

Intellectual Capital in Customer's Perception of Sharia Banking in Pangkalpinang

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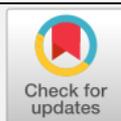
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ABSTRACT

This study investigates the influence of intellectual capital with the dimensions of Human Assets (HC), Structural Capital (SC), and Relationships (RC) on banking performance in the perceptions of customers on Syariah Bank in Pangkalpinang. The choice of method in this research is quantitative with the target of five Sharia banks in Pangkalpinang, namely Bank Syariah Mandiri, BRI Syariah, Bank SumselBabel Syariah, and Bank Muamalat. There were 20 questionnaires distributed in each Sharia bank. The measuring instrument used to calculate the variables is Structure Equation Modeling (SEM). The path coefficient value data processing or path coefficient bootstrapping analysis with the direction of the relationship obtained the human asset variable (HC) results, showing a positive number of 0.361. The structural capital variable (SC) shows a positive number of 0.436, the human asset variable (HC), and the capital variable structural (SC) has a positive effect on banking performance. For the relation variable (RC), the original value showed a positive number of 0.076. The t-statistic value was smaller than the t-value, $0.704 < 1.96$ so that the relationship variable had no positive effect on banking performance.

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1. Introduction

In the digital era 4.0, the unity of economic information is imperative. Decisions can be made quickly so that adjustments to the development of information technology and appropriate knowledge workers are needed. With the development of this technology, it can create healthy business competition. With the development of technology, knowledge in business also develops. Changes in knowledge are factors for a company to change its business strategy from resource-based competitiveness to knowledge-based competitiveness. In this digital era, companies must have more capabilities to compete with companies by constantly innovating so that the target market is increasing, collaborating, developing technology, managing assets, human resources. In asset management, it can be in the form of machines. Buildings are tangible assets. In human resources, there are intellectual assets in the company, including intangible assets. The regulation regarding assets is regulated in Statement of Financial Accounting Standards (SFAS) 19.

The commencement period of awards for companies that manage their knowledge or company knowledge occurred in 2005. The company made changes to a product, service and even had an excellent performance so that it had more value in the eyes of shareholders or external parties. The winners in 2014 were the success of the organization in demonstrating a knowledge-based organization. Companies that have succeeded in developing and optimizing company knowledge have increased company value and performance (<http://www.dunamis.co.id>). On the website, articles on intellectual capital (IC) have developed in Indonesia. Intellectual capital (IC) is a resource concept based on the latest knowledge and explaining the optimal use of intangible assets, implementing company strategies as effectively and efficiently as possible (Hadiwijaya & Rohman, 2013). Currently, intellectual capital (IC) is measured by human assets (HC), structural capital (SC), and relations (RC). So that intellectual capital (IC) is important to assess the types of intangible assets. However, specific regulations regarding the measurement and reporting of intellectual capital have not been regulated.

In this award, there was also obtained in the banking industry, namely PT Bank Syariah Mandiri. This implies that Intellectual Capital (IC) has also been used in the banking industry. IC's role on employee performance is because companies can use IC to realize company expectations regarding performance. IC is an employee evaluation tool in the form of performance to sort out employees who have a survival rate for the company's future needs. The high carrying capacity of IC in the company will increase employee performance. Then the knowledge of each employee continues to be improved and reduces dependence on the existing system. The company will not achieve optimal performance without good employee performance. So the management strives to continue to improve all employees performance level with the development and construction of IC. The company's competitiveness can be created from Intellectual Capital (IC), but the company does not pay attention to human resources. The variable Intellectual Capital (IC) can provide additional value for the company, but the company has not paid much attention to this. So far, the company has only seen one perspective, namely business. This view from a business perspective has been changed by some researchers who research IC. Researchers try to see IC from various perspectives.

Research that has been conducted on IC in companies, namely [Lestari \(2017\)](#) in insurance companies, found that the Value-Added Capital (VACA) coefficient has a significant negative effect. The Value-Added Human Capital (VAHU) has a significant positive impact on company performance (ROA). The variable of Structural Capital Value-Added (SCVA), firm size, and financial leverage do not significantly affect company performance (ROA). The added value of human capital (VAHU) and financial leverage significantly positively affects company performance (ROE). In contrast, Value-Added Capital (VACA), Structural Capital Value-Added (SCVA) and company size have no significant effect on company performance (ROE).

Meanwhile, [Faradina & Gayatri \(2016\)](#) conducted a study on the LQ45 Index, which shows that Intellectual capital (IC) and Intellectual Capital Disclosure have a positive effect on Return On Assets (ROA). In research that previous researchers have conducted, the discussion of intellectual capital is seen from companies that can increase profits or financial performance. However, this research that will be carried out is intellectual capital from the customer's perspective. The purpose of this study was to investigate the effect of intellectual capital with the dimensions of human capital, structural capital and relational capital on the performance of Sharia banking in Pangkalpinang.

2. Literature Review

The definition of intellectual capital (IC) from each researcher cannot be interpreted precisely but can be used according to the researchers' needs. [Ulum \(2007\)](#) stated that Itami and Roehl were the first to publish intellectual capital (IC) in 1987. According to [Itami & Roehl \(1987\)](#), as cited in [Chen Goh \(2005\)](#), intellectual capital (IC) is an intangible asset consisting of technology, customer information, brand name, reputation, and organizational culture existing in the company. All of which are invaluable assets used as a company competitive advantage.

There are many opinions from practitioners who state the dimensions of IC. Practitioners noted that IC consists of three main elements ([Stewart, 1998](#); [Sveiby, 1997](#); [Saint-Orange, 1996](#); [Bontis, 2000](#), as cited in [Sawarjuwono, 2003](#)), namely human capital (HC), customer capital and structural capital. Meanwhile, according to [Schiuma et al. \(2008\)](#), intellectual capital is divided into five parts: human capital (HC), Relational Capital, Organizational Capital, Structural Capital, Social Capital, and Stakeholder Capital.

2.1. Perception

The theory of perception put forward by [Werner & Tankard \(2007\)](#) that interprets messages in communication varies so that it is difficult to achieve the communicator's goals.

[Chahal & Bakshi \(2016\)](#) show that intellectual capital as a multidimensional scale is measured by human assets/human capital (HC), rational capital, and structural capital, which significantly contribute to intellectual capital. Furthermore, [Widarjo et al. \(2019\)](#) found that intellectual capital has a negative effect on underpricing.

Meanwhile, [Herdyanto \(2013\)](#) reveals that human capital (HC) has no effect, while Structural capital and customer capital positively affect employee performance.

2.2. Research Framework

The following is the research framework used:

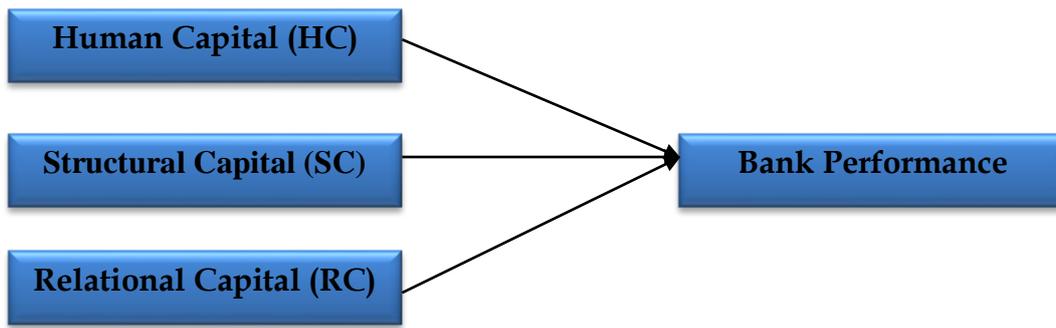


Figure 1. Research Framework

Hypothesis formulation:

Ha₁: human assets (HC) has a positive effect on banking performance

Ha₂: structural capital (SC) has a positive effect on banking performance

Ha₃: relational capital (RC) has a positive effect on banking performance

3. Research Methodology

This study investigates the effect of each variable studied and tested with statistical test tools from the questionnaires distributed to Sharia banking customers in Pangkalpinang. This research was conducted in five Sharia banks in Pangkalpinang, namely Bank Syariah Mandiri, BRI Syariah, Bank Sumsel Babel Syariah, and Bank Muamalat. The population used in this study were all customers registered in five Sharia banks located in Pangkalpinang. The sampling technique used is non-probability sampling, namely accidental sampling (convenience sampling). The quantitative research contained in this study uses primary data that distributes question sheets/questionnaires to customers of five Sharia banks in Pangkalpinang.

The research variables used are independent variables (X) in the form of human assets (HC), structural capital (SC), relational capital (RC), while the dependent variable (Y) is banking performance.

Table 1. Operational Research and Measurement Variables

Variable	Indicator	Measurement Scale
Human Capital (HC) (Bontis et al., 2000)	Educational background	Ordinal
	Training program	
	Excellent service	
	Self-development	
	Creative, innovative and brilliant attitude	
	Knowledge	
	Organization goals	
	Giving opinion	
	On-time	
	Problem-solving	

Variable	Indicator	Measurement Scale
Structural Capital (SC) (Bontis et al., 2000)	Best performance	Ordinal
	Culture and environment	
	Sharing knowledge	
	Respect opinion	
	Sanctions and rewards	
	Facilities and infrastructure	
	Information access	
	Organizational structure	
Relational Capital (RC) (Bontis et al., 2000)	Customer satisfaction	Ordinal
	Product introduction	
	Loyal customer	
	Customer problem solving	
	Sharia bank self-introduction	
	Feedback	
Bank Performance	SOP	Ordinal
	Agreement	
	Target achievement	
	Service to customers	
	Sharia banks are an example for other banks	
	Financial statement information	

Source: Processed data (2020)

3.1. Variable Measurement Scale

In scoring, it is using an ordinal scale. According to Cooper & Schindler (2006), the ordinal scale is on a 5-point scale. The ordinal scale has many benefits that make it famous because it is more reliable and provides a larger volume of data than other scales Cooper & Schindler (2006). The highest value is 5, and the lowest is 1.

The technique used in data processing in this research is Path Modeling. The quantitative data in this study were analyzed using Structure Equation Modeling (SEM) with the help of the AMOS (Analysis of Moment Structure) program version 26. According to Gudono (2016), Structure Equation Modeling (SEM) is a technique most commonly used in statistical modeling widely in the behavioral sciences. Structure Equation Modeling (SEM) was used to analyze the data in this study,

The steps for doing SEM modeling (Ghozali, 2017) are:

- 1) Model building
- 2) Formation of a path diagram
- 3) Convert path diagram into equation model

The model used in the equation relates one variable to another.

$$KP = + b1 + b2HC + b3RC + b4SC + e$$

Information:

- KP : Banking performance
- HC : Human assets
- RC : Relational capital
- SC : Structural capital
- α : Constant
- bHC, bRC, bSC : Variable regression coefficient x

- 4) Assess structural model identification
- 5) Testing the Goodness of Fit criteria
- 6) Modify Model

4. Results and Discussion

4.1. Hypothesis Test

Hypothesis testing can be seen from the value of the path coefficient of the bootstrapping process. The hypothesis can be known by looking at and comparing the value between the t-statistical value and t-value or comparing the P-value with alpha. The value of the path coefficient or inner model indicates the level of significance contained in the hypothesis test. The hypothesis can be accepted if it meets the criteria, namely, if the t-statistic value is > from t-value or the P-value is < from alpha, 5%. The path coefficient value indicated by the t-statistical value must be above 1.96 (t-value) for the 2-way hypothesis and 1.64 (t-value) for the 1-way hypothesis with an alpha of 5%. The results of hypothesis testing are presented in the following table:

Table 2. Path Coefficient Value Bootstrapping Analysis

Hypothesis	Correlation	Original Sample (Direction of Relationship)	t-statistic	t- value	P-value (sig)	Decision
Hypothesis 1	HC->KP	0.361	2.361	1.96	0.019	Accepted
Hypothesis 2	SC->KP	0.436	2.879	1.96	0.004	Accepted
Hypothesis 3	RC->KP	0.076	0.704	1.96	0.482	Rejected

Source: Processed data (2020)

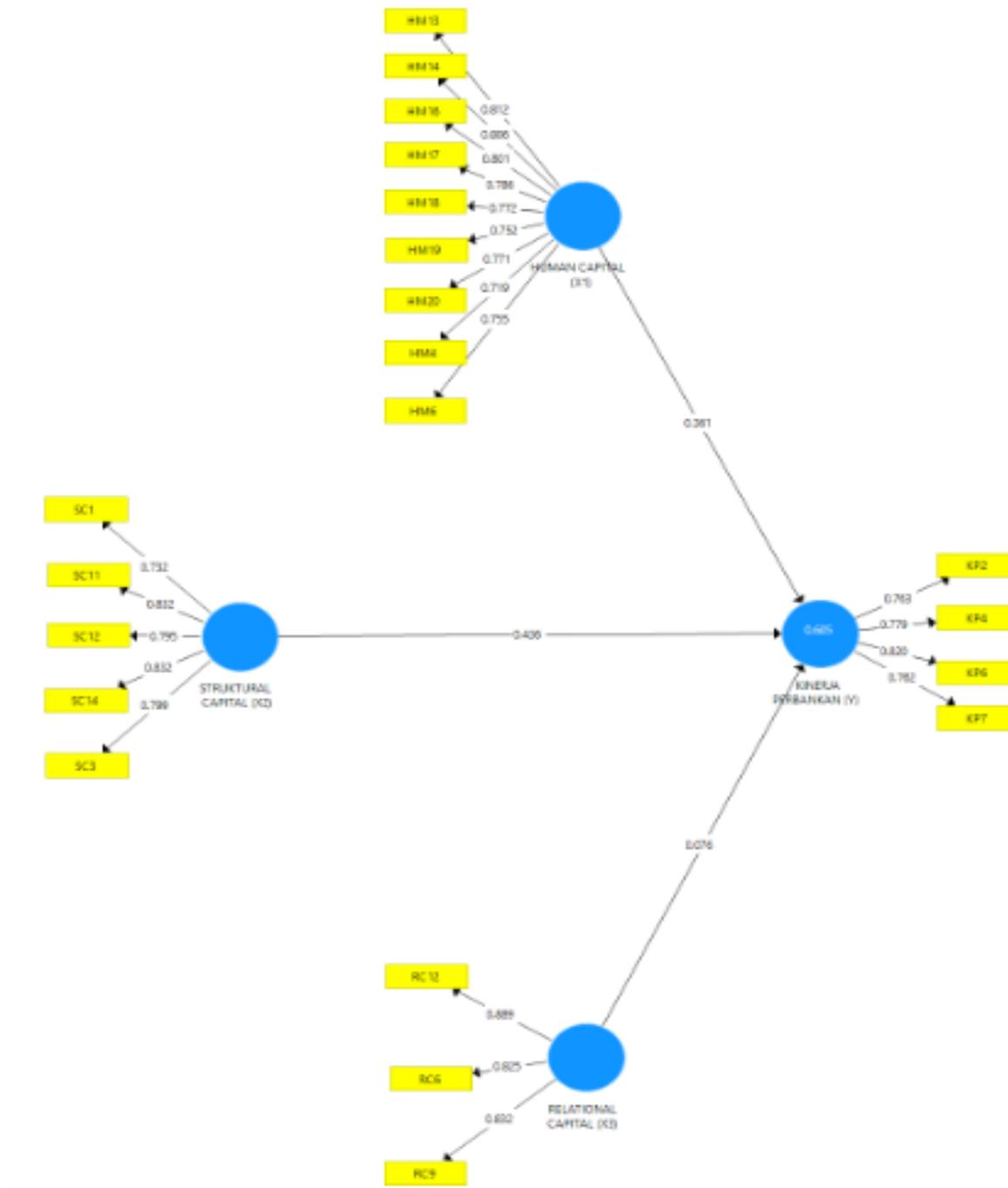
In **Table 2**, the first hypothesis states that human assets (HC) positively affect banking performance. In testing the hypothesis with 5% alpha (two-tailed), the original value shows a positive number of 0.361, and the t-statistics value is greater than the t-value, namely $2.361 > 1.96$. Based on the values shown in the table above, H_{a1} is accepted.

The second hypothesis states that structural capital (SC) has a positive effect on banking performance. In **Table 2**, there is a positive relationship between structural capital (SC) and banking performance. In testing the hypothesis with 5% alpha (two-tailed), the original value shows a positive number of 0.436, and the t-statistics value is greater than the t-value, namely $2.879 > 1.96$. Based on the values shown in the table above, H_{a2} is accepted.

The third hypothesis states that the relationship (RC) has a positive effect on banking performance. In testing the hypothesis with 5% alpha (two-tailed), the original value shows a

positive number of 0.076, and the t-statistics value is smaller than the t-value of $0.704 < 1.96$. Based on the values shown in the table above, H_{a3} is rejected.

Then the research model:



Gambar 2. Research Model

4.2. Discussion

4.2.1. Human capital (HC) has a positive effect on banking performance

The study results found that human assets (HC) positively affected banking performance after being tested on 100 customers in five Sharia banks. The results showed that the hypothesis was accepted. The first hypothesis is accepted because human resources are a huge intangible

asset for the company's survival. According to [Brinker \(2000\)](#), as cited in [Herdyanto \(2013\)](#), several essential characteristics are measured from human resources through training programs, credentials, experience, competence, recruitment, mentoring, learning programs, individual potential, and personality. The primary key of the company's operational activities is tangible and intangible assets that can positively impact the company's value. For developing companies, having human resources is the most crucial aspect in carrying out company activities. With effective and efficient human resource management based on the essential characteristics mentioned by [Brinker \(2000\)](#), as cited in [Herdyanto \(2013\)](#), can increase high competitiveness for the company. It is hoped that the management of human resources can achieve the company's goals perfectly.

The results of this research that have been carried out do not support the research results conducted by [Herdyanto \(2013\)](#) but support the research results from [Chahal & Bakshi \(2016\)](#). [Herdyanto \(2013\)](#) researched that human capital (HC) does not affect employee performance. While the results of the research by [Chahal & Bakshi \(2016\)](#) that intellectual capital as a multidimensional scale as measured by human capital (HC), rational capital (RC), and structural capital (SC) significantly contribute to intellectual capital.

4.2.2. Structural capital (SC) has a positive effect on banking performance

The study results found that structural capital (SC) positively affected banking performance after being tested on 100 customers in five Sharia banks. The results showed that the second hypothesis was accepted. Structural capital is a company's ability to fulfill routine processes. In supporting the company's business, employees carry out company activities by creating a culture and work environment that is safe and comfortable. The physical form of company support to employees in carrying out company operational activities is excellent and complete work facilities and infrastructure and technological sophistication. In creating a culture and a comfortable work environment, the company must also provide rewards and sanctions to employees to have high motivation to work. Companies that have good management must have an organizational structure. The organizational structure can provide a clear and firm description of the rights and obligations of employees in the company. Having the proper organizational structure can provide accurate information for each unit to improve employee performance.

The results of this study support the results of research conducted by [Herdyanto \(2013\)](#) that structural capital and customer capital have a positive influence on employee performance.

4.2.3. Relational capital (RC) has a positive effect on banking performance

The study results found that relational capital (RC) did not have a positive effect on banking performance after being tested on 100 customers in five Sharia banks. The result was that the third hypothesis was rejected. The rejection of this third hypothesis illustrates that the relationship with customers does not affect employee performance. This relationship with customers is more related to the company's performance because companies operating in the banking sector need customers who are the primary source of company activities. According to [Grasenick & Low \(2004\)](#), the definition of relational capital is the value that exists in a business entity based on the relationship between the organization and regulations. This relationship exists with suppliers, shareholders, or other individuals. When viewed from a banking company, relational capital is more about relationships with customers. Companies will be successful if they make a relationship maintained with consumers to become loyal to the company. Based on the theory of [Chu et al. \(2006\)](#), as cited in [Alipour \(2012\)](#), relational capital is

a relationship that exists between customers and the government that focuses on developing and maintaining important relationships or communications with customers and suppliers of goods and services where the communication will increase the level of partner satisfaction and customer loyalty.

In marketing theory, there is a change in the perspective of relationships with customers. Companies are more concerned with long-term relationships than short-term ones. This change in perspective has a significant impact on the company, namely the level of customer loyalty. Long-term interactions with consumers will bring complete information about our customers so that better communication is established.

This hypothesis is rejected because the respondents who are the samples in this study are customers who have a high level of loyalty. The respondents with an age range of 20-30 years were 32 people, age ranged 31-40 were 38 people, and above 41 were 30 people. This is reflected in the age of the respondents from young to old. So that the level of their loyalty to the bank also does not need to be doubted. For banks with a high level of customer loyalty, it is their performance target. This study does not support the research results by Herdyanto (2013) regarding structural capital and customer capital, which positively influence employee performance.

5. Conclusion

The study results found several important things related to the influence of intellectual capital with the dimensions of human assets (HC), structural capital (SC) and relational capital (RC) on banking performance in customer perceptions of Sharia banks in Pangkalpinang. The study results found that the variables of human assets (HC) and structural capital positively affected banking performance. At the same time, the relationship variables do not have a positive effect on banking performance.

6. Acknowledgement

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7. Declaration of Conflicting Interests

The authors have declared no potential conflicts of interest concerning the study, authorship, and/or publication of this article.

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