

Original Article

# Business Performance: Impact of Intellectual Capital and Knowledge Management

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**Abstract** - This study aims to analyze: 1) the impact of intellectual capital on business performance; and 2) the impact of knowledge management on business performance. This research is causative research, which is research that aims to see how far the independent variables affect the dependent variable. The population of this research is banks' employees in Padang. Research respondents are bank employees who have a structural position and have been working for more than 5 years. The number of respondents is 63 people. Data was collected through questionnaires. The data were analyzed by using multiple linear regression with the help of SPSS version 24 to determine the effect of the independent variables. The results of this research indicate that: 1) intellectual capital has a positive and significant impact on business performance, and 2) knowledge management has a positive and significant impact on business performance. The R squared value is 0,598, which means that both independent variables affect the independent variable up to 59.8%, whereas the rest, 40.2%, is determined by other factors not examined in this research.

**Keywords** - Business performance, Intellectual capital, Knowledge management

## I. INTRODUCTION

Banking development in Indonesia shows the indication that the economy moves better every year. In recent years, Indonesia has been the fourth investment destination in the world after India, Japan, and China, with the investments that are mostly made in the banking industry. The results of a survey conducted by the *United Nations Conference on Trade and Development (UNCTAD) in the World Investment Report, Investment, and the Digital Economy* revealed that foreign direct investment for Indonesia globally increased by 5% to the US \$1.8 trillion in 2017. The high level of investment coming in Indonesia in early 2017 placed Indonesia in the fourth position of world investment destination, with the investment value for the banking sector reaching 20.1% during 2016 [1].

A bank is a company of which the main orientation is based on the principle of trust. Even

banks can be a kind of clearinghouse because of anything transaction that customers do through the banks. For this reason, banks are also required to be able to adapt themselves to current development and advances in information technology which will provide more value in the banking sector[2]. In the past era, the economy depended on resources such as land, natural resources, equipment, and capital to create value. Then, in the millennium era, the economy depends on knowledge that has more value than physical assets for organizations.

A knowledge-based business is a business that is run by utilizing more intellectual capital. According to Gutrie[3], all intangible or non-physical assets and resources of an organization, which include process, the capacity of innovation, patterns, and knowledge that are not visible to its members and collaboration networks and organizational relations, are known as part of intellectual capital. Several results of studies revealed that IC was crucial and influenced business performance, company value-added, organizational effectiveness, competitiveness, and created [4 - 11] .

Not only does intellectual capital or knowledge-based business, but knowledge management also has an important role in influencing the success of an organization. The role of knowledge management in an organization becomes a device to facilitate better interaction through the availability of information flow so that it becomes a learning organization. This is stated by [12] that the role of knowledge management is increasingly important in an organization because it can be a device to facilitate better interaction through the availability of information flow, which is good to be a learning organization.

Intellectual capital and knowledge management have important roles in various activities, both strategic and operational activities, in a company. However, the important roles of intellectual capital and knowledge management are not widely known and identified. Attention to the development of intellectual capital has not been a priority, even though intellectual capital is the substance of the good and bad performance of an organization in the long run. Therefore, the



development of intellectual capital must be a concern for the development of an organization in the future.

In Indonesia, studies related to the integration of intellectual capital and knowledge management are still relatively rare, especially on the performance of banking companies.

So far, there have not been clear directions on how to develop intellectual capital or how management planning and control processes are to ensure that the stock of intellectual capital grows or at least is maintained [13]. For the development of effective and efficient intellectual capital in banks, a proper development model is needed amongst each component of intellectual capital (human capital, structural capital, and customer capital), and how the banks implement the principles of knowledge management is expected to improve the performance of Indonesian banks.

## II. LITERATURE REVIEW

### A. Business Performance

The measurement of success of the business performance is not only seen from the financial performance but also from the company's position amongst its competitors, employee productivity, and consumers' view on the company. According to [14], performance is the result of achievement in a certain period. To accomplish good performance, positive efforts need to be made to achieve it. Likewise, in a company, if the company conducts its business activities well, it will achieve good business performance. Business performance has a broad scope. In terms of time, business performance can be divided into long-term and short-term. Short-term performance is measured within a company's accounting period.

Business performance that was examined in this study is business performance seen from the perceptions of leaders on the structural position of banks while still referring to indicators of profitability, productivity, and market value [15].

### B. Intellectual Capital

The definition of intellectual capital (IC) in Indonesia has indirectly alluded to PSAK No. 19 revised 2000 (The Institute of Indonesia Chartered Accountants, 2012) concerning intangible assets. Intangible assets are defined as non-monetary assets that can be identified and have no physical form. According to Bontis [16], intellectual capital is knowledge inherent in marketing channels and customer relationships developed by an organization through the running of a business. [17] state that IC can relate to other disciplines such as corporate strategy and the production of measurement tools. From a strategic perspective, IC can be used to create and use knowledge to expand other companies. On the other hand, the measurement side focuses on how a new reporting mechanism developed, that is, the mechanism that measured non-financial, qualitative

information, and IC items in addition to being traditional that can be quantified from financial data. [18]

From some of the opinions of the experts above-mentioned, it concluded that intellectual capital is one of the assets for a company informing the personality and character of employees so that it can be the basis for generating an efficient organization. Basically, The ability of company management to manage existing resources can be the basis for the creation of intellectual capital. Intellectual capital is a company described through the dimensions of human capital, structural capital and relational capital.

### C. Knowledge Management

Knowledge management had been evolving as a body of knowledge after the economic era [19]. Humans, in the context of knowledge management, are a source of knowledge, innovation, and renewal. Humans are intangible resources that are believed to develop knowledge. That is, the better knowledge received by humans are, the better new knowledge will be created [20]. Knowledge management is defined as the experience and understanding of individuals that can be communicated and shared [21]. Therefore, it has been suggested that knowledge residing in individual employees in the form of tacit knowledge plays an important role in facilitating the growth of knowledge to increase value. The knowledge is then maintained and retained to be acquired and utilized extensively for the development of the organization. [22] Knowledge is the real nerve of today's organizations and a purposeful and contemporary administrative means to adapt to the requirements of the times. [23] mentions the cycle that becomes the main process in knowledge management: knowledge creation, knowledge retention, knowledge sharing, and knowledge utilization.

## III. RESULTS AND DISCUSSION

In analyzing the data, the validity and reliability of research instruments were first tested. In the validity test, 12 indicators had to be excluded from the data because the value of the indicators was lower than 0.36. The indicators excluded were HC4, SC5, SC6, SC7, RC1, RC5, KM9, BF3, BF5, BF7, BF8, and BF10. After testing the validity, then the reliability test was carried out. The reliability test result showed that the value of each research variable was higher than 0.70. After the data had passed the

validity and reliability tests, the data normality test was carried out to find out whether the data were normally distributed or not. The assumption test conducted in this study was the normality test within-parametric One-sample Kolmogorov-Smirnov Test. In the data normality test, Standardized Residual Sig. was  $0.200 > 0.05$ , meaning that the variables in this regression model had a normal data distribution.

Then, the model testing was done by carrying out F-test to find out whether knowledge management and intellectual capital (consisting of human capital, structural capital, and customer capital) could affect company performance, and the model developed in this study was worth examining. The F-test results using Anova analysis can be seen in Table 1 below:

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.630	2	6.315	44.682	.000 <sup>b</sup>
	Residual	8.480	60	.141		
	Total	21.110	62			
a. Dependent Variable: BF						
b. Predictors: (Constant), IC, KM						

Source: Primary Data Processed in 2019

From the F-test results presented in Table 1 above, it can be seen that F-value was 44.682 with sig. value of  $0.000 < 0.05$ . It means that the F-test carried out proved that knowledge management and intellectual capital, simultaneously, had a significant effect on banking companies' performance.

The results of the F-test carried out in this study revealed that the research model was accepted. Then, it could be proceeded with hypothesis testing using the t-test. The results of hypothesis testing can be seen in Table 2.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
		1	(Constant)	.482		
	KM	.400	.135	.382	2.959	.004
	IC	.471	.138	.440	3.408	.001
a. Dependent Variable: BF						

Source: Primary Data Processed in 2019

Table 2 shows that knowledge management had a positive and significant effect on the performance of banking companies in West Sumatra with sig.  $0.004 < 0.05$ . This means that the

first hypothesis of this study could be accepted, meaning that knowledge management in banking companies, if managed properly, will provide a positive and significant effect on the improvement of company performance. The results of this study indicate that differences in the knowledge possessed by employees can be managed and developed by companies. These differences in knowledge, when put together in a system, will generate good synergy in the company's work environment.

The second hypothesis in this study was also accepted. Based on Table 2, the value of sig. IC was  $0.001 < 0.05$ , meaning that intellectual capital had a significant effect on the performance of banking companies in West Sumatra. It indicates that intellectual capital (consisting of human capital, structural capital and relational capital) if managed properly by a company, can improve company performance. This result, in line with [24] intellectual capital, is considered as an indispensable factor of organizational differentiation, which comprises a series of elements that decisively influence business performance since it constitutes the central axis of competitive advantage

The size of the effect of knowledge management and intellectual capital on banking companies' performance can be seen in Table 3 below:

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.773 <sup>a</sup>	.598	.585	.37594
a. Predictors: (Constant), IC, KM				
b. Dependent Variable: BF				

Source: Primary Data Processed in 2019

As is seen in Table 3 above, the value of the adjusted R-squared was 0.598. This indicates that the contribution of the independent variables to the dependent variable was 59.8%, while 40.2% was determined by other factors not examined in this study.

#### IV. CONCLUSION

Based on the data that have been collected and the results of tests carried out using a multiple linear regression model, some conclusions can be drawn as follows:

1. The application of intellectual capital, such as providing education and training to employees, developing systems and programs, and having a good relationship between a company and its associates through customer capital, has a significant effect on a banking company's performance.
2. A banking company's ability to manage and disseminate knowledge possessed by employees and the company through the company's

knowledge management has a significant effect on the company's performance. The employees can do their jobs better because each employee has knowledge and information that support him/her in doing his/her work.

### ACKNOWLEDGEMENT

We would like to thank the Ministry of research and technology through Universitas Putra Indonesia "YPTK" for funding this research and all those involved in completing the research.

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