

One model of measuring the success of information systems that is often used is the information system (IS) success measurement that was introduced by DeLone & McLean (1992) and was developed in 2003. The IS success model uses six variables namely, system quality, information quality, service quality service quality), use, user satisfaction and net benefits. Users feel how a system provides facilities that affect the System Use . Information quality is output in the form of information produced by the information system used (Istianingsih, & Wijayanto, 2008). DeLone & McLean (1992) explains that the higher the Information Quality produced by an information system, the more it increases user satisfaction. Azhar Susanto (2013) states that the concept of service quality meets expectations if the expected service is the same as perceived meaning it is satisfying to users of the Service Qualitys provided by information system providers.

Various empirical studies have been carried out for the validity and reliability of the IS Success model. Research conducted by Hudin & Riana (2016) concluded that information quality and service quality had no significant effect on use. The System Quality affects the use. The System Quality, the Information Quality and the quality of use significantly influence user satisfaction. Usage and user satisfaction have a significant effect on net benefits. The success of every IS that has been adopted by an organization is very dependent on the quality of IS (Gable et al., 2008). To make a profitable benefit from IS investment, the use of IS quality is paramount (Gable et al., 2008). Based on research by Of et al., (2012) explains that, by only adopting IS, SMEs are not guaranteed to benefit from the system. Only through the use of good quality IS, can these benefits be realized. Without good quality IS, this benefit will always remain an elusive goal for these SMEs as it is today. IS success model DeLone and McLean (2003) are used in this study, IS quality affects user acceptance. That is, high quality IS will be associated with high user acceptance, and high levels of satisfaction. Therefore, quality remains an important factor in the success of information systems.

II. CONCEPTUAL MODEL AND HYPOTESIS DEVELOPMENT

The Effect of System Quality on the Use of Accounting Information Systems

System quality means the quality of the combination of hardware and software in an information system (DeLone and McLean, 1992). The higher the System Quality, the higher the use of accounting information systems. So the system is said to be successful if, the System Quality produced by the system can provide useful information and can increase the use of information systems. The results of the study by Tan, et al (2015) provide empirical evidence that the System Quality will significantly influence the System Use . This is in line with research conducted by Wahyuni (2011), Budiyanto (2009), and Sumiyanan and Personal (2010). Based on the description, the formulation of the hypothesis proposed in this study is:

H₁: System Quality has a positive and significant effect on the use of accounting information systems.

The Effect of Information Quality on the Use of Accounting Information Systems

Quality information that is complete, relevant, accurate, timely and has a good presentation of information, will increase user confidence in the system. The higher the Information Quality , the higher the use of accounting information systems. So the system is said to be successful if, the Information Quality is able to produce information needed by users for decision making which is expected to increase the usefulness of information systems. Research conducted by Sumiyana & Pribadi (2010) found that information quality significantly and positively influences the tax consultant's willingness to use the tax information system as a source of information. This means, the more quality information produced by the information system, the more users will increase the System Use . The results of this study are supported by research conducted by Putrawan et al., (2017), Eka & Yasa (2017), and Wahyuni (2011) who also found that information quality has a significant use. Based on the description, the formulation of the hypothesis proposed in this study is:

H₂: The Information Quality has a positive and significant effect on the use of accounting information systems.

The Effect of Service Quality on the Use of Accounting Information Systems

Service quality focuses on meeting the needs and desires of users of information systems. The higher the Service Quality, the higher the use of accounting information systems. So that the system is said to be successful if, service quality can provide response and fulfillment of needs for users in the event of problems with the information system, which will increase the use of information systems. Rimawati (2012) in her research that examined the successful implementation of

Vol. 7, Issue 2, pp: (1359-1371), Month: October 2019 - March 2020, Available at: www.researchpublish.com

electrononic government found that the Service Qualitys owned by a system influences the System Use positively and significantly. This research is supported by research conducted by Sumiyana and Personal (2010). Based on the description, the formulation of the hypothesis proposed in this study is:

H₃: Service quality has a positive and significant effect on the use of accounting information systems.

The Effect of System Quality on Accounting Information System User satisfaction

Iivari (2005) states the System Quality as a characteristic of the desired system characteristics of the information system itself. DeLone & McLeann (1992) also stated that the higher the System Quality felt by users, the more satisfied the users were with the System Quality. Swandewi (2017) states that the System Quality has a positive effect on user satisfaction of the accounting information system. The results of this study are also supported by research conducted by Putrawan et al., (2017) also get the same results where that the quality of the information system has a positive effect on user satisfaction Accounting Information Systems. Based on the description, the formulation of the hypothesis proposed in this study is:

H_4 : The Information Quality systems has a positive and significant effect on user satisfaction of accounting information systems.

The Effect of Information Quality on Accounting Information System User satisfaction

Based on the DeLone & McLean Information System Success Model (2003), information quality is used as a measure to measure user satisfaction. Information quality is the quality of output in the form of information produced by the information system used (Rai et al., 2002). Radityo & Zulaikha's research (2007) provides an affirmation that the Information Quality shows the output of information systems that is related to the value, benefits, and relevance of information systems generated for system users. DeLone & McLean (1992; 2003) states the higher the Information Quality perceived by the user, the more satisfied the information produced by the system. Research by Swandewi (2017) and Putrawan et al., (2017) and Purwaningsih (2010) prove that information quality has a positive effect on information system user satisfaction. Based on the description, the formulation of the hypothesis proposed in this study is:

H₅: Information quality has a positive and significant effect on user satisfaction of accounting information systems.

The Effect of Service Quality on Accounting Information System User satisfaction

Service quality is the user's perception of the services provided by the accounting application program provider. If the information system users feel that the quality of the services provided is good, then they will tend to feel satisfied and still want to use the system. According to Septianita et al., (2014) the higher the Service Qualitys provided will affect the high level of user satisfaction. Research Efendy (2013) and Wahyuni (2011) produced a significant positive relationship between service quality on user satisfaction. Based on the description, the formulation of the hypothesis proposed in this study is:

H₆: Service quality has a positive and significant effect on user satisfaction accounting information system.

The Effect of System Use on Net Benefits of Accounting Information Systems

The use of accounting information systems refers to how often users use information systems. The higher the use of accounting information systems, the higher the net benefits. So the system is said to be successful if the use of accounting information systems can meet the needs and the system runs well. The reciprocity of benefits provided by users of information systems. This is in line with research Hudin & Riana (2016), which states that the use of the effect on net benefits. Based on the description, the formulation of the hypothesis proposed in this study is:

H₇: The System Use has a positive and significant effect on the net benefits of the accounting information system

The Effect of User satisfaction on Net Benefits of Accounting Information Systems

DeLone and McLean (1992) define user system frustration as the response and feedback that the user raises after using the information system. The higher the user satisfaction of the accounting information system, the higher the net benefit. So the system is said to be successful if the system used provides a sense of satisfaction and rapid response to users of information systems. The reciprocity given by users of information systems who are satisfied using the system. This is in line with research Hudin and Riana (2016), which states that User satisfaction affects the Net Benefit. Based on the description, the formulation of the hypothesis proposed in this study is:

H₈: User satisfaction has a positive and significant effect on the net benefit of accounting information systems.



Figure 1: Conceptual Model

III. RESEARCH METHODOLOGY

This research is a quantitative research in the form of an accounting information system. This research was conducted by SMEs engaged in various fields, both trading companies and service companies, which are located in the Badung Regency. The location was chosen because there are many SMEs that have succeeded in their business by using the right information system. The population in this study is the accounting information system for SMEs in Badung Regency. The population in this study is unknown, because there is no relevant and accurate data that provides information about the number of accounting information system users in SMEs in Badung Regency.

Sampling in this study uses nonprobability sampling method with accidental sampling technique. The sampling technique in accordance with the facts that appear appears, and the sample chosen in accordance with the provisions or sample samples of certain samples that are most easily obtained or obtained. The sample was chosen from SMEs who already have a Taxpayer ID, because it is felt that SMEs who already have a Taxpayer ID are included in the taxpayer base who require very assistance from the accounting information system. The reason researchers use this sampling technique is that researchers will only examine and retrieve data based respondents who use accounting information systems in their businesses, so that using the sampling techniques proposed also will not be related to the number of users of accounting information systems in SMEs in Badung Regency.

The number of samples in this study were at least 96 respondents. The number of questions is 120, with the hope of meeting the minimum number of sample requirements. Data collection methods used in this study were interviews and questionnaires. Data analysis technique used in this study is multiple linear regression test. A total of 120 questionnaires were distributed but 96 questionnaires were requested. The remaining 24 copies of the Questionnaire did not return until the specified deadline had not been filled due to the busy owner or employee of the SMEs. Obtained from these data produces a response rate of 80% with a response rate that can be used at 100%.

IV. RESEARCH FINDING AND DISCUSSION

The characteristics of the respondents in this study were profiles of 96 respondents who participated in filling out the questionnaire. The profile of the respondents contained in the questionnaire consisted of four aspects, namely: gender, age, education, and posisition. The description of the characteristics of respondents can be seen in Table 2:

| Characteristic | Classification | Respondent | (%) |
|----------------|--------------------|------------|--------|
| | Male | 58 | 60,4% |
| Gender | Female | 38 | 39,6% |
| | Total | 96 | 100 |
| | <26 years | 28 | 29,16% |
| | 26-35 years | 30 | 31,25% |
| Age | 36-45 years | 27 | 28,12% |
| | >45 years | 11 | 11,47% |
| | Total | 96 | 100 |
| Education | Senior High School | 23 | 23,96% |
| Education | Diploma III | 29 | 30,2% |

TABLE 2: CHARACTERISTICS OF RESPONDENT

| | Bachelor | 43 | 44,8% | |
|------------|------------|----|--------|--|
| | Magister | 1 | 1,04% | |
| | Total | 96 | 100 | |
| | Owner | 42 | 43,75% | |
| | Accountans | 29 | 30,21% | |
| Posisition | Cashier | 24 | 25% | |
| | Supervisor | 1 | 1,04% | |
| | Total | 96 | 100 | |

Source: Primary data processed, 2019

This research includes gender, age, education, and position which will be described as follows:

1) Information on gender shows the proportion of male and female respondents. Based on Table 2, it can be seen that the majority of respondents who participated were male, as many as 58 people or 60.4% of the total number of respondents.

2) Information about the age of the respondent can be used as a reference for decision making ability because of the maturity of the respondents' mindset. From Table 2, it can be seen that the majority of respondents who participated were accounting information systems 26-35 years, namely 30 people or 31.25% of the total number of respondents.

3) Information about education is used to find out the proportion of the last education that the respondent had. Based on Table 4.2, it can be seen that the majority of the last education possessed by respondents is S1, as many as 43 people or 44.8% of the total number of respondents.

4) Information about the position is used to determine the proportion of the use of accounting information systems in their work needs. Based on Table 2, it can be seen that the majority of respondents have a position as the owner of 42 people or 43.75% of the total number of respondents.

The results of the validity test show that all instruments of this study are valid and appropriate to be used as research instruments. Reliability test results show that all research instruments have Cronbach's Alpha coefficients of more than 0.60. So it can be stated that all variables have met the requirements of reliability or reliability so that they can be used to conduct research.

Multiple Linear Regression Analysis

After all the classical assumptions have been fulfilled, the next step presents the results of the multiple linear regression analysis. Calculation of multiple linear regression coefficients is done by regression analysis through SPSS software.

| Variable | Use stars dantis ad Data | Std. | t | Sig. t |
|---------------------|--------------------------|-------|-----------|--------|
| variable | Unstandartized Beta | Error | Statistic | - |
| Constant | -0,070 | 0,438 | -160 | 0,874 |
| System Quality | 0,178 | 0,095 | 1,878 | 0,063 |
| Information Quality | 0,300 | 0,114 | 2.628 | 0,010 |
| Service Quality | 0,530 | 0,117 | 4.546 | 0,000 |
| Adjusted R Square | 0,363 | | | |
| Sig. f | 0,000 | | | |

TABLE 3: THE RESULT OF MULTIPLE LINEAR REGRESSION ANALYSIS STRUCTURE 1

Source: Primary data processed, 2019

Based on the results of multiple linear regression analysis 1 as presented in Table 3, the regression equation can be formulated as follows.

 $Y = -0,070 + 0,178 X_1 + 0,300 X_2 + 0,530 X_3 + \varepsilon \dots (1)$

Information :

1) The coefficient value of $\beta 1$ is 0.178. This means that if the System Quality increases, then the use of the system will increase.

2) The coefficient value of $\beta 2$ is 0.300. This means that if the Information Quality increases, the use of the system will increase.

Vol. 7, Issue 2, pp: (1359-1371), Month: October 2019 - March 2020, Available at: www.researchpublish.com

3) The coefficient value of β 3 is 0.530. This means that if the Service Quality increases, the use of the system will increase.

Model Feasibility Test (F Test)

Based on the results of the regression analysis in Table 3, it shows a significance value of 0,000. This value is smaller than 0.05. Thus it can be concluded that the regression model 1 in this study could be researched.

Adjusted R²

Based on Table 3, it can be seen the Adjusted R^2 value of 0.363, this means that 36.3% of the variation in system use is influenced by the System Quality, information quality and service quality. The remaining 63.7% is influenced by other factors outside the model.

| Variable | Unstandarlized Beta | Std. Error | t Statistic | Sig. t |
|---------------------|---------------------|---------------|----------------|--------|
| Constant | 0,223 | 0,440 | 0,506 | 0,614 |
| System Quality | 0,147 | 0,095 | 1,544 | 0,126 |
| Information Quality | 0,375 | 0,115 | 3,273 | 0,001 |
| Service Quality | 0,417 | 0,117 | 3,553 | 0,001 |
| Adjusted R Square | 0,325 | | | |
| Sig. F | 0,000 | | | |

TABLE 4: THE RESULT OF MULTIPLE LINEAR REGRESSION ANALYSIS STRUCTURE 2

Source: Primary data processed, 2019

Based on the results of multiple linear regression analysis 2 as presented in Table 4, the regression equation can be formulated as follows.

 $Y = 0,223 + 0,147 X_1 + 0,375 X_2 + 0,417 X_3 + \varepsilon$ (2)

1) Information :The coefficient value of $\beta 1$ is 0.147. This means that if the System Quality increases, then user satisfaction will increase.

2) The coefficient value of $\beta 2$ is 0.375. This means that if the Information Quality increases, then user satisfaction will increase.

3) The coefficient value of β 3 is 0.417. This means that if the Service Quality increases, then user satisfaction will increase.

Model Feasibility Test (F Test)

Based on the results of the regression analysis in Table 4, it shows a significance value of 0,000. This value is smaller than 0.05. Thus it can be concluded that the regression model 2 in this study could be researched.

Adjusted R^2

Based on Table 4, it can be seen the Adjusted R2 value of 0.325, this means that 32.5% of variations in user satisfaction are influenced by the System Quality, the Information Quality and the Service Quality. The remaining 67.5% is influenced by other factors outside the model.

| Variable | Unstandarlized Beta | Std. Error | t Statistic | Sig. t |
|-------------------|---------------------|---------------|----------------|--------|
| Constant | 1.186 | 0,204 | 5.809 | 0,000 |
| System Usage | 0,347 | 0,076 | 4.580 | 0,000 |
| User Satisfaction | 0,303 | 0,177 | 3.915 | 0,000 |
| Adjusted R square | 0,514 | | | |
| Sig. F | 0,000 | | | |

TABLE 5: THE RESULT OF MULTIPLE LINEAR REGRESSION ANALYSIS STRUCTURE 3

Source: Primary data processed, 2019

Vol. 7, Issue 2, pp: (1359-1371), Month: October 2019 - March 2020, Available at: www.researchpublish.com

Based on the results of multiple linear regression analysis 3 as presented in Table 5, the regression equation can be formulated as follows.

 $Y_3 = 1.186 + 0.347 Y_1 + 0.303 Y_2 + \varepsilon$ (3)

Information :

1) The coefficient value of $\beta 1$ is 0.347. This means that if the use of the system increases, the net benefits will increase.

2) The coefficient value of $\beta 2$ is 0.303. This means that if user satisfaction increases, the net benefits will increase.

Model Feasibility Test (F Test)

Based on the results of the regression analysis in Table 5, it shows a significance value of 0,000. This value is smaller than 0.05. Thus it can be concluded that the regression model 3 in this study could be researched.

Adjusted R²

Based on Table 5, it can be seen the Adjusted R^2 value of 0.514, this means that 51.4% of the net benefit variation is influenced by the use of the system and user satisfaction. The remaining 48.6% is influenced by other factors outside the model.

V. DISCUSSION

The Effect of System Quality on System Use

The first hypothesis in this study states that the System Quality has a positive and not significant effect on the use of accounting information systems at SMEs in Badung Regency. The results of tests conducted using multiple linear regression are in line with the hypothesis that has been formulated previously, namely the System Quality has a positive effect on system use. The results of the analysis obtained a significance value of t of 0.063. This value is greater than 0.05. This finding states that the first hypothesis in this study was rejected. The results of this study are also proven to be in line with previous studies from Eka & Yasa (2017) Putrawan et al., (2017) Arifin and Pratolo (2012), Susanty (2013), and McGill et al. (2003). The research found that the System Quality owned by an information system, did not affect the use of information systems. According to DeLone and McLean (2013) The focus is the performance of the system, which refers to how well the hardware, software, policy, and procedure capabilities of the information system can provide information to the needs of users.

The System Quality did not affect the use of the system in accordance with the results of the questionnaire answers which found that the performance of the system is still not stable. Proven these indicators have the lowest value compared to other indicators. Respondents felt the system still often experienced problems when using accounting information systems. The accounting information system used also often suffers from some damage to the hardware or software. This is caused by system users only using the system as work routines. The intensity of the use of the system is not because the System Quality is good.

The Effect of Information Quality on System Use

The second hypothesis in this study states that the Information Quality has a positive and significant effect on the use of accounting information systems at SMES in Badung Regency. The results of tests conducted using multiple linear regression are in line with the hypothesis that has been formulated previously, namely the System Quality has a positive effect on system use. The results of the analysis obtained a significance value of t of 0.010. This value is smaller than 0.05. This finding states that the second hypothesis in this study was accepted. The results of this study are also proven to be in line with previous studies from Putrawan et al., (2017), Eka & Yasa, (2017), Sumiyana and Personal (2010), Wahyuni (2011), Halawi et al., (2007), and Rai et al., (2002) which states that the Information Quality can affect the use of the system. This hypothesis is strengthened by the opinion of DeLone and McLean (2003), which states that the quality of accurate and relevant information, as well as user satisfaction after using an accounting software will further increase user needs and user intensity of the accounting software.

The effect of the Information Quality on the use of the system is strengthened by the results of the questionnaire which found that respondents felt the data generated by the accounting information system was complete and could be tested for truth. In addition, respondents also agreed that the data obtained from the accounting information system could be relied upon to meet the information needs for work. Evidently these two indicators have the highest value compared to other

Vol. 7, Issue 2, pp: (1359-1371), Month: October 2019 - March 2020, Available at: www.researchpublish.com

indicators. Under these conditions, the Information Quality produced by the accounting information system can influence the use of accounting information systems.

The Effect of Service Quality on System Usage

The third hypothesis states that service quality has a positive and significant effect on the use of accounting information systems. The results of tests conducted using multiple linear regression are in line with the hypothesis that has been formulated previously that service quality has a positive effect on system use. The results of the analysis obtained a significance value of t of 0,000. This value is smaller than 0.05. This finding states that the third hypothesis in this study was accepted.

Research is also supported by research conducted by Sumiyana and Personal (2010), which states the quality of service can affect the use of the system. Rimawati (2012) in her research that examined the successful implementation of electrononic government also found that the quality of service owned by a system influences the use of the system positively and significantly. DeLone and McLean (2003), stated that, service quality can affect the use of a system. Service quality focuses on meeting the needs and desires of users of information systems.

The effect of service quality on the use of accounting information systems can be seen from the results of the questionnaire which found that many respondents felt the accounting information system responded according to what was needed and provided some input which was very helpful in completing work faster. Evidently these two indicators have the highest value compared to other indicators. So that the good quality of the services provided by the accounting information system, can later influence the level of use of accounting information systems by its users.

The Effect of System Quality on User Satisfaction

The fourth hypothesis in this study states that the quality of the system has a positive and not significant effect on the accounting information system user satisfaction at SMEs in Badung Regency. The results of tests conducted using multiple linear regression are not in line with the hypothesis that has been previously formulated, namely the quality of the system has a positive effect on system use. The results of the analysis obtained a significance value of t of 0.126. This value is greater than 0.05. This finding states that the fourth hypothesis in this study was rejected.

The results of this study are also proven to be in line with previous studies from Eka & Yasa (2017) Simon Nisja Putra Zai (2014) and Hadi (2012). Both of these studies also found that the quality of the system owned by an information system, could not affect the information system user satisfaction. According to DeLone and McLean (2013) The focus is the performance of the system, which refers to how well the hardware, software, policy, and procedure capabilities of the information to the needs of users.

No effect on the quality of the system on user satisfaction is supported by the results of answers to the questionnaire which found that the performance of the system is still not stable. Proven these indicators have the lowest value compared to other indicators. Respondents felt the system still often experienced problems when using accounting information systems. The accounting information system used also often suffers from some damage to the hardware or software. This causes the system user to only use the system as a work routine. The intensity of the use of the system is not because the quality of the system is good.

The Effect of Information Quality on User Satisfaction

The fifth hypothesis in this study states that the quality of information has a positive and significant effect on user satisfaction of accounting information systems at SMEs in Badung Regency. The results of tests conducted using multiple linear regression are in line with the hypothesis that has been formulated previously, namely the quality of the system has a positive effect on system use. The results of the analysis obtained a significance value of t of 0.001. This value is smaller than 0.05. This finding states that the fifth hypothesis in this study was accepted.

The results of this study are also proven to be in line with previous studies from Putrawan et al., (2017), Swandewi (2017) and Wahyuni (2011) which prove that there is a positive and significant relationship between information quality and user satisfaction. Research by Purwaningsih (2010) that examines the successful implementation of online integrated information system services, also proves that information quality has a positive effect on user satisfaction. DeLone & McLean (1992; 2003) states the higher the quality of information perceived by the user, the more satisfied the information produced by the system. DeLone and McLean (2003), state that the quality of accurate and relevant information, as well

International Journal of Management and Commerce Innovations ISSN 2348-7585 (Online) Vol. 7, Issue 2, pp: (1359-1371), Month: October 2019 - March 2020, Available at: www.researchpublish.com

as user satisfaction after using an accounting software will further increase user needs and user intensity of the accounting software.

The effect of the quality of information on user satisfaction is strengthened by the results of the questionnaire which found that respondents felt the data generated by the accounting information system was complete and could be tested for its truth. In addition, respondents also agreed that the data obtained from the accounting information system could be relied upon to meet the information needs for work. Evidently these two indicators have the highest value compared to other indicators. Under these conditions, the quality of information produced by the accounting information system can affect user satisfaction.

The Effect of Service Quality on User Satisfaction

The sixth hypothesis states that service quality has a positive and significant effect on accounting information system user satisfaction. The results of tests conducted using multiple linear regression are in line with the hypothesis that has been formulated previously that service quality has a positive effect on system use. The results of the analysis obtained a significance value of t of 0.001. This value is smaller than 0.05. This finding states that the sixth hypothesis in this study was accepted.

The research is also supported by research conducted (Widodo, et al., (2016), Purwaningsih (2010), and Barnes and Vidgen (2006), which states that service quality can influence the use of the system. Septianita, et al. (2014), in his research on the determinants of Rail Ticketing System (RTS) user satisfaction also found that service quality factors significantly and positively influenced user satisfaction DeLone and McLean (2003) stated that service quality could influence the use of a system. in efforts to meet the needs and desires of users of information systems.

The effect of service quality on user satisfaction accounting information can be seen from the results of a questionnaire that found that many respondents felt the accounting information system responded according to what was needed and provided some input which was very helpful in completing work faster. Evidently these two indicators have the highest value compared to other indicators. So that the good quality of services provided by the accounting information system, will later affect the level of satisfaction of accounting information systems by users.

The Effect of System Usage on Net Benefits

The seventh hypothesis in this study states that the use of the system has a positive and significant effect on the net benefits of accounting information systems at SMES in Badung Regency. The results of tests conducted using multiple linear regression are in line with the hypothesis that has been formulated previously, namely the quality of the system has a positive effect on system use. The results of the analysis obtained a significance value of t of 0,000. This value is smaller than 0.05. This finding states that the seventh hypothesis in this study was accepted.

The results of this study are also proven to be in line with previous studies from DeLone and McLean (2003) and Hudin & Riana (2016), which state that the use of the system has an effect on Net Benefits. The higher the use of accounting information systems, the higher the net benefits. The reciprocity of benefits provided by users of information systems. So the system is said to be successful if the use of accounting information systems can meet the needs and the system runs well.

The effect of the use of the system on the net benefits of accounting information systems at SMEs in Badung Regency is strengthened by the results of a questionnaire that found that respondents felt an increase in performance after using an accounting information system. accounting information systems can get things done faster. Proven these indicators have the highest value compared to other indicators. So that the benefits felt by users after using accounting information systems make users feel satisfied and continue to use accounting information systems to help their work.

The Effect of User Satisfaction on Net Benefits

The eighth hypothesis in this study states that user satisfaction has a positive and significant impact on the net benefits of accounting information systems at SMEs in Badung Regency. The results of tests conducted using multiple linear regression are in line with the hypothesis that has been formulated previously, namely the quality of the system has a positive effect on system use. The results of the analysis obtained a significance value of t of 0,000. This value is smaller than 0.05. This finding states that the eighth hypothesis in this study is accepted.

This study also proved to be in line with previous studies from DeLone and McLean (2003) and Hudin & Riana (2016), which stated that User satisfaction influences Net Benefits. According to Sitoresmi (2013), states that one of the information systems that is needed is the accounting information system. Therefore the application of an effective accounting information system in a company will provide net benefits for the company and management in running their business.

The influence of user satisfaction on the net benefits of the accounting information system is strengthened by the results of the questionnaire which found that respondents felt an increase in performance after using the accounting information system. Accounting information systems can get things done faster. The benefits felt by users after using the accounting information system makes users feel satisfied and continue to use accounting information systems to help the job.

VI. CONCLUSIONS AND SUGGESTIONS

Conclusions

This study aims to examine the success of accounting information systems at SMEs in Badung Regency. The Accounting Information System used by SMEs in Badung Regency still finds constraints on the system quality variables that are still unstable which cannot affect the use of the system and user satisfaction. The success of the accounting information system at SMEs in Badung Regency as measured by the increase in effectiveness found that the accounting information system applied was quite successful. This is due to a significant effect on the following variables:

Information quality can affect the use of the system and user satisfaction, because the system can provide complete data and can be tested for truth. Quality of service can affect the use of the system and user satisfaction, because the system can provide responses in accordance with what is needed and provide some input that is very helpful in completing work faster. The use of the system and user satisfaction can affect net benefits, because the system can improve the performance of respondents, by completing work faster.

Suggestions

Based on the results of research and conclusions that have been made, the suggestions that can be given are as follows:

The results of the questionnaire showed that the system quality variable on the reliability indicator had a relatively low value. This means that the reliability of a system that is seen from the instability and damage experienced by the system is still common. This condition can be used as a suggestion for SMEs to adjustments back to the accounting information system used. The results of the questionnaire showed the variable quality of information on the accurancy indicator has a lower value than the other indicators. This means that the accounting information system used still does not produce accurate information. It is recommended that these deficiencies can be followed up and adjustments made to avoid misinformation. The results of the questionnaire indicate that the service quality variable on the assurance indicator has a lower value than the other indicators. This means, users feel less secure in accessing or sending data through the accounting information systems at Badung Regency SMEs pay more attention when sending data through the accounting information system.

The researcher further suggested that adding other variables that influence the system use and user satisfaction variables because the results of the coefficient of determination (Adjusted R2) in this study there are still other variables that can influence it. Other variables that can be used such as supervision measures, work expectations and social factors can be used as independent variables.

REFERENCES

- Azhar Susanto, 2008. (2013). Peranan Penerapan Sistem Informasi Manajemen Terhadap Efektivitas Kerja Pagawai Lembaga Pemasyarakatan Narkotika (Lapastika) Bollangi Kabupaten. Jurnal Capacity STIE AMKOP Makassar. https://doi.org/10.4028/www.scientific.net/AMM.448-453.402
- [2] DeLone, W. H., & McLean, E. R. (2003). The DeLone and McLean model of information systems success: A tenyear update. Journal of Management Information Systems. https://doi.org/10.1080/07421222.2003.11045748
- [3] Duncombe, R. (2009). Formalisation of Information Systems in sub- Saharan African Small and Medium Enterprises : Case of Botswana. 1(2), 1–29.

- Vol. 7, Issue 2, pp: (1359-1371), Month: October 2019 March 2020, Available at: www.researchpublish.com
- [4] Eka, I. W., & Yasa, S. (2017). Analisis Kesuksesan Sistem Informasi Manajemen Daerah Dengan Mengadopsi Model Delone & Mclean. E-Jurnal Akuntansi, 18, 2505–2533.
- [5] Gable, G. G., Sedera, D., & Chan, T. (2008). Re-conceptualizing information system success: The IS-impact measurement model. Journal of the Association of Information Systems.
- [6] Hudin, J. M., & Riana, D. (2016). Kajian Keberhasilan Penggunaan Sistem Informasi Accurate Dengan Menggunakan Model Kesuksesan Sistem Informasi Delon Dan Mclean. Journal of Information System.
- [7] Iivari, J. (2005). An Empirical Test of the DeLone-McLean Model of Information System Success. Data Base for Advances in Information Systems. https://doi.org/10.1145/1066149.1066152
- [8] Istianingsih, & Wijayanto, S. H. (2008). Pengaruh Kualitas Sistem Informasi Perceived Usefulness, dan Kualitas Informasi terhadap Kepuasan Pengguna Software Akuntansi. Jurnal Simposium Nasional Akuntansi XI. https://doi.org/10.1021/ef050412z
- [9] Marshall B. Romney, & Steinbart, P. J. (2003). Accounting Information Systems 9th Edition. In African Journal of Microbiology Research. https://doi.org/10.5897/AJMR12.475
- [10] Mohan-Neill, S. (2009). The influence of education and technology use in the success of US Small Businesses. Journal of Management SystemsManagement Systems.
- [11] Of, S., In, Y., & Of, T. (2012). Quality assessment of information systems (pp. 1–23). pp. 1–23.
- [12] Pinasti, M. (2007). Pengaruh Penyelenggaraan Dan Penggunaan Informasi Akuntansi Terhadap Persepsi Pengusaha Kecil Atas Informasi Akuntansi: Suatu Riset Eksperimen. Simposium Nasional Akuntansi X Makassar. https://doi.org/10.1017/CBO9781107415324.004
- [13] Purwaningsih, S. (2010). Analisis Kesuksesan Penerapan Sistem Informasi pada Sistem Informasi Pelayanan Terpadu (SIPT) Online (Studi Pada PT Jamsostek (PERSERO)). Aset,.
- [14] Putrawan, N. A., Putri, I. G. A. M. A. D., & Ariyanto, D. (2017). Analisis Efektivitas Sistem Informasi Manajemen Daerah (SIMDA) Pemerintah Kabupaten Gianyar. E-Jurnal Ekonomi Dan Bisnis Universitas Udayana, 6(4), 1639– 1672. Retrieved from https://ojs.unud.ac.id/index.php/EEB/article/view/28134
- [15] Radityo, D., & Zulaikha. (2007). Pengujian Model DeLone and McLean Dalam Pengembangan Sistem Informasi Manajemen (Kajian Sebuah Kasus). Simposum Nasional Akuntansi X.
- [16] Rai, A., Lang, S. S., & Welker, R. B. (2002). Assessing the validity of IS success models: An empirical test and theoretical analysis. Information Systems Research. https://doi.org/10.1287/isre.13.1.50.96
- [17] Rimawati, Y. (2012). Keberhasilan Implementasi Elektronik Government Berdasarkan Persepsi Pengguna. Jurnal Akuntansi Multiparadigma. https://doi.org/10.18202/jamal.2012.08.7164
- [18] Saputro, P. H., Budiyanto, D., & Santoso, J. (2016). Model Delone and Mclean Untuk Mengukur Kesuksesan E-Government Kota Pekalongan. Scientific Journal of Informatics. https://doi.org/10.15294/sji.v2i1.4523
- [19] Septianita, Wi., Agus Winarno, W., & Arif, A. (2014). Pengaruh Kualitas Sistem, Kualitas Informasi, Kualitas Pelayanan Rail Ticketing System (RTS) Terhadap Kepuasan Pengguna. E-Journal Ekonomi Bisnis Dan Akutansi. https://doi.org/10.19184/ejeba.v1i1.570
- [20] Sitoresmi, L. D. (2013). Faktor-Faktor Yang Mempengaruhi Penggunaan (Studi Pada Kub Sido Rukun Semarang). Diponegoro Journal of Accounting, 2(2009), 1–13.
- [21] Stacie Petter, William DeLone, & Ephraim R. McLean. (1992). Information Systems Success: The Quest for the Independent Variables. Journal of Management Information Systems.
- [22] Sumiyana, & Pribadi, A. (2010). Pemrediksian Peningkatan Manfaat Penggunaan Situs Pajak: Model Kesuksesan Sistem dengan Pengindusian Orientasi Tujuan Pembelajaran dan Norma Subyektif. Universitas Gadjah Mada.
- [23] Sutaryo, S. (2017). Pengaruh Karakteristik Inovasi Terhadap Adopsi Teknologi Internet Oleh Usaha Kecil dan Menengah (UKM). Ekuitas (Jurnal Ekonomi Dan Keuangan). https://doi.org/10.24034/j25485024.y2004.v8.i2.2368

- Vol. 7, Issue 2, pp: (1359-1371), Month: October 2019 March 2020, Available at: www.researchpublish.com
- [24] Swandewi, L. P. (2017). Kepuasan Pengguna Sistem Informsi Akuntansi pada Lembaga Perkreditan Desa di Kabupaten Buleleng. E-Jurnal Akuntansi Universitas Udayana, 19, 1803–1831. Retrieved from E-Jurnal akuntansi
- [25] Tan, Suyatno, & Aliyah. (2015). Pengujian Kesuksesan Sistem Informasi Model Delone & McLean pada sektor Publik. University Research Collugoium.
- [26] Undang-Undang, N. 20. (2008). Undang-Undang No 20 Tahun 2008. UU No. 20 Tahun 2008, (4 Juli 2008), 1–31. Retrieved from https://www.bi.go.id/id/tentang-bi/uu-bi/Documents/UU20Tahun2008UMKM.pdf
- [27] Utomo, W. P. 2010. (2011). Pengaruh persepsi dan penggunaan informasi akuntansi terhadap keberhasilan pengusaha tanaman hias di Surabaya. Skripsi. Universitas Pembangunan Nasional (UPN). Jawa Timu.
- [28] Wahyuni, T. (2011). Uji empiris model delone dan mclean terhadap kesuksesan sistem informasi manajemen daerah (simda). Jurnal BPPK.
- [29] Wanjau, K., Macharia N, R., & Ayodo Eunice M A. (2012). Factors Affecting Adoption of Electronic Commerce among Small Medium Enterprises in Kenya: Survey of Tour and Travel Firms in Nairobi. International Journal of Business, Humanities and Technology.
- [30] World Bank. (2015). Access to Finance for SMEs The ACET Way. Access to Finance for Small and Medium Enterprises in Africa Why African.