Effect of Intellectual Capital on Organizational Performance Moderated by Cultural

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Abstract

This study analyzes Organizational Performance which is the influenced by intellectual Capital moderated by culture. The method used in this research is by surveying and distributing questionnaires based on the time horizon using a cross section study. The population manufacturing companies in MM2100 area using convenience sampling. Regression analysis and inferential statistics, descriptive statistics is used by data analysis technique. The intellectual shows positive and significant impact on organizational performance and cultural as a moderating effect in this results. This research imply that by increasing intellectual and cultural Capital will be more effective on improving organizational performance.

Keywords

Intellectual Capital, Organizational Performance and Cultural.

Introduction

The potential for business success depends on organizational performance in implementing strategies to achieve institutional goals (Farouk at. Al, 2016). Organizational performance is a description of the work of an organization in achieving its goals (Burridge at. Al, 2008). Organizational performance can also be interpreted as the success of personnel, teams or organizations in realizing predetermined strategic goals (Carmeli, & Tishler, 2004). Organizational performance is largely eggendent on the skill level of its leaders in implementing strategy. The essence of leadership is the establishment of a good relationship between superiors and subordinates.

In an organization there are always obstacles to achieving its goals (Kontoghiorghes, 2016). Organizational performance also depends on employees who are an important part of achieving organizational goals. This concept of leadership is often included in the context of virtual teams (Fores, & Camison 2016).

One of the factors that affect the organization is the intellectual Capital which is one of the important assets in a knowledge-based economy (Bontis, Keow, & Richardson, 2000). In addition, the incorporation of intangible assets is also known as intellectual capital - markets, intellectual property, people and infrastructure to enable companies to carry out their functions (De Pablos, 2003). The developed intellectual Capital is divided into two groups, namely non-monetary (non-financial) measuremets and monetary measurements (Abeysekera, 2007). Intellectual capital can be characterized by utilizing intangible resources efficiently according to the knowledge of resources and capabilities combined with real Capital and generating added value for the organization (Edvinsson & Sullivan, 1996; Bontis, 2001).

The next factor is cultural. Culture is a collective thought program that differentiates members of one group (Muhammad at. Al, 2012). Organizational culture can also be defined as the philosophy that underlies organizational policies, rules of the game for association, and feelings brought about by the physical preparation of the organization (Linnenluecke & Griffiths, 2010). Another opinion also explains that Organizational culture is a guideline for achieving organizational goals that directs employees to behave, provides direction and action in making decisions. (Ravasi, & Schultz, 2006). Organizational culture elements include values, beliefs, basic principles, and management practices (Carmeli, & Tishler, 2004).

Studies on intellectual Capital, organizational performance, and cultural relationships have been widely researched (Petty, & Guthrie, 2000; Guthrie, & Petty, 2000; Richard, Devinney, & Johnson, 2009; Lesser, & Storck, 2001; Linnenluecke, MK, & Griffiths, A. (2010). Previous research generally explained two variables, not all variables were studied together. Therefore, this study aims to determine organizational performance that is influenced by culturally moderated Intellectual Capital. Policy makers in developing organizational performance can also use this research as input.

Research Methods

The data collection method used in this research was survey and questionnaire distribution based on the time horizon using a cross section study. The population in this study were all 173 manufacturing companies in the MM2100 area. Taking the sample using convenience sampling, so that the sample in this study 173 manufacturing companies in the MM2100 area. Samples were taken using convenience sampling, namely the presence of elements and easy to obtain. At the right place and time, this sample was selected

Measuring the level of *intellectual Capital* uses measurement indicators (Lin & Edvinsson, 2013) of human, market, process and renewal Capital, then the measurement of human Capital is developed, namely structural Capital and relational Capital (Bontis, 2013). To measure the level of *organizational performance* using measurement indicators of output quality (product / Service), implementation of introductionl of new products / Services, new procedures or practices, operating efficiency, operating effectiveness and level of customer satisfaction (Walker & Boyne, 2006; Griffin et al. , 2007; Baker & Sinkula, 1999; Nuhu, 2016). Meanwhile, to measure the *cultural* level using measurement indicators from (Hofstede, 2010), namely avoidance of uncertainty, distance of power, individualism versus collectivism, femininity versus masculinity, short-term versus long-term orientation, indulgence versus restraint and technological modernization.

This analyzed using descriptive statistics and inferential statistics. This study uses a 5-point Likert scale scoring system to analyze the data that has been collected from strongly disagree (1) to strongly agree (5) by giving a score or value to get interval data. The research model as shown in Figure 1 uses the multiple regression hypothesis Moderate Regression Analysis (MRA) through validity and reliability tests.

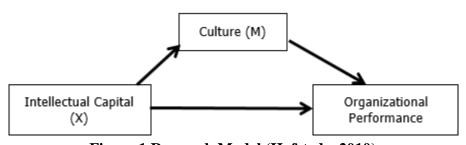


Figure 1 Research Model (Hofstede, 2010)

Results and Discussion

OverView of Intellectual Capital, Organizational Performance and Cultural Levels

The level of organizational performance in this study is an independen! variable, while the level of intellectual Capital and cultural is the dependent variable. The results were obtained based on the overall organizational performance statement consisting of 31

statements, intellectual Capital consisting of 6 statemengand cultural consisting of 35 statements. In detail, the scores for each variable can be seen in Table 1 and Table 2.

Table 1 Score of Intellectual Capital, Organizational Performance, and Cultural Level.

SCORE								
Total Items	Very disagree	Disagree	Doubt	Agree	Strongly Agree	Score total		
Score Of Intellectual capital level								
31	248	992	2976	4960	11935	21111		
Organizational Performance Level								
6	72	240	180	1104	2550	4146		
Culture Level Score								
35	525	700	4725	4480	12425	22855		

Source: Informant statement

Table 2 Category of Intellectual Capital, Organizational Performance and Cultural Level

Category	Range				
Category of Intellectual Capital Level					
High	>20766				
Medium	18373 - 20766				
Low	< 18373				
Category Organizational Performance Level					
High	>4087				
Medium	3262-4087				
Low	<3262				
Culture Level Category					
High	>2009				
Medium	1794-2009				
Low	< 1794				

Source: Informant statement

Based on Table 1 and Table 2, this shows that the level of Intellectual Capital is included in the high-level category with a range of 21111. This category shows that employees have human, process, market and renewal Capital and structural and relational Capital. In addition, Tables 1 and 2 show that the level of organizational performance is in the high category gith a total score of 4146. In this category, employees get quality output (products/services), new practices or procedures, introduction of new products / Services, operation efficiency, operation effectiveness and customer satisfaction level. Finally, Tables 1 and 2 show that the cultural level is in the high category with a total score of 22855. In this category, In this category it is shown that students have a cultural level such as the measurement indicator from (Hofstede, 2010).

MRA Statistical Analysis Test Results

Table 3 Results of the Regression Equation on the Effect of Intellectual Capital on Organizational Performance

Model	R	\mathbb{R}^2	В	Std.Eror	eta	(F)t	P
Model 1	0.427	0.303				(161.524	
Constant			12.120	1.821		7.241	0.000
Intellectual Capital (X)			0.541	0.0471	0.524	11.167	.000

Source: Informant statement

Table 4 Intellectual Capital and Organizational Performance (Results of Hierarchical Regression Effects of Cultural Moderation)

Model	(RP)	R ² (Adjusted R ²)	R ² Change (P)	В	td.Eror	Beta	(F) t	P
Model 1 _0	0.6561 (0.000)	0.415 (0.557)	0.471 (0.000)				(105.514)	
Constant				11.148	0.149		5.188	0.000
X				0.506	0.057	0.493	8.902	0.000
Mi				0.317	0.068	0.259	4.676	0.000
Model 2	0.694 (0.041)	0.483 (0.475)	0.492 (0.041)				(105.006)	
Constant				12.487	0.681		1.380	0.019
X				0.411	0.223	0.509	2.341	0.020
Mi				0.222	0.232	0.273	1.434	0.023
X*Mi				0.103	0.216	0.226	1.974	0.041

Source: Informant statement

Based on Table 3, it can be seen that the regression equation 1 obtained in this study is

$$Y = 12.120 + 0.541X$$

Based on this equation, it can be seen that:

- 1. A constant of 12,120 States that when the intellectual Capital variable is 0, the employee's organizational performance is 12,120.
- 2. The regression coefficient for the intellectual Capital variable is 0.541 in a positive direction, meaning that every addition in the value of the intellectual Capital variable will cause an increase in the organizational performance variable.

The coefficient of determination (R2) is used to see the magnitude of the influence together with the exogenous variables in the analyzed model is 0.303, which means that 30.3% of intellectual variables have an influence on organizational performance variables,

while 69.70 are variables outside of this study. Based on Table 4 it can be seen that the regression equation 2 obtained in this study is,

$$Y = 12.487 + 0.411X + 0.222M2 + 0.103XM2$$

Based on this equation, it can be seen that:

- 1. A constant of 12,487 States that when the intellectual Capital variable is 0, the student organizational performance is 12,487.
- 2. The regression coefficient for the intellectual Capital variable is 0.411X in a positive direction, meaning that every addition in the value of the intellectual Capital variable will cause an increase in the organizational performance variable.
- 3. The regression coefficient for the cultural variables is 0.222 with a positive direction, meaning that any added value to the cultural variable will cause an increase in organizational performance variables.

The regression coefficient for the moderating variable or the result of the interaction between intellectual and cultural Capital is 0.103 in a positive direction, meaning that any increase in the value of the mediating variable will cause an increase in organizational performance variables.

The Influence of *Intellectual Capital* on Organizational Performance

The results of this study indicate that intellectual Capital affects organizational performance in line with the results of research which states that countries with dense industries are predicted to be winners in wealth creation in the future (Bounfour & Edvinsson. 2004). Because in practice, Indonesia is still in the process of developing, so that many developed countries still have solid knowledge. Organizational performance is the result that the organization wants from the behavior of the people in it (Richard, Devinney, Yip, & Johnson, 2009).

The way that must be done to improve organizational performance is to motivate employees to be willing and able to maximize production and always communicate. Apart from that, also by increasing intellectual Capital. Intellectual capital is used to generate higher value assets through materials that have been compiled and captured (Ulum, Rizqiyah, & Jati, 2016). Because Intellectual Capital can be used to create wealth through information, knowledge, intellectual property and experience (Martinez and Garcia-Meca, 2005). This intellectual Capital consists of components of human, structural and customer Capital (Edvinsson and Malone, 1997).

Cultural can Moderate the Influence of Intellectual Capital on Organizational Performance

The research findings show that *intellectual Capital* has a positive and significant influence *organizational performance* and cultural mediates the influence of both. The results of this study are in accordance with the research conducted by Ling (2013) and Ling (2011). *Intellectual Capital* in economic theories has different definitions Therefore, the only most neutral definition is a debate about "the intangible assets in the economy and Capital assumptions that create intellectual property (Bontis, 2001). In addition, culture can influence decision making as a psychological factor in (Salter, 2012 system State financial reporting (Zarzeski, 1996), the concept of leadership (House et al., 2004) and how resources are allocated (Stulz and Williamson, 2003).

Conclusion

Based on the results of analysis and data processing, it is concluded that the level of intellectual Capital, organizational performance, and culture is in the very high category. Intellectual Capital has a positive and significant effect on the results of this study on organizational performance is proven true and culture is able to strengthen the relationship between the two. This shows that the level of intellectual Capital and culture will better affect organizational performance, so that intellectual and cultural Capital skills need to be improved.

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