The Role of Management Information Systems in Kerambitan Village Governance with Tri Hita Karana Culture as a Mediation Variable

I Gede Nyoman Carlos W Mada¹, Putu Yudha Asteria Putri²
¹,² Faculty of Economics and Business, Warmadewa University, Bali

ABSTRACT: This study aims to examine the effect of Management Information Systems on Governance. The mediating variable, namely the concept of Hindu culture Tri Hita Karana is included in this study. This research was conducted in one of the agro-tourism villages in Bali, namely Kerambitan Village - Tabanan by taking 128 research samples. The overall model evaluation results are based on the R-Square (R²), Q-Square Predictive Relevance (Q²) and Goodness of Fit (GoF) values, so the model is declared good. The results obtained by the Management Information System have a positive effect on Tri Hita Karana, Tri Hita Karana has a positive effect on corporate governance and Tri Hita Karana mediates the influence of management information systems on corporate governance.

KEYWORDS: Culture, Management Information Systems.

INTRODUCTION

Since the issuance of Law Number 6 of 2014 concerning Villages, the existence of villages has been recognized for their existence in the constitutional aspects of the Republic of Indonesia. The village has been given full rights and authority in managing village household affairs without interference from other parties. The provisions of Law Number 6 of 2014 emphasize that a village is a legal community unit that has territorial boundaries that are authorized to regulate and manage government affairs, local community interests based on community initiatives, origin rights, and/or traditional rights that are recognized and respected within the government system of the Unitary State of the Republic of Indonesia (Indrawan et al., 2022).

As (Abidin, 2015) explains that the main obstacles in managing village funds so that they have not been able to optimize development results in rural areas are the lack of existence and capacity of village officials, lack of village financial independence, technically, there are weaknesses in planning that affect implementation and reporting, and finally, weak village institutions, and weak coordination with local governments at the district/city level (horizontal constraints). Meanwhile, (Prasetyo & Muis, 2015) explains, the obstacles in implementing the Village Law are not only located in the village, but also in terms of regulation by the central government (vertical constraints). If upward (vertical) improvements cannot be made immediately, then horizontal improvements need to be made. Therefore, programs to strengthen village government governance are still very relevant to be carried out to support the implementation of the Village Law, especially those related to village governance (Alfirdaus et al., 2020).

In Law Number 6 of 2014 concerning Villages it is very clear that this law provides the basis for a self-governing community, namely a community that regulates itself. With the understanding that the Village has the authority to regulate and manage the interests of the community according to local socio-cultural conditions and combined with Local Self Government, it is hoped that customary law community units which have been part of the Village area, will be arranged in such a way as Villages and Traditional Villages.

Good governance also needs to be supported by a qualified Information System to minimize human error. The success of an organization in achieving its goals is highly dependent on the ability of the people who manage the organization (Purnama, 2016). Management as a method of regulating, managing an organization can be interpreted as the art of doing things through people (Awalia, 2022). If the management of an organization is good, it will increase the prosperity of a country. In carrying out their duties, managers need information, because there are differences in tasks, the information needed will also be different. These differences are caused by the time period, the level of uncertainty, the type of information, the basis for information needs and the form of reporting. So that it can be categorized that information is one of the main types of resources, and is included in the category of conceptual resources.
Other main types of resources, in the category of physical resources, namely; people, materials, machines (including facilities and energy) and money. Physical resources that are in the organization are usually limited and can be exhausted or extinct. While information resources are "never" will never run out. So that all resources, both physical and conceptual, must be synergized. Therefore the task of the manager is to direct the use of all resources so that they can be used effectively (Indrayani & Gatningsih, 2013) . Especially in terms of government, in today's modern era the Village Information System must be based on technology (typewriter, computer, telephone, facsimile, printer and internet network) and Human Resources (HR). Technology and HR cannot be separated. no HR can operate it, of course it will be redundant. Vice versa, there are quality human resources, but the technology is not available, nor can they present an ideal Village Information System (Kurniawan et al., 2021).

One of the traditional villages in Bali which is an agro-tourism village in the Tabanan Regency is Kerambitan Village which is located approximately four kilometers from the west of Tabanan City, this village has a very strategic position because it is close to the coast and plantation land and agricultural land which is still wide. There are problems faced by the Kerambitan Village government, namely village governance that has not been effective. In the implementation of village government, there are still village officials and village social institutions that do not understand their duties and functions in implementing government administration. Institutionalization and village institutions that do not play a role will affect community participation in supporting village development. The work system built by the Kerambitan Village government institution is based on culture. Bali is thick with customs and habits which are called culture.

Organizational culture is a system of spreading beliefs and values that develops in an organization and directs the behavior of its members (Mei et al., 2016). Organizational culture can be the main competitive advantage instrument, that is, if the organizational culture supports the organization's strategy, and if the organizational culture can answer or overcome environmental challenges quickly and precisely. Organizational culture besides influencing organizational performance, influences good governance (Marliani, 2019). Organizational culture in an organization is usually associated with values, norms, attitudes and work ethics that are shared by each component of the organization. These elements form the basis for monitoring employee behavior, the way they think, cooperate and interact with their environment. If the organizational culture is good, it will be able to improve employee performance and will be able to contribute to the success of organizational governance. The relationship between organizational culture and governance in its roles and functions binds all parties involved in the organization to achieve goals. In the next stage, organizational culture which is composed of values and beliefs binds employees, becomes a reason for behavior and becomes the basis for work ethics in organizations that are directed at achieving good governance.

The Hindu beliefs and culture of the Balinese people that are firmly held to this day are the Tri Hita Karana culture. The teachings of Tri Hita Karana, namely the relationship between humans and God, humans and humans, humans and the environment are the basis of the Balinese people's life behavior which so far has been universally recognized by various business entities in Bali and all levels of Balinese society (Saputra, 2015). Welfare and happiness for humans physically and spiritually will be achieved if humans are able to realize harmonious cooperation with God Almighty, with fellow human beings, and with the natural surroundings (Devi et al., 2019). A strong understanding of this philosophy is believed to be able to mediate good governance.

Governance or good governance in general is that which concerns or discusses the management and administration of good governance (Ali & Saputra, 2020). The existence of a Management Information System is expected to be able to support governance so that it can be viewed from a functional government perspective. Even though a technology-based system for creating good governance must be implemented, village governance which cannot be separated from the customs and culture applied in social life is still very important to be highlighted. Therefore it is important to add the role of organizational culture, namely the Tri Hita Karana culture in the application of SIM in Village Government Governance Model Research. This research tries to describe village government activities to improve and achieve good village governance in order to provide village income and open up entrepreneurial opportunities for village communities.

In this study, researchers will add external variables that can be the cause of SIM's role in creating better governance, namely by presenting the local culture of the Balinese people. The local culture used is Tri Hita Karana which appears as a mediating variable. Culture in a community in a place especially in a village certainly has a very strong role in influencing a person's behavior. Therefore, until now in the midst of the rapid development of traditional villages, the role of culture is still something that should be highlighted in increasing individual behavior to commit to an organization, especially in government institutions (Robins & Timothy, 2005).
This study aims to explain how the influence of the Management Information System on the Governance of the Governance System in Kerambitan Village by adding the Tri Hita Karana variable as a moderator. This research also aims as material for consideration by the village government to pay more attention to the quality of the use of Management Information Systems impact on public confidence.

LITERATURE

Management Information System (MIS)

Management information systems (MIS) are defined as systems that provide information support for decision making within organizations (Pearlson, Saunders, Galetta, 2019). MIS is defined as an integrated system of humans and machines to provide information to support operations, management and decision-making functions within organizations (Laudon and Laudon, 2019). MIS is defined as a system based on an organizational database developed for the purpose of providing information to people in an organization (Rainer and Prince, 2015). SIM is defined as a computer-based information system (Blac, 2018). A management information system is a formal information network within an organization that is integrated and organized to collect relevant data, turning it into appropriate information for business decision making. (Wardhana, et al., 2021)

Governance

Governance is an implementation of solid and responsible development management that is in line with the principles of democracy and efficient markets, avoiding misallocation of investment funds and preventing corruption both politically and administratively, implementing budgetary discipline and creating a legal and political framework for the growth of business activities (World Bank, 2008). Good governance, or better known as good governance, in general is everything related to actions or behavior that directs, controls or influences public affairs with the aim of realizing these values in everyday life. Governance is a series of processes of socio-political interaction between government and society in various fields that are related to the interests of society in government intervention on these interests (Sedarmayanti, 2004).

Organizational culture

Culture is an important aspect of any institution, but it is difficult to find a unified single definition of culture. Shein (2010) assumes that a basic assumption in the form of a pattern and is learned with a group to solve a problem and then taught by new members is called organizational culture and has three levels, namely: artifacts, beliefs and values espoused, and the underlying basic assumptions (Schein, 2010). Artifacts are easily observable in the physical space of the institution, the visible behavior of employees, and how work is organized and processed. Artifacts can be aligned with explicit knowledge in an organization. Beliefs and espoused values can be seen in the vision, mission and goals of the organization, but can also be found in the ideals, principles and personal aspirations of individuals. This level of culture is expressed as explicit knowledge as well as more personal and tacit knowledge. The cultural level of underlying assumptions represents unstated thoughts, feelings, and perceptions that influence decision-making actions and employee behavior (Schein, 2010).

Tri Hita Karana

Tri Hita Karana is a philosophy which is also a concept of life and cultural system of the Balinese people. The concept of life that puts forward the principles of togetherness, harmony and balance between economic goals, environmental and cultural preservation, aesthetics and spirituality (Devi et al., 2019) states that Tri Hita Karana teaches all human beings to always maintain a harmonious relationship with God, with fellow human beings, and with nature (Atmadja & Kurniawan, 2018).

METHODOLOGY

Methods and Analysis Tools

The researcher used an analysis tool with a structural equation model, namely PLS-SEM (Structure Equation Modeling) because this study aims to develop a theory. SEM according to Jogiyanto & Abdillah (2016: 2) is a model in the form of a structure that has many dependent variables. In their book, Jogiyanto and Abdillah also mention that SEM can also be used for factor analysis, path analysis, and regression, using path analysis with partial least squares (PLS), namely Smart PLS 3.0 software.
Outer Model Analysis

The outer model in the Smart PLS application is how things relate to testing the size of each variable which is called the latent variable or how to measure the indicators of each variable. Because this analysis assumes that indicator engagement is uncorrelated, therefore an internal measure of consistency of reliability called Cronbach's alpha is not needed to test formative construct reliability (Ghozali, 2014). Evaluation of the external model was assessed by examining the relevant reliability (ie indicator reliability and internal consistency) and validity (ie convergent and discriminant validity). In particular, the reliability of the indicator refers to the contribution of each indicator variable (ie the communality of an item) in the reflective outer model. Regarding the reliability of the indicators, all off-standard loads are not only statistically significant but also higher than 0.70 (Henseler et al., 2009). In addition to reliability, evaluation of the reflective outer model in PLS-SEM applications includes convergent validity and discriminant validity. While the former refers to “the degree to which a measure is positively correlated with alternative measures of the same construct”, the other refers to “the extent to which a construct actually differs from other constructs by empirical standards (Hair et al., 2017a, p. 112). Extracted mean variance (AVE) is commonly used in SEM to test convergent validity. More specifically, an estimate of AVE higher than or equal to 0.50 is recommended to establish convergent validity (Bago). zzi and Yi, 1988), with the argument that constructs that exceed this threshold value explain more than half of the variance of the indicator variables.

Inner Model Analysis

Evaluation of the inner model where after determining the reliability and validity of the external model (measurement), the next stage in PLS-SEM discusses the assessment of the inner (structural) model which involves several checks. Model assessment begins by examining security issues. Since the measured path coefficients are based on ordinary squared regression, they may be biased if high collinearity exists between the predictors of the constructs (Sarstedt et al., 2014). Collinearity is good using the same measure as in the evaluation of the formative outer model. After examining the collinearity problem, the researcher moves on to examine the variance of the endogenous constructs. This can be done by reviewing the coefficient of determination (R²), which has a range from 0 to 1. Although a higher R² value indicates a higher predictability, an acceptable level of R² in the research context, suggests that giving a rough rule of thumb for R² values is difficult (Hair et al., 2011). Thus, researchers must interpret the value of R² by considering previous studies. Nonetheless, Henseler et al. (2009) provide the following rules of thumb for acceptable R² values: 0.75 (substantial), 0.50 (moderate) and 0.25 (weak). Furthermore, the effect size f² should also be used to assess the inner model (Chin, 1988). The effect size f² refers to the change in the value of R² when certain exogenous constructs are removed from the model” (Hair et al., 2017) and indicates whether exogenous latent variables that are omitted have a substantial effect on endogenous latent variables. The following thresholds can be used to measure the size of the effect size f² (Cohen, 1988): 0.02 (small effect), 0.15 (medium effect) and 0.35 (large effect).

Hypothesis test

PLS-SEM tested the hypothesis with the t test, in which the t test was obtained from the SmartPLS bootstrapping program which assessed the diversity of the two groups and the mean with different values from one group to another when viewed statistically. Which is the value sig. used (two-tailed) value is greater than 1.65 with a sign level of 10%), greater than the value of 1.96 with a sig level of 5%, greater (Ghozali & Latan, 2015)

RESULTS AND DISCUSSION

This study uses SEM-PLS in testing the outer and inner models, to analyze research data. In the first stage the researcher conducted a measurement test (outer model) to test the convergent validity of the evaluation of model measurements using reflective indicators which can be seen from the loading factor values for each variable indicator and the average variance extracted (AVE).

Table 1. The coefficient of determination (R²)

<table>
<thead>
<tr>
<th>Construct</th>
<th>R Square</th>
<th>R-Square Adjusted</th>
</tr>
</thead>
<tbody>
<tr>
<td>crime scene</td>
<td>0.502</td>
<td>0.498</td>
</tr>
<tr>
<td>thk</td>
<td>0.442</td>
<td>0.438</td>
</tr>
</tbody>
</table>
Based on the table of the coefficient of determination (R²) each variable is at a good value. So overall with the analysis tools seen from the R-Square (R²) side, the model offered as a whole is stated to be good. Testing the relationship between latent constructs as hypothesized in this study was carried out through a resampling process with the bootstrapping method.

Figure 1 and table 2 provide the estimated output for testing the structural model where the expected result is that Ho is rejected or the sig value <0.05 (or the t statistic value > 1.96 for a test with a significant level of 0.05).

Figure 1. Results of hypothesis testing through bootstrapping

<table>
<thead>
<tr>
<th>Relations Between Constructs</th>
<th>Original Sample Means</th>
<th>Standard Deviations</th>
<th>T Statistics (O/STERR)</th>
<th>P-Value</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIM → THK</td>
<td>0.471</td>
<td>0.055</td>
<td>8,604</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>THK → TKP</td>
<td>0.665</td>
<td>0.444</td>
<td>15,192</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>SIM → THK → TKP</td>
<td>0.709</td>
<td>0.046</td>
<td>15,460</td>
<td>0.000</td>
<td>Significant</td>
</tr>
</tbody>
</table>

Accounting Information System Has a Positive Influence on Tri Hita Karana

The influence of the Management Information System variable on Tri Hita Karana shows a P-value of 0.000 ≤ 0.05, then H₁ is accepted. This proves that the Management Information System variable has a positive effect on Tri Hita Karana.

Organizational culture is concerned with how employees perceive the characteristics of an organization's culture, not with whether they like the culture or not. That is, culture is a descriptive term. The Parahyangan concept views that every human activity is a sacrifice and devotion (yadnya and ngayah) to God. This is reinforced by Bhagawadgita III.4 and 5 in (Suardhikha, 2012) that a person will not achieve perfection in life if he avoids work. Only through good work (subhakarma) can man help himself from...
the sufferings of life (samsara) to attain eternal happiness (moksa). Someone who works well, sincerely, and sincerely will receive a reward and pleasure from God, because work is principally worship.

In relation to organizational governance, belief in the existence of a high God and fear of natural laws when making something that contains elements of adharma (bad actions) will make employees loyal to their jobs and willing to make more efforts to improve their performance and good, clean and correct organizational governance. Structural ideal self-condition is a self-condition that has a healthy physique, an intelligent mind, and a pure conscience. It is these individuals who can be sought to build noble intentions to move forward together and think about steps to build common interests.

Organizational culture refers to a system of shared meaning held by members that distinguishes the organization from other organizations (Intan, 2021). Organizational culture in an organization is usually associated with values, norms, attitudes and work ethics that are shared by each component of the organization. If this organizational culture is good, it will be able to increase high work motivation and will contribute to the success of good and correct governance (Sofyani et al., 2018). The paleahan concept views that the adoption of good governance should not damage or encourage the destruction of the natural environment around the company (Astri Pramitari & Nurhayanti, 2020). If it is related to governance, the concept of pekaahan, especially space, will become the spirit of the process of adopting governance because it always prioritizes benefits, effectiveness, and sustainability (Ali & Saputra, 2020). The role of a strong Tri hita karana culture in the work environment must be used as a guide to form a mental attitude, work ethic, attitude of tolerance and character of human resources with noble character.

**Tri Hita Karana Mediates the Influence of Management Information Systems on Governance**

Tri Hita Karana variable on Governance shows a $P$-value of $0.000 \leq 0.05$ then $H_1$ is accepted. This proves that the Tri Hita Karana variable has a positive effect on Governance.

For organizations, especially public sector organizations, the application of information systems will be assessed as being on target if it is able to make the organization carry out its business goals and strategies properly (Andono et al., 2017). In other words, the application of MIS aims to deliver the organization as optimally as possible to achieve its vision and mission (Afrianto, 2009). Many information system implementations clash with organizational culture (Claver et al., 2001), about 80% -90% of information system projects fail to meet user expectations (Cabrera et al., 2001). Implementation failure is dominated by human factors, namely brainware involvement and interaction with the information system such as the incompatibility of the new work culture, policies for using information systems, and limited expertise, here humans make a significant contribution to optimizing the use of information systems (Lamb and Kling, 2003).

The cultural component that is the focus of Beaudry and Pinsonneault's (2005) study is user stability in the framework of IS maintenance, effective and efficient behavior at work, and initiatives after IS implementation. Ahuja and Thatcher (2005) place the cultural aspect as an accelerator, that is, culture can optimize the use of IS in innovation which is influenced by interpersonal trust which consists of personal interest, ability, empathy and trust in technology.

Organizational culture can also create cohesion (tug of attraction) between members of the organization, as well as control in the implementation of information systems (Claver et al., 2001). Organizational culture is also a social control system for members of the organization to control the expected behavior in accordance with organizational goals (Schein, 2010). In addition, according to Berthon (1993) attention to organizational culture in the implementation of information systems can increase the satisfaction of all internal collaborators in the company, facilitate environmental adaptation, and internal integration, so as to reduce the anxiety created by information systems (Claver et al., 2001). It is supposed to form a good governance system that is capable of being used and not forgetting cultural roots, in this study is Tri Hita Karana

**CONCLUSIONS AND SUGGESTIONS**

**Conclusion**

This study raises the dimensions of an established information system theory, namely the influence of management information systems on corporate governance by incorporating organizational culture, namely Tri Hita Karana as a mediating variable. The overall model evaluation results are based on the value of R-Square ($R^2$), $Q^2$- Square Predictive Relevance ($Q^2$) and Goodness of Fit (GoF) then the model is declared good. The results obtained by the Management Information System Positive Influence on Tri Hita Karana, Tri Hita Karana has a positive effect on Corporate Governance and Tri Hita Karana mediates the effect of Management Information Systems on Corporate Governance.
Suggestion

This research has several limitations. First, this survey research has not been fully upheld Updated Theory Acceptance Model, because there is a more complex information systems theory, namely information systems theory from DeLone and McLean Model (2003) so that further studies are expected to further refine the existing model by adding the latent constructs in the model. Second, this study raises a model with first order and second order construction which refers to the model (Chen, 2010), so for future research we try to return it according to the original model considering that in the results of the first order analysis too many indicators are lost during interaction. Third, this study only took samples from one area in Bali, namely Kerambitan Village, Tabanan Regency, so that future studies are expected to expand the research area by including respondents from other districts.

Suggestions that researchers can give for village government institutions, considering that village government institutions are crucial institutions because they deal directly with the community, they must be able to use information systems appropriately to carry out their activities. To the community, to be able to work together with village government institutions to pay attention to how important it is to use information systems not only to facilitate business transactions, but also to promote transparency. In addition, a qualified information system can realize better governance.

REFERENCES


