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Impact of Tri Hita Karana Culture on the Use of Accounting Information Systems and User Satisfaction as the Expression of Information System Success

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ABSTRACT

Objective – The research aims to examine whether *Tri Hita Karana* (THK) culture influences the use of Acccounting Information System (AIS) and user satisfaction as the expression of Information Systems (IS) success.
Methodology/Technique – The research was conducted in Badung Regency with Customary Village Financial Institution (LPD) as the sample. This research observes 55 LPDs in Badung Regency. The data was analyzed using SEM analysis with a PLS approach.
Findings – The results of this research show that THK culture influences the use of AIS; THK culture influences through perceptions of use and perceptions of simplicity; THK culture influences user satisfaction through perception of use, perception of simplicity, and the use of AIS; perception of use and perception of simplicity influence the use of AIS; perception of use does not influence user satisfaction; perception of simplicity influences user satisfaction; AIS use effects user satisfaction; perception of use effects user satisfaction through the use of AIS.
Novelty – The research suggests that suggestions for developing AIS in LPDs across Badung Regency or for further research in the field of AIS include: (1) dividing the LPDs into groups based on their business scale (either their amount of capital or the amount of assets owned); and (2) further exploring the impact of THK culture on the use of AIS.
Type of Paper: Empirical

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JEL Classification: M40, Z12.

1. Introduction

Generally, every company worldwide commonly encounter problem in its decision-making processes. Information systems that can generate equal information are those with the capacity to effectively catch, create and process the internal and external information for the best interests of the company.

IS success is measured by the satisfaction experienced by its users and the continuous use of that IS (Choe, 1996; McGill, Hobbs, & Klobas, 2003; Iivari 2005; Radityo & Zulaikha, 2007). IS success is proxied as user satisfaction in many studies (DeLone & McLean, 1992, 2003; McGill et al., 2003; Iivari, 2005; Radityo & Zulaikha, 2007).

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DeLone and McLean (1992) state that system quality refers to the performance quality yield by the hardware and software combination in an IS. However, Radityo and Zulaikha (2007) explain that good system quality is measured by the efficacy of the system output, which can influence the level of use intensity and user satisfaction. Therefore, it can be said that better quality systems and output (e.g. rapid access time and higher information quality), will increase the frequency of use.

The novelty of this research is its examination in Indonesia, with a particular focus on Badung Regency, due to the phenomena associated with LPDs operating in this region. Previous studies have identified a gap in the measurement of IS/IT success in this location (McGill et al., 2003; Iivari, 2005; Radityo and Zulaikha, 2007; Davis et al., 1989; Verkantesh et al., 2003; and Handayani, 2007).

On this background, the main limitations of the current research are: (1) does THK culture influence the use of AIS?; (2) do the perception of simplicity and the use of AIS influence user satisfaction?; (3) dois the influence of perceptions of use and perceptions of simplicity over user satisfaction mediated by the use of AIS?; (4) is the influence of THK culture on the use of AIS mediated by perceptions of use and perceptions of simplicity?; and (5) is the influence of THK culture over user satisfaction mediated by the use of AIS, perceptions of use, and perceptions of simplicity?

2. Literature Review

DeLone and McLean (1992) state that the success of system development is proxied by two variables, namely IS user intensity and IS user satisfaction. Variables that influence the success of IS include information quality (system output) and system quality. The variable of IS use also influences IS user satisfaction. Pitt and Watson (1997) explain that IS effectiveness is measured by the information quality produced by the IS itself, the antecedent of the AIS use, and user satisfaction (Radityo and Zulaikha, 2007). The simplicity of IS is measured by how easy the IS can be used (Davis et al., 1989). TAM (Davis et al., 1989) predicts that perception of simplicity is one aspect of the system quality (DeLone and McLean, 1992). This illustrates that IS quality is an antecedent of AIS use and user satisfaction.

THK philosophy is well known in Balinese life as the tradition of Hindus in Bali. THK is interpreted as three causes of well-being based on the harmony of the relationship between human and God (parahyangan), human and nature (palemahan), and among human beings (pawongan) (Kaler, 1983; Pitana, 1994; Dalem, 2007; Palguna, 2007; and Agung, 2009).

2.1 The Impact of THK Culture on the Use of AIS

Researchers agree that culture is an important variable related to the acceptance of IS/IT. There is therefore an interaction between culture, particularly national cultures, and the process of accepting the technology (McCoy et al., 2007). It is shown by Sadha Suardikha (2011; 2012) that THK culture affects the use of AIS. Based on the findings, the following hypothesis is made:

H_1: THK culture affects the use of AIS.

2.2 THK Culture Influences the Use of AIS Through Perception of Use and Perception of Simplicity

This involves the interaction between two separate phenomena; the process of accepting technology and national culture (McCoy et al., 2007). Sadha Suardikha (2011) found that THK culture affects the use of AIS which is mediated by user confidence in the computer, personal innovation, perception of use, and perception of simplicity. Suardikha (2012) also indicates that THK culture affects the use of AIS through perception of use and perception of simplicity. Based on those findings, the following hypothesis is made:

H_2: THK culture influences perception of use and perception of simplicity.

2.3 THK Culture Influences User Satisfaction Through the Use of AIS, Perception of Use, and Perception of Simplicity

Sadha Suardikha (2011; 2012) reveal that THK culture plays a key role, promoting the use of AIS in the decision-making process. DeLone and McLean (1992), Pitt and Watson (1997), and McGill et al. (2003) explain that if a system provides its users with certain benefits, the users are more likely to use that system again. In other words, high levels effeciveness increase user saisfaction. Based on the above explanation, the following hypothesis is made:

H_3: THK culture influences user satisfaction through the use of AIS, perceptions of use, and perceptions of simplicity.

2.4 The Impact of Perception of Use and Perception of Simplicity on the Use of AIS and User Satisfaction

Information Systems are widely used in the 21st century. This increase in use of IS demonstrates an increase in user comfort with the system (DeLone and McLean, 1992; Pitt and Watson, 1997; and McGill et al., 2003). However, Radityo and Zulaikha (2007) found that use of IS does not affect user satisfaction. In addition, Davis et al. (1989) and Pitt and Watson (1997) explain that the simplicity of IS is measured by how easy the IS can be used. This illustrates that the quality of IS is an antecedent of AIS use and user satisfaction. From the above explanation, the following hypotheses are made:

H_4: Perception of use affects the use of AIS.
H_5: Perception of simplicity affects the use of AIS.
H_6: Perception of use affects user satisfaction.
H_7: Perception of simplicity affects user satisfaction.

2.5 The Use of AIS Influences User Satisfaction

Baroudi et al. (1986) in Iivari (2005) assume that the use of IS demonstrates that the system fulfills the user's needs. Torkzadeh and Dwyer (1994) in Iivari (2005) found that the coefficient of the relationship between the use of the system and user satisfaction is bigger than the coefficient of relationship between user satisfaction and the use of the system. Thus, the following hypothesis is made:

H_8: the use of AIS affects user satisfaction.

2.6 The Perception of Simplicity and Perception of Use Influences User Satisfaction Through the Use of AIS

DeLone and McLean (1992), Pitt and Watson (1997); and McGill et al. (2003) explain that the positive experience of users of AIS will increase the frequency of using AIS. Davis et al. (1989) and Pitt and Watson (1997) state that simplicity of use refers to how easy the AIS is to use when completing a task. Moreover, DeLone and MacLane (1992) and Radityo and Zulaikha (2007) state that the ability of hardware, software, and the procedures of IS (system quality) to provide good quality information needed by users will increase the chance of the user re-using the IS. On this background, the following hypothesis is made:

H_9: Perception of use affects user satisfaction through the use of AIS.
H_{10}: Perception of simplicity affects user satisfaction through the use of AIS.

3. Methodology

The research employs a quantitative method by using Structural Equation Modelling (SEM) based on variance based or component based with Partial Least Square (PLS). This research was conducted on LPDs througout the sub-districts in Badung Regency. The data was taken from 55 respondents operating in Badung Regency.

The variable is THK culture, a formative latent variable measured by three indicators: parahyangan, pawongan, and palemahan, which are adopted from Windia and Dewi (2007: 52), Riana (2010), and Sadha Suardikha (2011; 2012). Other variables are reflective latent variables. There are three variables measured by three indicators that are adopted from Sadha Suardikha (2011, 2012). These include: (1) perception of use measured by three indicators (performance, productivity and effectiveness); (2) perception of simplicity measured by three indicators (learning, interaction, and experience); and (3) the use of AIS measured by three indicators (transaction process cycle, job creation plan, and intern management process). The questions in the list were measured by using Likert scale that consists of five assessment figures, namely: (5) strongly agree, (4) agree, (3) neutral, (2) disagree, (1) strongly disagree.

The instrument validity of the research was examined by correlating the score of one indicator and the score of all indicators. If the coeficient of correlation is bigger than 0,3 ($r \geq 0,3$), the instrument of research is considered valid (Masrun, 1979 in Solimun, 2002: 81 and Hartono, 2004: 129). This research employs various data collected through survey methodology by proposing a list of question to the research subjects involved.

4. Results and Discussion

Structural Similarity Model as the result of PLS Smart 2.0 M3 execution to the collected data is depicted in Figure 1.

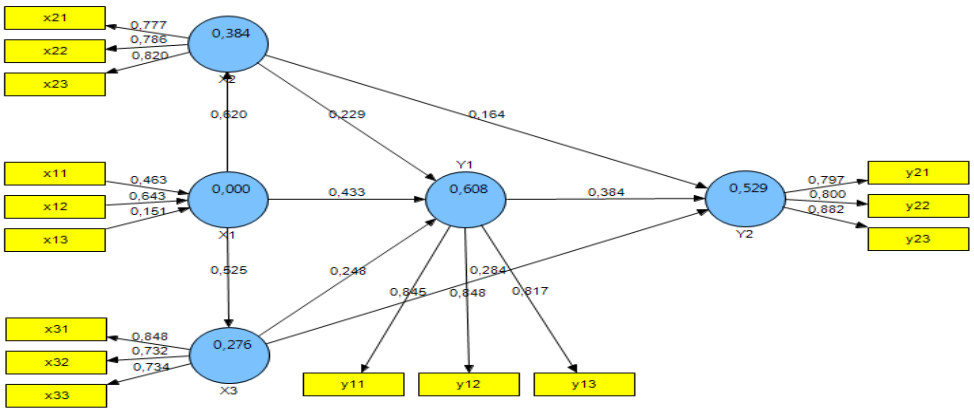

Figure 1. Structural Similarity Model the Result of Research PLS Execution

Based on the PLS execution results, it can be said that the outer model based on outer loading of the reflective indicator is valid since it has been fulfilled: (1) convergent validity (loading value is over 0.5 and or statistic t-value is over 1.96); (2) discriminant validity (cross loading value in the biggest suitable variable, which is compared to other latent variables cross loadings or latent variable square root of AVE, which are bigger than the correlation of other latent variables); and (3) the latent variable of the research is reliable because composite reliability has a value of more than 0.70.

The results of the instrument validity test in the previous explanation shows that the coefficient of correlation between the score of one indicator and the score of all indicators was bigger than 0.3 ($r \geq 0.3$). This shows that all instruments used are valid, meaning the content validity test has fulfilled the construct validity test criteria since all instruments used are adequate to measure the construct. Next, the structural model (inner model) is considered adequate because it has a relevant predictive value (Q2) of 64.24%. Variation in user

satisfaction variables can be explained by variables used herein, while the rest (35.76%) are explained by other variables in the model. The results of the hypothesis examination in this research can be seen in Table 1.

Table 1: The result of Hypothesis Examination

Hypo-thesis	Independent Variable	Dependent Variable	Mediation Variable	Impact	Path coefficient (Statistic-T)	Accepted or Rejected decision
H_1	*THK* culture	The use of AIS	-	Direct	0.432649 (6.104556)	Accepted
H_2	*THK* culture	The use of AIS	Perception of use and Perception of simplicity	Direct + Indirect	0.705198 (12.430430)	Accepted
H_3	*THK* culture	User satisfaction	The use of AIS, Perception of use and Perception of simplicity	Direct + Indirect	0.521348 (9.507823)	Accepted
H_4	Perception of use	The use of AIS	-	Direct	0.229434 (2.311259)	Accepted
H_5	Perception of simplicity	The use of AIS	-	Direct	0.248253 (2.709780)	Accepted
H_6	Perception of use	User satisfaction	-	Direct	0.163519 (1.718178)	Rejected
H_7	Perception of simplicity	User satisfaction	-	Direct	0.283527 (2.159795)	Accepted
H_8	The use of AIS	User satisfaction	-	Direct	0.384479 (3.503916)	Accepted
H_9	Perception of use	User satisfaction	The use of AIS	Direct + Indirect	0.251731 (2.690396	Accepted
H_{10}	Perception of simplicity	User satisfaction	The use of AIS	Direct + Indirect	0.378976 (3.197755)	Accepted

The path coeficient value of the perception of use indicates a significant impact on the use of AIS. This means that perception of use influences the use of AIS. These results are in line with the finding of of Davis et al. (1989), Adam et al. (1992), Starub et al (1995), Igbaria et al. (1995), Szajna (1996), Igbaria et al. (1996), Igbaria et al. (1997), and Ndubisi et al. (2005).

The path coeficient value of perceived simplicity significantly impacts the use of AIS. This shows that perception of simplicity influences the use of AIS. The results of this research are consistent with TAM theory (Davis, 1989). This in line with the findings of Davis et al. (1989), Adam et al. (1992), Starub et al. (1995), Igbaria et al. (1995), Szajna (1996), Igbaria et al. (1996), Igbaria et al. (1997), Venkatesh et al. (2003), Ndubisi et al. (2005), Wang et al. (2008), Srite et al. (2008), and Sadha Suardikha (2011; 2012), which all conclude that perception of simplicity directly influences actual use.

The path coeficient value of AIS use, perception of use, perception of use, and perception of simpicity completely mediates the impact of THK culture on user satisfaction (Hartono and Abdillah, 2007: 120). This means that THK culture influences user satisfaction through the use of AIS, perception of use, and perception of simplicity.

The path coeficient value of perception of use has an insignificant impact on user satisfaction. This means that perception of use does not influence user satisfaction. These findings are similar to the findings of Radityo and Zulaika's (2007), which state that the level of use presented by the information quality does not influence user satisfaction.

The path coeficient value of perception of simplicity significantly impacts user satisfaction. This shows that perception of simplicity greatly influences user satisfaction. These results are consistent with the finding of McGill et al. (2003) and Iivari (2005). However, the results are inconsistent with the findings of Radityo and Zulaika (2007) which reveal that simplicity of use does not influence user satisfaction.

The path coeficient value of the use of AIS use demonstrates a significant impact on user satisfaction. This means that the use of AIS influences user satisfaction. These results are consistent with the finding of Torkzadeh and Dwyer (1994) in Iivari (2005), which explain that user experiences with IS strongly influence user satisfaction.

The path coeficient value of perception of use significantly influences user satisfaction through the use of AIS. This means that perception of use has an impact on user satisfaction, which is mediated by the use of AIS. This is consistent with DeLone and McLane (1992), Pitt and Watson (1997), and McGill et al. (2003), which state the use of AIS will increase the frequency of use of IS, as the reflection of user satisfaction.

The coeficient value of perception of simplicity significantly impacts user satisfaction. This means that perception of simplicity influences user satisfaction, which is mediated by the use of AIS. This finding is consistent with the explanation provided by DeLone and McLane (1992), Pitt and Watson (1997), and Radityo and Zulaikha (2007) that the quality of hardware, software, and the procedures of IS (system quality) can result in the frequent use of IS, as reflected through IS meeting user satisfaction.

5. Conclusion

Based on the background of the research, the aim of the study, and the results of the hypothesis examination, it can be concluded that: (1) THK culture influences the use of AIS. This is because the path coefficient value of THK culture statistically and significantly impacts the use of AIS; (2) THK culture influences the use of AIS through perception of use and perception of simplicity. The examination shows that the path coefficient value of total impact is statistically significant; (3) THK culture influences user satisfaction through perception of use, perception of simplicity, and the use of AIS. This is because the path coefficient value of total impact is statistically significant; (4) perception of use influences the use of AIS. This is because the path coefficient value of perception of use significantly impacts the use of AIS; (5) perception of simplicity influences the use of AIS. This is because the path coeficient value of perceived simplicity statistically and significantly impacts the use of AIS; (6) perception of use does not influence user satisfaction. This is because the path coeficient value of perception of use has no major impact on user satisfaction; (7) perception of simplicity influences user satisfaction. This is because the path coeficient value of the perception of simplicity has a statistically significant impact on user satisfaction; (8) The use of AIS influences user satisfaction. This is because the path coefficient value of AIS use has a statistically significant impact on user satisfaction; (9) the impact of perception of use on user satisfaction is mediated by the use of AIS. This is because the path coefficient value of total impact is statistically significant; and (10) the impact of perception of simplicity on user satisfaction is mediated by the use of AIS. This is because the path coefficient value of total impact is statistically significant.

Based on the research results, suggestions for developing AIS in LPDs across Badung Regency or for further research in the field of AIS include: (1) dividing the LPDs into groups based on their business scale (either their amount of capital or the amount of assets owned); and (2) further exploring the impact of THK culture on the use of AIS; It should be noted that THK culture is unique and universal because THK philosophy can be found in all religion teachings worldwide (Arif, 1999 and Pusposutardjo, 1999 in Windia and Dewi, 2007).

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