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The effect of entrepreneurial leadership, organizational culture and information system on the implementation of risk management

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Abstract

This paper studies the influence entrepreneurial leadership, organizational culture and information systems on the implementation of risk management. This research used quantitative methods by conducting a survey to distribute questionnaires to research objects and processing data using Partial Least Square (PLS). Results from the test using Partial Least Square (PLS) confirm that a company always need a leader who creates opportunities and develops human resources. Organizational culture tends to make progress for the implementation of risk management is supported by a good information system. The results of this study suggest that facing an external environment that can increase the risk of companies required entrepreneurial leaders who provide direction and motivation to employees. In addition, organizational culture that focuses on the external environment, dare to innovate and do the differentiation. There are two culture in professional organizational culture, adhrocracy culture and market culture. Therefore, information systems that owned by company must follow the current technology developments.This study wants to see how the implementation of risk management in a company by assessing the characteristics of organization and knowing the development of the company in innovation with the challenges in the existing environment.

Keyword: Entrepreneurial leadership; organizational culture; information systems; implementation of risk management

INTRODUCTION

The impact of the global financial crisis has highlighted the importance of risk management, Coskun (2012). Risk management has become a major concern for practitioners, academics and business community, although real failures in the financial crisis originating in the United States had a multiplier effect on the world economy, Huber and Scheytt (2013). The role of risk management is also associated with changes in the business environment with threats from political, economic, natural and technical resources, Wu and Olson (2010). Risk management is a systematic approach that develops strategies, people, technology, processes and knowledge with the aim of assessing, evaluating and managing risks faced by the organization. The strategy process divided into three stages formulation, implementation and evaluation, David (2013). The strategic management approach in its development includes three main elements; understanding the strategic position, understanding strategic choices and developing strategies into action, Scholes, Johnson and Whittington, (2002). Specifically, risk management is carried out in the strategy formulation process as an activity of identifying opportunities and risks in accordance with the strategy, Mintzberg (2003).

The successful companies can effectively manage risk. Effective risk management can reduce investor uncertainty about the results of investments made (Ireland et al, 2008). Environmental changes that occur make companies use proactive risk management techniques, namely Enterprise Risk Management (ERM) which has become a major resource in developing risk management systems Choi et al., (2015); Mikes and Kaplan, 2014; Power, (2009). Risk management approach is still largely developing (Mikes and Kaplan, 2014). ERM is a systematic approach to risk management throughout the company to identify, assess, respond and report on opportunities and threats that affect the company in achieving its objectives. The purpose of ERM is to deal with company risks that integrate a variety of risks in the company, Barton et al., (2002). ERM has proven to be a momentum for companies to improve themselves by utilizing the global crisis, but the risks affecting various companies continue to increase and there will always be new risks, Golshan and Rasid (2012).

The quality of leaders in making decisions can determine the effectiveness of the implementation of risk management incompany, Lowell (2015). In addition, leadership is very important for organizational effectiveness, as the success of leadership affects the success of the team in terms of sharing knowledge and existing information, Zaccaro (2003). An effective leader is someone who knows how to inspire and connect with subordinates, increase employee motivation and loyalty to the organization, Alkahtani (2015). The ability of leaders to assess risk and make decisions to adopt the level of execution risk will determine the outcome of each group member and the effectiveness of the leader, Ertac and Gurdal (2012).

Employee empowerment largely depends on the ability of management to demonstrate a leadership that supports involvement and the creation of a safe environment, where employees feel comfortable in expressing opinions, even if it conflicts with management's opinions or existing procedures, Huang et al., (2010); Mantere and Vaara (2008); Moeller (2007). Making organizational culture has a significant factor in the implementation of ERM, Kimbrough and Componation (2009). Miccolis (2003), says that organizational culture and organizational layers are some of the obstacles in implementing ERM. Despite concerns about the influence of culture on ERM, no empirical evidence was found linking the organizational culture framework to the recognized application of ERM. Therefore, this research will link the framework, so that the implementation of ERM can gain useful insights into the nature of organizational culture related to ERM in the insurance industry.

The complexity of business transactions, technological advancements, globalization, speed in the product cycle and overall speed of change continues to increase the number and scale of risks faced by the company, Beasley and Frigo (2007). In many businesses today, information system is considered the most strategic investment capital and is important for the success of a company, both in information systems and information technology. Information systems on risk management, is important for all business activities as a continuous and forecasting process, Ikiao (2015). Every factor that changes the composition of risk will affect the expected company performance results, Kozak (2010). Advances information technology and telecommunications have enabled financial services

companies to provide efficient hedges and guarantees to manage risk, Novick (2014). The COSO framework shows that information and communication are one of the key elements in ERM.

This research will discuss about entrepreneurial leadership, organizational culture and information systems that can influence the implementation of risk management in one of the state-owned insurance company in Indonesia.Leadership can influence team success depends on existing knowledge and facilities, Zaccaro and Horn (2003).In addition, organizational culture is also one of the contextual factors that has an important role for the success of management in organizations other than leadership, Koompai 2010). However, research on organizational culture and ERM is still very limited, Thomya and Saenchaiyahon, (2015). ERM is also influenced by the development of increasingly developing information technology. As it is known that the COSO framework shows that information and communication are one of the key elements in ERM.

Entrepreneurial leadership

Leadership is complex and is influenced by a variety of relationships, situations, personalities, and additional factors in the realm of work, DeCaro (2005). Leadership as a process that can influence activities related to the work of group members. Barrow (1977), refers to leadership as a process of behavior influencing individuals or groups towards the goals set. Leadership can be considered to have a charismatic influence in inspiring others, Peterson and Seligman (2004). Effective leadership is a leader who is successful in implementing changes in the organization, especially during critical periods and unexpected changes in the external environment, Littrell and Valentin (2005). Leadership is often defined as the process of directing and influencing a group of people in an organization (Ivancevich et al., (2011). Entrepreneurial leadership is a style of leadership that can occur in a variety of sizes and types of organizations. According to Cunningham and Lischeron (1991), entrepreneurial leadership sets clear goals, creates opportunities and develops human resources. The effectiveness of national government risk management is largely driven by two latent variable factors good leadership and governance, Campbell (2013). The effect of leadership on performance results in a company can be seen directly in the decisions taken and actions taken by leaders, Cetin (2012). Therefore, entrepreneurial leaders are leaders who are able to recognize opportunities, create visions and mobilize key resources to establish visions and create value, Gupta et al., (2004); Ireland et al., (2003). There may be an impact of responses made through the implementation of a risk management process that can provide in shaping the character of leadership.

Organizational culture

The concept of organizational culture first emerged in the 1970s and 1980s, Hofstede (1981); Ouchi and Price, (1993); Pettigrew, (1979); Schwartz and Davis, (1981), and quickly became one of the factors that was not only the most influential but became a concept the most controversial in research and management practice, Crane (1995); Jarnagin and Slocum, (2007). Culture is considered as the soft side of an organization, Alvesson and Berg (1993); Alvesson (2002). Schein (1992), culture is one of the most powerful influences on decision making in an organization as well as in determining strategy. Organizational culture is a system that provides shared rules that govern aspects of membership in an organization as well as processes regarding individuals interacting in an organization, Kunda (1992). Organizational culture is the most effective factor in knowledge management and learning in organizations, but it can also be an obstacle in transferring knowledge, Rahgozar et al., (2012). Various theories of organizational culture have presented a number of measurements of organizational culture, Cooke and Rousseau, (1988); Xenikou and Furnham, 1996). Measurement of organizational culture focuses on values, whereas cultural definitions that focus to lead actions that focus on organizational creation, Harris and Ogbonna (1999). Specific measurement tools to measure organizational culture are known as Organizational Culture Assessment Instrument (OCAI). This measuring instrument consists of 24 statement items with 6 indicators. The six indicators are organizational leadership, employee management, organizational glue, strategic pressure points and organizational success criteria, Cameron and Quinn (2005). Based on a combination of the six organizational indicators, there are four typologies of organizational culture, clan, adhrocracy, bureaucracy and market.

Information system

Information system is a collection of data that are interconnected with each other to form a unity in integrating data, process and store data and distribute information that has been processed, Oetomo (2002). Information generated from data processing by the system must not only be accurate and fast, but also pay attention to the information needs of decision makers. Today many companies rely on information systems to obtain information to achieve their goals. The development of information systems requires a review to anticipate failures in the application of information systems development. Facing the risk due to the failure of the development of an information system that is the information system developed is not in accordance with what the company needs, the cost of developing information systems that cannot be predicted, and the development of information systems does not improve organizational performance. The development of information systems can produce qualified and highly relevant information both to improve company performance in managing risks from both business risk, operational risk and strategic risk. Information systems on the application of corporate risk management can be used to set risk management goals, identify risks, assess risks, establish measures to reduce risk, control risk and provide information about risk, Yegon (2015). Measurement of information systems support for a company's business processes usually uses the Objective for Information and Related Technology (COBIT) which is a collection of best practice documentation for IT Governance that can help auditors, users, and management, to see business risks, monitoring and IT technical problems, Sasongko (2009).

Implementation of risk management

Every activity in the company will always face risks that affect the company in achieving its goals. Environmental changes that occur making the company uses proactive risk management techniques, Enterprise Risk Management (ERM), which has become a major resource in developing a risk management system, Choi et al., (2015); Kaplan and Mikes, (2014); Power, (2009). Definition of Enterprise Risk Management (ERM) by COSO (2004) is a process, influenced by board of directors, management and other personnel, applied in setting strategy and across the enterprise, designed to identify potential events that may affect the company, and manage risk, to provide reasonable assurance of achieving the company's objectives. ERM talk about integration in three ways. First, ERM requires an integrated risk structure of the organization. Second, ERM requires the integration of strategy in the aspect of risk transfer. Third, ERM requires the integration of risk management for the company's business processes. Compared with the pattern of the defensive approach or control-oriented in addressing the lower limit of risk and earnings volatility, ERM optimize business performance by supporting and influencing the price, resource allocation and other business decisions.

Based on the literature review, the theoretical framework to determine the influence of characteristics of organization on the implementation of risk management as follows:

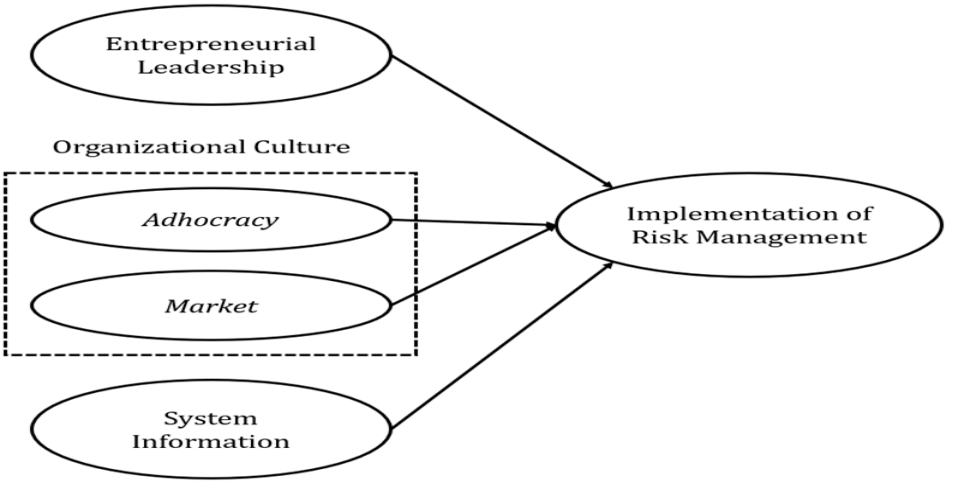

Figure 1. Research model

Research hypothesis

Entrepreneurial leadership and implementation of risk management

The role of the leader is very important in planning and developing strategies in a company, Yukl (2006). Strategy formulation is an important aspect of effective management, this is because the right strategy will provide superior performance results. The effectiveness of the risk management process is seen from the characteristics of leadership that are prudent, wise, have integrity, honesty and courage to acknowledge risks and uncertainties. Leaders have an important role in the responsibility of risk management. Entrepreneurial leadership is currently needed in a variety of large organizations. This is because, company carry out market analysis on an ongoing basis, restructure their operations and modify their business models, and learn the ways of thinking and acting that are the source of the company's competitive advantage, Ireland and Webb (2007). The effectiveness of national government risk management is largely driven by two latent variable factors good leadership and governance. This is because making decisions and taking action to manage risk is a continuous process that requires foresight and moral discipline in finding solutions rather than personal interests. The effect of leadership on performance results in a company can be seen directly in the decisions taken and actions taken by leaders, Çetin (2012). A leader is a risk bearer, on behalf of others. He not only has to direct people and monitor input, but also makes decisions in running his business. The success of leadership is determined by the level of employee involvement that inspires them to contribute to the successful achievement of company goals. The character can be taught through examples and increase responsibility in making good and right decisions, Kane and Patapan (2006). In this respect, we suggest that:

H_1. Entrepreneurial Leadership has a positive effect on the implementation of risk management.

Organizational culture and implementation of risk management

The culture in every organization will influence the decision making within the company, including in decisions that have risks and are full of uncertainties, House et al., (2004). Companies that have a risk culture prove that employees at the company understand the orientation of the strategy and the risks taken will be in accordance with applicable regulations in the company, Farrell and Hoon (2009). Strong leadership, commitment and involvement of all elements of the organization can change the way organizations behave and make decisions, Perrin (2009). Risk management must be successfully embedded into an organization when the beliefs and behaviour of the organization employees reflect risk understanding, risk awareness, and implementation of a risk management framework. The ability to apply risk management to an organization depends on the extent to which it is embedded in the organizational culture and decision-making management within the company (Risk and Insurance Management Society Inc., (2009). The elements of risk management have a significant relationship to organizational culture, Cooper et al., (2013).

Organizational culture has 4 (four) different types, clan, adhocracy, hierarchy, and market, Cameron and Quinn, (2005). Organizations that are dominated by a culture of hierarchy, leadership style shows an attitude of organizing, monitoring, coordinating and maintaining efficiency. Organizations that are dominated by market culture, managers provide direction, produce something, negotiate and motivate other employees. Organizations are dominated by clan culture and effective leaders are described as parent figures, team building, facilitators, mentors and supporters. Organizations are dominated by adhrocracy culture is a company that takes into the conditions of the company's external environment. In the current development of information, a new approach is needed to manage the company in the face of change. Companies that can survive, compete and grow sustainably are companies that can create and develop creativity and innovation. Thus:

H_{2a}: Organizational culture (*adhrocracy*) has a positive effect on the implementation of risk management

In addition, there is a market culture. Market culture is oriented to the external environment compared to the company's internal conditions. In this case the company has clear objectives and creates strategies in order to achieve productivity and increase company profitability. The implementation of risk management in looking at the external environment is very important, because

threats and risks can come from within and outside the company. This culture pays attention to productivity and profitability, where it is related to risk management, the higher the profit owned, the higher risk faced. Therefore, seeing how the influence of these two things is very important for the company's sustainability in facing competition. Thus:

H_{2b}: Organizational culture (*Market*) has a positive effect on the implementation of risk management.

Information system and implementation of risk management

Increasingly competitive competition in various business activities, making companies that have accurate information in management decision making are companies that have a competitive advantage. This is because, at this time information is very valuable for the company, Finne (2000). Therefore, companies must know valuable information and try to protect that information. The effectiveness of the implementation of risk management is influenced by the facilities that support in gathering accurate data about risk profiles, difficulties in measuring risks, appropriate infrastructure and the availability of clear policies on compliance with risk regulations, Watt (2008). Facilities that support one of them is an information system that can provide information quickly and accurately. Managing risk and information data is the key to the success of any risk management effort regardless of the size or industry sector of the organization. The capitalist system is always trapped in business risk because it needs a system that able to identify risks and control risks. The goal of implementing risk management is to reduce the different risks associated with the chosen field at a level acceptable to the company. This can be in the form of various types of threats caused by the environment, technology and so on. Based on previous research, this research will propose a hypothesis that reflects a causal relationship as follows:

$H_{3.}$ Information systems has a positive effect on the implementation of risk management

METHODS

Sample and data collection

The population in this study are employees who work at one of the state-owned insurance companies in Indonesia. The sample of respondents in this study was collected through a survey using purposive sampling. Purposive sampling technique is the most effective type of non-probability sampling to learn certain characteristics, Tongco (2007). The purposive sampling technique is done intentionally and accordance with all the sample requirements that will be needed.The unit of analysis is a level where data will be observed, it can be individuals, dyads, or organizational groups, Sekaran and Bougie (2010). In this study, questionnaires were distributed to employees, but after checking in completeness in filling out the questionnaire and seeing the qualifications of respondents who filled out the questionnaire selected 75 questionnaires.

Instrument

The primary tool used for data collection was questionnaires. The questionnaire has divided into five sections. In section 1 until section 4, the questionnaires using likert scale. Likert scale is a detailed rating scale that responders are given a scale that has a number associated with category, Malhotra and Peterson (2009). The categories are sorted according to scale position and respondents are asked to choose the specified category in order to properly describe the object being tested. The Likert scale was chosen because easy to understand and respondents were only asked to indicate the degree of agreement or disagreement with each of a series of statements regarding the object of research. The level of valuation with each of these aspects by responding on a five-point rating scale ranging from “strongly agree” (1) to “strongly disagree” (5).Section 1 is the entrepreneurial leadership measurement. Entrepreneurial leadership is a process that sets clear goals, creates opportunities and develops human resources by leaders. leaders not only can find opportunity, but also be able to arrange resources that have the potential to improve company performance. This study will use the item the question of research Ogbonna and Harris (2000), which uses 12 questions.Section 2 is the organizational culture measurement. Adopted from the work of Deshpande *et al*. (1993), Campbell and Freeman (1991) and Quinn (1988). Based on the adjustments to the research to be conducted

Organizational Culture Assessment Instrument (OCAI). In this research only using two typologies, Adhocracy and Market. Adhocracy culture focus on the external organization and differentiation that can survive, compete, and grow sustainably in creating creativity and innovation in taking risks. Market culture focused on working relationships and transactions.Section 3 is the information systems measures. Information systems a system consisting of procedures to provide information that can support corporate decision making and control, Lucas (1975). Plan and Organize (PO) IT contributions to the achievement of company goals. Acquire and Implement (AI) is the process of selecting the procurement and application of IT used. Deliver and Support (DS) is an IT service process and technical support. Monitor and Evaluate (ME) is the process of overseeing IT management in companies.Section 4 is the implementation of risk management measures. The instruments according to the regulation of the financial services authority number 1/PJOK.05/2015 on the implementation of risk management for non-bank financial services institutions. A key subset of questions based on five components of financial services authority rules, internal environment; objective setting; event identification, risk assessment, risk response and control activities; information and communication; and monitoring.Section 5 consists of basic demographic data, including gender, age, last education, length of work, level management and division.

Data analyst

In this study the method of collecting data obtained by distributing questionnaires. The first step is to conduct a wording test. This was done to find out the prospective respondents' understanding of the questions in the questionnaire. The recording test was carried out on 10 respondents. During the wording test, the respondent only reads every question and responds with a statement if the questions is difficult to understand or not. After doing the wording test, the next was pre-test. The pre-testwas proposed to test the quality of the research design through validity and reliability from the questionnaire. Validity test wasconducted on the instruments used in a study said to be able to measure exactly according to what was measured, Cooper and Schindler (2008). The validity test for pre-test used the factor analysis method. Factor analysis requires that the data matrix must have correlation, Ghozali and Fuad, (2005). Usually an instrument is said to be valid if the component matrix value is more than 0.5 Hair *et al.*, (2010). Reliability test is a tool used to determine the consistency of a research questionnaire to be used at different times, Malhotra (2004). Testing the reliability of the questionnaire by looking at the value of Cronbach's Alpha. Cronbach's Alpha value is greater or equal to 0.7, it can be said that the variable has good reliability, Hair *et al.*, (2010). Sekaran and Bougie, (2010) suggests the closer the 1.0 coefficient of reliability, the better an instrument.

This research used a quantitative approach by conducting surveys. Survey approach by distributing questionnaires to the sample of population. To find relationships between very complex variables, but the size of the sample data is small, in this research using Partial Least Square (PLS). PLS is a variance-based SEM analysis that can test measurement models and structural models simultaneously. The following are the stages of testing (1) Make a descriptive analysis to find out the number of samples by segmenting the profile of respondents. (2) Make a path diagram of PLS that explains the relationship between latent variables and indicators. Evaluation of PLS models can be done by assessing measurement models and structural models, Chin and Newsted (1999). Structural models of relationships between latent variables based on the theoretical basis. Model of Measurement of the relationship between each indicator with its latent variable. (3) Estimating parameters for the model created. Evaluating the goodness of fit on the model that has been built, Jaya and Sumertajaya (2008). Evaluating the measurement model with convergent validity, this test looks at reflective and formative indicators with their latent variables. The measurement of the most factor loading value is having a value greater than 0.5, Chin (1998). Next to do the discriminant validity test, this test is to see differences between variables by assessing the square root of average variance extracted (AVE) of each latent variable with the correlation between other latent variables in the model. If the root value of AVE latent variable is greater than the correlation with all other latent variables, then it is said to have good discriminant validity. Recommended AVE value should be> 0.50. Composite Reliability, an indicator that measures the consistency of latent variables. Latent variables are said to have good reliability if they have a composite reliability greater than or equal to 0.7. Goodness of fit models are

measured by R-Square endogenous latent variables with the same interpretation as regression. Q-Square predictive relevance for structural models, measuring the goodness of the observed values generated by the model and estimating its parameters. The quantity of Q2 has a value with a range of 0 <Q2 <1, the closer to 1 (one), the better the model. The hypothesis used is H_0 there is no relationship between variables, while H_1 there is a relationship between variables. The criterion for rejecting the initial hypothesis is that the significance level is below 5% or the t-value exceeds the critical value of 1.96.

RESULT AND DISCUSSION

Descriptive analysis

The following data is a description of respondents based on the results of a research survey in one of the state-owned insurance companies in Indonesia. Descriptive analysis begins with the profile of respondents, which is used to determine the characteristics of individuals who are the object of research. Profile of respondents in this study consisted of grouping based on gender, age, last education, length of work, level of management and division. Based on the gender, male respondents were 34persons (45.3%) and female respondents were 41 persons (54.7%).Based on the age, "under 25 years" were 13respondents (17.3%), "between 26 years to 30 years" were 23respondents(30.7%), "between 31 years to 40 years" were 19respondents(25.3%), "between 41 years to 55 years" were 20respondents (26.7%).Based on the latest education, respondents who graduated from diploma (D3) were 8persons(10.7%), respondents with bachelor's degree (S1) were 58persons(77.3%), and respondents with magister degree (S2) were 9 persons(12.0%).

Based on the length of work, less than 3 years 23respondents (30.7%), between 3 to 5 years were24 respondents (32.0%), between 5 to 10 years were 14respondents (18.7%), more than 10 years were 14respondents (18.7%).Based on the level of management, from top management were 8respondents (10.7%), middle management were 20respondents (26.7%) and lower management were 47respondents (62.7%).Based on the division, respondents from financial division were 9 persons(12.0%), from Kredit Usaha Rakyat (KUR) division were 20 persons(26.7%), from risk management and compliance (MRK) division were 10 persons(13.3%), from suretyship marketing division were 5 persons(6.7%), from reinsurance division were 13 persons, from internal control unit (SPI) division were 13 persons (17.3%), from underwriting division were 5 persons (6.7%).

Pls path diagram

The path diagram in the Partial Least Square is a model that developed from the theory described in the literature review. In this study there are 3 exogenous latent variables, there are entrepreneurial leadership, organizational culture and information systems, and endogenous latent variables is the implementation of risk management. The entrepreneurial leadership variable (K) has 11 indicators. Organizational culture variables (B) have 2 measurements, adhrocracy and market. This measurement directly looks at the relationship between adhrocracy culture to the implementation of risk management, as well as the market culture that directly sees the relationship with the implementation of risk management. In this study using 6 (six) indicators of culture adhrocracy and 4 indicators of market culture. Information system variable (S) has 4 dimensions, plan and organize; acquire and implement, deliver and support, and monitor and evaluate, each dimension has 4 indicators, except monitor and evaluate has 3 indicators. The variable implementation of risk management (MR) has 5 dimensions, leader supervision, policies and procedures, process adequacy, information systems and control systems, the leader supervision dimension has 5 indicators, others have 4 indicators. Before using PLS method, this study conducted pre-test. The results from pre-test, in entrepreneurial leadership variable there is one indicator was not valid, in market culture there are two indicators were not valid, and in information systems there are one indicator was not valid and cannot be used to further analysis. The next step, after pre-test, evaluation goodness of fit using PLS models. Evaluation of PLS models can be done by assessing measurement models and structural models, Chin and Newsted (1999).

Evaluation of measurement model

Evaluation of the measurement model is carried out on each latent variable. This is done by testing the validity and reliability of variables. The size of an indicator is valid if it has a factor loading value with a latent variable that wants to be measured greater than 0.5 and AVE greater than 0.5. Furthermore, a dimension is said to be quite consistent if the dimension has a composite reliability value greater than 0.7, Chin, (1998); Chin (2010); Hair et al., (2010).

Table 1. Validity and reliability test for pls

Variable	Measurement model	Indicator	Loading Factor	AVE	Composite Reliability
Entrepreneurial Leadership	Entrepreneurial Leadership	K1	0.636	0.5795	0.9006
		K2	0.693		
		K3	0.577		
		K4	0.793		
		K5	0.679		
		K6	0.656		
		K7	0.751		
		K8	0.769		
		K11	0.799		
		K12	0.512		
Profesional Organizational Culture	Adhrocracy	A1	0.908	0.7393	0.9443
		A2	0.879		
		A3	0.881		
		A4	0.828		
		A5	0.770		
		A6	0.886		
	Market	M1	0.769	0.6127	0.8633
		M2	0.798		
		M5	0.731		
		M6	0.830		
Information System	Plan and Organize	PO1	0.836	0.7636	0.9281
		PO2	0.901		
		PO3	0.884		
		PO4	0.873		
	Acquire and Implement	AI1	0.879	0.7603	0.9269
		AI2	0.855		
		AI3	0.891		
		AI4	0.862		
	Deliver and Support	DS1	0.894	0.7381	0.9185
		DS2	0.838		
		DS3	0.844		
		DS4	0.860		
	Monitor and Evaluate	ME1	0.853	0.7890	0.9181
		ME2	0.915		
		ME3	0.896		

Based on Table 1 shows that validity and reliability test from PLS model, after discarding indicators that are declared invalid based on loading factors whose value is smaller than 0.5, it can be seen that the loading factor values for the constructs of entrepreneurial leadership, adhrocracy culture, market, plan and organize, acquire and implement, deliver and support, monitor and evaluate have loading factor is greater than 0.5 and AVE value is greater than 0.5 then the indicator is valid. While reliability based on composite reliability has a value greater than 0.7, it can be concluded that the construct is reliable.The implementation of risk management variable which has the dimensions of leader supervision, policies and procedures, the adequacy of the process, information systems and

control systems have a formative construct so the validity of the indicators seen from the significance of the weight.

Table 2 Validity and reliability implementation of risk management variable

Variable	Original Sample (O)	T-Statistics
PP1<- PP	0.2206	29.7767
PP2<- PP	0.2109	19.0401
PP3<- PP	0.2168	25.1025
PP4<- PP	0.2319	34.1833
PP5- PP	0.2277	27.8471
KNP1<- KNP	0.2762	37.2633
KNP2<- KNP	0.2683	30.1929
KNP3<- KNP	0.2689	30.4898
KNP4<- KNP	0.2655	29.19
KP1<-KP	0.2631	19.3512
KP2<-KP	0.2814	30.0904
KP3<-KP	0.2784	24.4232
KP4<-KP	0.2908	24.2188
SI1<-SI	0.273	9.2879
SI2<-SI	0.253	8.041
SI3<-SI	0.3242	8.8383
SI4<-SI	0.3735	6.3109
SPI1<-SP	0.3161	11.4379
SPI2<-SP	0.2662	9.7008
SPI3<-SP	0.3065	8.3821
SPI4<-SP	0.2819	12.9512

Based on Table 2 the resulting t-statistics values are greater than 1.96 with a significance level of 5%. Therefore, it can be concluded that the indicators in the construct implementation of risk management are valid.

Evaluation of structural model

Structural model can be evaluated by looking at the R-square value on endogenous latent variables.

Table 3. R-*square* value latent variable

Latent Variable	*R-Square*
Entrepreneurial Leadership	0
Adhocracy	0
Market	0
Information Systems	0
Implementation of Risk Management	0.5731

Based on Table 3 shows that the R-square value of implementation risk management 57.31%,the diversity of the implementation of risk management is quite well explained by entrepreneurial leadership, adhrocracy culture, market culture and information system by 57.31% the remaining 42.69% is explained by other variables outside the model. R-square results which have a value of 30% -67% can already show that the model is good enough, Chin (1998). The structural model goodness of fit test can be seen from the following values:

Q^2 = 1-(1-0.5731) = 0.4269

The Q^2 values larger than zero for a specific reflective endogenous latent variable indicate the path model's predictive relevance for a particular dependent construct, Hair et al., (2017). The results of the evaluation of the measurement model and structural model show that the model is good enough, so that the research model can be declared valid and reliable.

Hypothesis testing

The results of hypothesis testing for structural models can be seen in Table 4

Table 4. Hypothesis testing results

Causality Relationship (direct influence)	Path Coefficient	T-Statistics
Entrepreneurial Leadership ->Implementation of Risk Management	0.4826	2.4898
Adhocracy Culture->Implementation of Risk Management	0.2763	2.1647
Market Culture->Implementation of Risk Management	0.3273	1.9741
Information Systems -> Implementation of Risk Management	0.5871	2.259

Based on the results in Table 4, it can be seen that entrepreneurial leadership, adhrocracy culture, market culture and information systems have t-statistics values greater than 1.96. This shows that there is a relationship between entrepreneurial leadership and the implementation of risk management, the relationship between adhrocracy culture and the implementation of risk management, the relationship between the market culture towards to implementation of risk management, the relationship between the information systems and the implementation of risk management has a significant influence.

The effect of entrepreneurial leadership on the implementation of risk management

Based on the results of hypothesis testing in Table 4 shows the influence of entrepreneurial leadership on the implementation of risk management. The application of more effective risk management can be obtained by increasing response, adaptation, and speed in mitigating risk, Juul Andersen (2009). This can be said that the company is very involved employees in making decisions and see things that can affect the company. The companies in facing business developments that can threaten the company sustainability to mitigate risk. In the implementation of risk management, for example, to carry out a risk identification process requires good communication from a leader to explore information on the potential risks of each process carried out by each employee. Therefore, company can conduct refreshing awareness and regular training at all levels of management in order to understand the risks faced by the company and know the actions that can be taken to prevent and make improvements if it has occurred. A leader who has innovation and creative thinking is a figure that is needed, entrepreneurial leadership. The risk management process, if carried out effectively, can be a sign of leadership character by showing caution, wisdom, integrity, honesty, and even the courage to acknowledge and take actions that have a high level of risk or uncertainty, Campbell (2013). There may be an impact of responses made through the implementation of a risk management process that can provide assistance in shaping the character of leadership.

The effect of organizational culture on the implementation of risk management

Based on the results of hypothesis testing in Table 4 shows the influence of organizational culture by outlining the culture of adhrocracy and market culture on the implementation of risk management. The company that can survive, compete and grow sustainably are company that can create and develop creativity and innovation. Every member of the organization is challenged to innovate and to take risks. Commitment to experimentation and thinking differently are values that unite members of the organization. The company must always pay attention to the company's external environment. Based on the previous description, organizational culture tends to then influence both business processes and decision making, influencing both employee perceptions and behaviour. Therefore, organizational culture has an influence on the implementation of risk management.

Effect of information system on the implementation of risk management

Based on the results of hypothesis testing in Table 4 shows the influence of information systems on the implementation of risk management. Information systems are useful in capturing information, conveying information, creating information, storing information and communicating information so that the information system can help managers in planning, coordinating, monitoring, investigating,

evaluating, which in turn can improve managerial performance, Haag and Cummings (1998). The development of information systems can produceinformation with good quality and is very relevant both to improve company performance in managing risk from both business risk, operational risk and strategic risk.

Information used as consideration in decision making must be presented quickly and accurately. Generally, the levels of the company in decision making from three levels, top management (TM), middle management (MM) and lower management (LM). Top management makes strategic decisions for long-term needs and to achieve company targets. Meanwhile, middle management does its job as a translator of strategic targets set for the medium-term period and ensures its implementation is effective and efficient. Finally, lower management ensures that daily operations are in accordance with predetermined short-term procedures and targets. However, all levels of decision making will not be useful, if not supported by adequate information. The development of the system makes the company can easily and quickly access data and information for decision making. The quality decisions for existing strategies will increase company excellence with quality data that is processed into information.

CONCLUSION

This research empirically provides input on the influence of entrepreneurial leadership, organizational culture and information systems in influencing the implementation of risk management in one of the state-owned insurance company in Indonesia. The results of the study based on primary data that have been processed show that entrepreneurial leadership influences the implementation of risk management. Entrepreneurial leadership is very important for company effectiveness. Successful leadership can influence team depends on existing knowledge and facilities, Zaccaro and Horn (2003). In addition, organizational culture is also one of the contextual factors that has an important role for the success of the company besides leadership, Koompai (2010). The organizational culture in this study focuses on the culture of the external organization which makes the company professional in carrying out its business activities. Organizational culture that is focused in this research is adhrocracy culture and market culture. The results of this study indicate that adhrocracy culture and market culture influence the implementation of risk management. The implementation of risk management is also influenced by the development of an increasingly developed information system. As it is known that the COSO framework (2004), shows that information and communication are one of the key elements in the implementation of risk management. The results of this study indicate that the information system influences the implementation of risk management. This shows that the company already has special attention to the development of information systems to improve the implementation of risk management.

Implication

Leaders who lead with clear goals, create and provide opportunities are always made employees to get involved in decision making in improving company performance. A leader who invites and motivates employees to get up together is a leader figure needed in company. Leaders who motivate and lead to change are leaders who can provide an understanding of risk management. The results of this study indicate that leaders who provide clear procedures and treat employees fairly can improve the implementation of risk management in the company. A successful company is a company that can adapt and respond to changes in the environment. The company's external environment is very important to be maintained in maintaining competitive advantage. Organizational culture that focuses on the external environment is adhrocracy culture and market culture. Adhrocracy culture makes the company think about the continuation of the company in dealing with existing risks. Whereas market culture focuses on results that companies expect to have a competitive advantage to survive in the competitive industry. This can be seen from the results of research which states that market culture influences the implementation of risk management and the adhrocracy culture influences the implementation of risk management. In companies, innovation must be considered that companies need to increase competitive advantage in the face of competition. This can make the company achieve its goals efficiently and effectively. In addition to the external environment, companies must also pay

attention to the development of the current information system. This is because fast and accurate information is needed now. In addition, information is very important for the implementation of risk management.

Limitation and future research

Some limitations in this study are only applies to one of the state-owned insurance company in Indonesia.In addition, this study does not use a sampling method using structured stratification in the selection of respondents. This can cause a respondent bias because the selection of respondents who did not do a selection of the level of management in the company because of questions that are difficult to be answered by lower management. This study is also limited to researching the one-way relationship between one variable and another. However, this does not close the relationship between other variables in the application of the field that influence each other.

Further research is suggested to stratify the management level when distributing questionnaires in order to be able to distinguish opinions from each level of management. In addition, the respondents involved were not only from one company, but also from several companies with the same industry or other industries in Indonesia. The variables used can also be added with knowledge management variables or knowledge management and learning management learning management. This is because organizational culture has an influence on knowledge management and learning in organizations (Rahgozar et al., 2012). Therefore, this addition can be a theory development for organizational culture that influences the implementation of risk management.

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