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Measuring Intellectual Capital: How to Manage Modified Value Added Intellectual Coefficient in Islamic Banking?

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ABSTRACT

Background: This study aims to examine the impact of Intellectual Capital (M-VAIC) and its components Capital Employed Efficiency (CEE), Human Capital Efficiency (HCE), Structural Capital Efficiency (SCE), and Relational Capital Efficiency (RCE) on firm value (Tobin's Q), with profitability (ROA) serving as a moderating variable, in Islamic banking companies.
Method: This study employs purposive sampling to select data samples, focusing on Islamic banking companies, including Bank Umum Syariah (BUS) and Unit Usaha Syariah (UUS), listed on the stock exchange during the period from 2019 to 2023. Data analysis is performed using Panel Data Regression and Moderating Regression Analysis with the aid of Stata 17.
Results: The results indicate a significant effect of IC, SCE, and RCE on firm value, while CEE and HCE do not have a significant impact. Additionally, profitability significantly moderates the relationship between intellectual capital and firm value.
Conclusion: The results show that the value of a bank in the eyes of the market is no longer solely determined by its physical assets or financial capital; instead, intangible strengths such as efficient internal systems, reliable technology (Structural Capital), and strong relationships with customers and communities (Relational Capital) are the main drivers of firm value. This study takes a modern and relevant approach by analyzing the most recent period (2019-2023) and specifically incorporating "Relational Capital" into its analysis.

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INTRODUCTION

Competition between Islamic banks is getting tighter, data shows that in Indonesia there are 33 Islamic banks which are divided into 14 Islamic general banks and 18 Islamic business units. (OJK, 2024). This creates competitive competition between Islamic banks to develop company value to attract investors. Investors' decisions to invest have a major impact on the company's finances. (Damodaran, 2014; Murniati, et al., 2019). The financial structure of a company depends on investment activities and

capital investment by investors. (Stulz, 2000). Meanwhile, the high interest of investors to invest is influenced by the company's value. (Fidhayatin & Dewi, 2012).

The high increase in the growth of Islamic banking growth can be seen from the high opportunities in investment. The company's value that continues to increase will provide opportunities for investors to be braver in investing. (Unruh, et al., 2017). Investors can pay attention to stock price fluctuations to assess the value of the company. However, until now stock price fluctuations in Islamic banks are less stable. And this is not comparable to the total assets of Islamic banks which have increased from year to year.

It was recorded that the total assets of Islamic banks in January 2024 reached IDR 845.61 trillion, growing by around 10.48% (year on year/yoy) from the previous year. (OJK, 2024), while the company value of several Islamic bank shares in 2021 until the end of 2023 such as: Bank Tabungan Negara/BTN, Bank Syariah Indonesia/BRIS, Bank Pembangunan Daerah Jawa Timur/BJTM experienced a decline (IDX, 2024).

From the total growth data of Islamic banking assets, the value of Islamic banking companies in terms of tangible assets is not problematic because the total assets from year to year continue to increase. Thus, hidden factors need to be further studied regarding their influence on company value in Islamic banking. According to several theories and studies, the main contributor to company value is intellectual capital (IC) (Chen et al., 2005; Clarke et al., 2011; Maji & Goswami, 2017; Pulic, 2000).

Intellectual capitaldefined as a collection of intangible assets that can increase company value and performance. (Chen & Zhu, 2004; Marr et al., 2003). Public (2000) designing and developing intellectual capital ratio measurement using a method called value added intellectual coefficient (VAICTM). Then, to be more comprehensive, VAICTM was refined by adding Relational Capital Efficiency (RCE) so that it became Modified Value Added Intellectual Coefficient or abbreviated as M-VAIC (Mohammad & Shairi, 2023; Ulum et al., 2014).

Previous researchers have tried to analyze hidden factors that affect a company's value where financial reports are unable to explain it. It can be seen that the company's ability driven by intangible asset sources in the form of knowledge, skills, employee experience, innovation, organizational structure, and process innovation can increase the company's value. (J. Chen & Zhu, 2004; Lev, 2001). In the researchJ. Chen & Zhu (2004) and Maji & Goswami (2017) found that the company's performance which subsequently influences the company's value is greatly influenced by structural capital, innovation capital, human capital, and customer capital in the intellectual capital element. In addition, Ulum et al. (2014) found that Indonesian banking has a fairly long M-VAIC range, in his research it was also stated that the top 3 banking performance rankings came from government banks. Furthermore, research conducted byDiyanty et al. (2019) in companies in Southeast Asia found that M-VAIC, namely Structural Capital Efficiency, Human Capital Efficiency, Capital Employed Efficiency, and Relational Capital Efficiency, have a positive effect on market value creation and company performance. Bayraktaroglu et al. (2019) found that intellectual capital measured using VAIC was able to improve performance in manufacturing companies in Türkiye.Faruq et al., (2023) also found that dynamic MVAIC is superior to static measures, although both have a significant positive effect on the performance of banks in Bangladesh. However, there are different research results, one of which is the studyMarch (2022) found something different, that VAIC does not always align with intellectual capital.

From the description of the permThe problems that have been presented and based on previous research, this study focuses on the role of Modified Value Added Intellectual Coefficient abbreviated as M-VAIC in Islamic banking. The novelty in this study is to reveal the factors of intangible assets in Islamic banking that affect the value of the company with profitability which is an indicator of company performance as a moderating variable. Islamic banking was chosen because it has intellectual property and companies that use intensive knowledge-based service activities (Akkas & Asutay, 2023; Asutay & Ubaidillah, 2024).

LITERATURE REVIEW

Resource-Based View Theory

Resource-Based View Theoryfirst delivered byWernerfelt (1984), states that companies must pay attention to their resources in terms of tangible assets and intangible assets in order to be superior to their competitors. Barney, (1991) and Barney & Arikan, (2005) strengthens the theory by stating that company resources are tangible assets and intangible assets. This theory explains that companies need to manage and utilize resources to improve good long-term performance and be more competitive in the market.

According toBarney (1991) all resources include knowledge, innovation, ongoing organization, information, company characteristics, and other things under the company's control that can be implemented by the company as a strategy to increase the company's efficiency and effectiveness. The resources that the company can control will have an impact on the growth of competitive advantages in the company. Competitive advantages in the company will create intellectual capital, which can lead to increased performance in the company (Taher, 2012; Ulum et al., 2017).

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Modified Value Added Intellectual Coefficient(M-VAIC) and Intellectual Capital

Intellectual capitalor can also be called the intellectual capital of the company is defined as an economic and accounting concept. Intellectual capital is based on human resource accounting which is developed with elements that are outside of accounting such as organizations, structural assets, and relations. (El Tawy & Tollington, 2012). Intellectual property, company experience, company knowledge, and information are some of the material elements of intellectual capital that are optimized to increase the company's value. (Diyanty et al., 2019).

However, a measurement method is needed to directly assess intellectual capital, because businesses have difficulty doing so. The measuring tool for assessing intellectual value added (VAIC) was first launched by Public in 1998. Researchers in the following period then improved VAIC until the Modified Value Added Intellectual Coefficient measurement method or abbreviated as M-VAIC emerged, which is considered more comprehensive than VAIC.

Ulum et al. (2014) create a Modified Value Added Intellectual Coefficient or M-VAIC model. M-VAIC is different from VAIC because Ulum adds a relational capital efficiency indicator. In VAIC consists of three components, namely the first is human capital efficiency or HCE, the second is structure capital efficiency or SCE, and the third is capital employed efficiency or CEE. Meanwhile, in M-VAIC consists of four components, namely human capital efficiency or HCE, the second is capital employed efficiency or CEE, the third is structure capital efficiency or SCE, and the fourth is relational capital efficiency or RCE (Fuad & Nustini, 2022; Ulum et al., 2014).

Relationship between Capital Employed Efficiency / CEE and Company Value

Capital employed efficiencyis a method used to create efficient added value in a company from the capital management side to create value. (Fuad & Nustini, 2022). According toresource-based view theory, capital employed efficiencyhas a contribution to the company's value in terms of increasing the efficiency of the use of company assets (Krisyadia et al., 2022). Increased company value and profitability are obtained when the company's income increases, this increase in company income occurs when the

company's capital is utilized effectively. (Anifowose et al., 2018). Effective capital utilization shows good asset management efficiency, thus bringing competitive advantage to the company. Previous studies also obtained the same results, including: Bayraktaroglu et al. (2019); Diyanty et al. (2019); Faruq et al. (2023); Nurseha et al. (2024) that capital employed efficiency has a positive and significant effect on the value of a company. Different results in the research conductedKrisyadia et al. (2022), Mohapatra et al. (2019), and Onumah & Duho, (2020) found that CEE does not have a significant influence on the value of a company. From this explanation, the hypothesis on this variable is:

H1: Capital employed efficiencyhas a positive and significant influence on the value of a company.

Relationship between Human Capital Efficiency / HCE and Company Value

The intellectual capital indicator that shows the role of human resources is called Human capital efficiency or HCE. The factors include competence, commitment, motivation and loyalty of human resources that contribute to the company. Human capital efficiency becomes a non-physical asset (intangible asset), the asset measured by HCE plays an important role in the company. Because the human resources of each company are different, HCE will depend on how high the performance of human resources is. Human Capital Efficiency or HCE is a term that refers to the amount of value generated by a company's business from funds allocated to workers. (Ulum, 2017).

According to Belkaoui (2003) Human resources or employees have a very significant role in the company to increase the company's value. Employees with their intellectual abilities can improve their competence in serving customers. So companies need to pay attention to the welfare and career development of their employees by facilitating a supportive work environment, providing training, providing space for innovation (Mahajan et al., 2023). By improving employee welfare and productivity, the company will ultimately be able to obtain added value for the company. (Phillips, 2011). There are several studies that support this explanation, namelyDiyanty et al. (2019); Firer & Williams (2003); Mahajan et al. (2023); Nurseha et al. (2024), they found that human capital efficiency has a positive and significant relationship to company value. However, Aprilyani et al. (2020) found different results where the company value cannot be influenced by HCE. Thus, the hypothesis of company value influenced by human capital efficiency/HCE is:

H2: Human capital efficiencyhas a positive and significant influence on company value.

Relationship between Structural Capital Efficiency/SCE and Company Value

Structural capital efficiencyor SCE is a measure of added value based on efficiency analyzed from structural capital. If the company has the ability to fulfill the structure that supports the business and routine processes of employees such as operational systems, management philosophy, manufacturing processes, organizational culture and all intellectual property, then the company can create added value, so that the company's value can increase.(Sawarjuwono & Kadir, 2003; Ulum, 2017).In previous research, there were results stating that company value was positively and significantly influenced bystructural capital efficiency orSCE(Bayraktaroglu et al., 2019; Diyanty et al., 2019; Sawarjuwono & Kadir, 2003).

H3: Structural capital efficiencyhas a significant positive influence on company value

Relationship between Relational Capital Efficiency/RCE and Company Value

Relational capital efficiency or RCEis a new indicator added byUlum et al., (2014) as part of the transformation of VAIC to M-VAIC. Relational capital efficiency is a performance measurement construct on intellectual capital. RCE shows the relationship between the company and its partners. The company's partners include suppliers, customers, communities, and governments. (Fuad & Nustini, 2022; Ulum, 2017). Effective RCE will maintain good relationships with its partners. The resource-based view theory states that effective and strong relationships with company partners/external parties can provide opportunities, maintain and improve market positions, and have competitive advantages, so that the company's value increases because the company has good ties with stakeholders. (Belkaoui, 2003). The results of previous research show that company value is positively influenced by relational intellectual capital. (Emeka et al., 2023; Momani et al., 2021; Wardifa & Yanthi, 2022).

H4: Structural capital efficiencyhas a significant positive influence on company value

Relationship between Intellectual Capital and Company Value

Intellectual capital is an intangible asset that adds value to a company. If a company manages intellectual capital well, it can increase added value, so that the company's value increases. (Maji & Goswami, 2017). Companies that manage intellectual capital effectively include: including capital employed, human capital, structural capital and relational capital will have a greater chance of increasing stock prices that are coherent with the company's value. Thus, it will increase the profits obtained by stakeholders. This is in line with previous research that intellectual capital has an effect on company value. (Bayraktaroglu et al., 2019; J. Chen & Zhu, 2004; Diyanty et al., 2019; Maji & Goswami, 2017; Marr et al., 2003; Nisa', 2021; Nurseha et al., 2024; Ulum et al., 2017; Wardifa & Yanthi, 2022)

H5: Intellectual capital has a positive and significant effect on firm value.

Intellectual Capitaland Firm Value with Profitability as a Moderating Variable

The measure of success for the work done by the organization through efficient use of resources to prepare for future changes is financial performance. The financial performance of the organization is analyzed using financial ratios to forecast its future condition. Profitability ratios indicate the performance of business management in terms of capital, assets, and inventory. ROA can be used to measure the profitability of this company. (Diyanty et al., 2019).

Since IC is determined by the added value of a business, profitability is an important component of IC. (Ulum et al., 2014). Profitability is a measure of how well a company is performing when its intellectual capital resources are managed. A highly profitable business is more likely to have high-quality products in the future. (Fristiani et al., 2020). These positive attributes indicate that the business's finances will be solid in the future and may stimulate more investor demand for the stock, thereby increasing the company's value.

M-VAIC, which is a measure of intellectual capital, can also increase market capitalization, besides that it can also increase return on assets (ROA) in banks in Indonesia. (Ulum, 2013; Ulum et al., 2014). Findings from other studies, which show that profitability can enhance the relationship between intellectual capital and business value, support this research. (Nisa', 2021; Sayyidah & Saifi, 2017).

H6: Profitability can moderate the relationship between intellectual capital and firm value.

The following is a picture of the theoretical framework in this study:

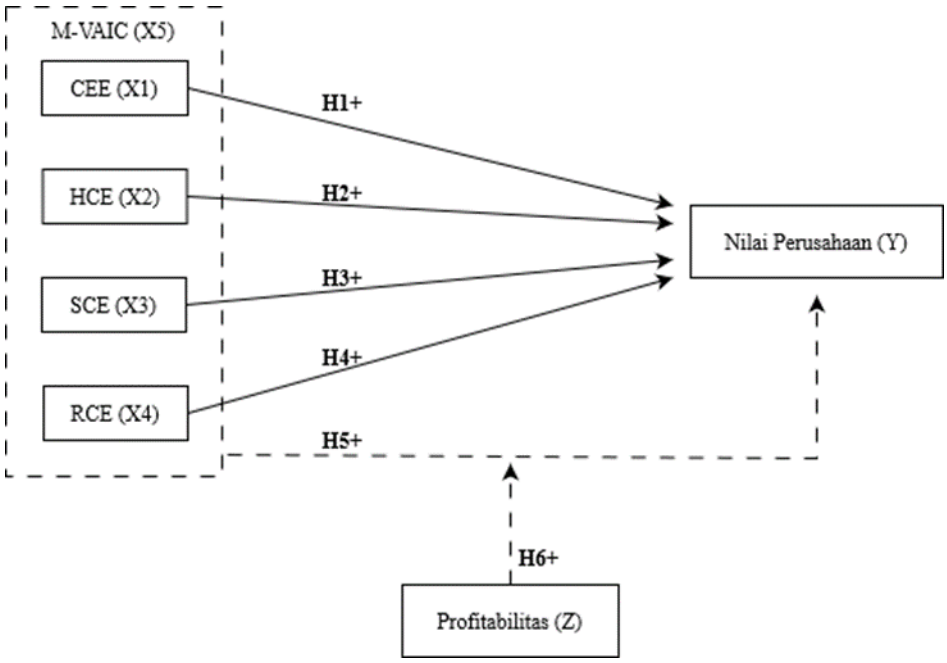

Figure 1. The Theoretical Framework

METHOD

Data and Population

This study uses secondary data on Islamic Banking (Islamic Commercial Banks and Islamic Business Units) with a period from 2019 to 2023 obtained from the IDX website. The sampling method used was purposive sampling to obtain 11 Islamic banking samples, which include a list of Islamic banking SPS in 2024 consisting of BRIS, PNBS, BDMN, BNLI, BNII, BNGA, NISP, BJTM, BSIM, BBTN, and ARTO.

Operational Definition of Variables

The operational definitions in the research are summarized in the following table:

Table 2. Operational Definition of Variables

Data types	Variables	Definition and measurement	Hypothesis	Source
Independent	Capital Employed Efficiency (CEE)	reflects the contribution of capital employed units to value added. CEE=VA/CE	+	IDX Report
Independent	Human Capital Efficiency (HCE)	reflects the contribution of human capital to value added. HCE=VA/HC	+	IDX Report
Independent	Structural Capital Efficiency (SCE)	assess the structural capital used to generate 1 rupiah of value added. SCE=SC/VA	+	IDX Report
Independent	Relational Capital Efficiency (RCE)	assess the added value that can be generated against the marketing costs that have been invested. RCE=RC/VA	+	IDX Report
Independent	Modified Value Added Intellectual Coefficient (MVAIC)	the company's intellectual ability to create corporate value. VAIC = CEE + HCE + SCE MVAIC = HCE + RCE + SCE + CEE	+	IDX Report
Dependent	Firm Value with Tobin's Q ratio.	Explains the company's effectiveness and efficiency in using all resources. Tobins' Q= (MVS+Total Debt)/(Total Assets)	+	IDX Report
Moderation	ROA	The ratio to determine the company's ability to utilize assets to generate profits.(Darmawan, 2020). ROA= (net profit after tax)/(total assets) ×100%	+	IDX Report

Source: various sources, author (processed)

Data analysis

Panel data regression analysis, specifically testing to ensure the relationship between independent and dependent variables, is used in this study. The following is the panel data regression equation used in this study:

$$Y_{it}=\alpha+\beta_1 X_{(1,it)}+\beta_2 X_{(2,it)}+\beta_3 X_{(3,it)}+\beta_4 X_{(4,it)}+\varepsilon$$

Information:

Yit: Value of individual firm i in year t

α : Constant

β1234: Regression Coefficient 1, 2, 3, 4

X1: CEE

X2: HCE

X3: SCE

X4: RCE

ε : Tram error

In addition, this study uses an analysis technique called Moderated Regression Analysis (MRA) to assess the relationship between independent and dependent variables, which are moderated by the profitability moderation variable in the form of ROA. Thus, the following is the equation:

$$Y= \alpha+\beta_1.X_5+\beta_2.Z+\beta_3.X_5.Z+\varepsilon$$

Information:

Yit: Company values

X5: MVAIC

Z : ROA

ε : Tram error

RESULTS AND DISCUSSION

Descriptive Analysis

Table 3. Descriptive Analysis

Variables	Obs	Mean	Std. Deviation	Minimum	Maximum
CEE	220	0.1356	0.0878	-0.1965	0.3876
HCE	220	1.3447	0.6500	-5.1608	3.5994
SCE	220	0.4470	1.3185	-2.6561	13.9280
RCE	220	0.0582	0.0827	0.0004	0.6739
TQ	220	1.5575	3.2253	0.1534	21.8496
ROA	220	0.4012	1.2616	-9.2324	2.1912
MVAIC	220	2.0622	1.1419	0.1047	11.1501

As can be seen from the table above, the Human Capital Efficiency (HCE) variable has a standard deviation of 0.650, a mean of 1.344, a minimum value of -5.16, and a maximum value of 3.599. While the Capital Employed Efficiency (CEE) variable has a maximum value of 0.387, a minimum value of -0.196, a mean of 0.135, and a standard deviation of 0.08. While the Structural Capital Efficiency (SCE) variable has a maximum value of 13.928, a minimum value of -2.656, a mean of 0.447, and a standard deviation of 1.318. The Relation Capital Efficiency (RCE) variable has an average value of 0.058, a minimum of 0.004, a maximum of 0.673, and a standard deviation of 0.082. 1.557 is the mean, 3.225 is the standard deviation, 0.153 is the minimum, and 21.849 is the highest value of the Tobin's Q (TQ) variable. The mean value of 0.401, standard deviation of 2.261, the highest value of 2.191, and the lowest value of -9.232 were recorded for the Return On Asset (ROA) variable. The mean value, standard deviation, lowest value, and maximum value of the Modified Value Added Intellectual Coefficient (MVAIC) variable were 2.06, 1.141, 0.1047, and 11.150, respectively.

Analysis of Hypothesis Test Results

The following is a table of determination coefficient tests:

Table 4. Results of the Determination Coefficient Test

R-squared:		
Within	=	0.2046
Between	=	0.9461
Overall	=	0.4873

Source: Stata Output 17, 2024

Based on the R-squared value above of 0.4873, it can be seen that in this study the intellectual capital variables (CEE, HCE, SCE, and RCE) can explain the company's value by 48%, while other variables not included in this study can explain the company's value by 52%. Next, here is the F-test table:

Table.5 F-test

F(4, 10)	=	136.23
Prob > F	=	0.0000

Source: Stata Output 17, 2024

It can be seen from the table above that the probability value is 0.000 < 0.05. H5 in this study is accepted because it indicates that the variables CEE, HCE, SCE, and RCE together have an influence on the company's value. The next analysis is the t-test, which is summarized in the following table:

Table 6. Panel Data Regression Test

Tobin's Q	**Coefficient**	**Robust Std. err.**	**t**	**P>t**	**[95% conf. interval]**	
CEE	-2.9672	2.3599	-1.26	0.237	-8.2254	2.2909
HCE	0.0526	0.1394	0.38	0.714	-0.2581	0.3633
SCE	0.9194	0.1181	7.79	0.000	0.6563	1.1824
RCE	4.4198	1.9092	2.31	0.043	0.1658	8.6738
_cons	1.2209	0.1667	7.33	0.000	0.8496	1.5923

Source: Stata Output 17, 2024

From the table above, the panel data regression equation can be made as follows:

TQ = 1.2209 – 2.9672CEE + 0.0526HCE + 0.9194SCE + 4.4198RCE +e

This can be seen from the panel data regression equation that the probability value is 0.237 > 0.05 and the coefficient value of the CEE variable is -2.9672. Thus, the H1 hypothesis is rejected. In other words, the firm value (Tobin's Q) is not much influenced by CEE. The coefficient value of the HCE variable is 0.0526, and because the probability value is 0.714 > 0.05, the H2 hypothesis is rejected.

This indicates that HCE has a significant influence on firm value (Tobin's Q). In addition, the SCE variable has a coefficient value of 0.9194 and a probability value of 0.000 <0.05, indicating that SCE has a significant positive influence on firm value (Tobin's Q). The coefficient value of the RCE variable is 4.4198 and a probability value of 0.04 <0.05. Hypothesis H4 is accepted, indicating that RCE has a significant and positive influence on firm value (Tobin's Q).

After conducting the panel data regression analysis test, the next step is to test the relationship between the independent variables and the dependent variables through the Moderated Regression Analysis (MRA) test. The results of the MRA test in this study are as follows:

Table 7. Moderated Regression Analysis (MRA) Test

Tobin's Q	Coefficient	Std. err.	t	P>t	[95% conf.interval]	
MVAIC	0.2217	0.2210	1.00	0.317	-0.2139	0.6573
ROA	0.9523	0.1762	-5.40	0.000	-1.2996	-0.6050
ROA*MVAIC	0.1228	0.0232	5.29	0.000	0.0770	0.1686
_cons	1.3031	0.5164	2.52	0.012	0.2853	2.3209

Source: Stata Output 17, 2024

Based on the results of Moderated Regression Analysis in table 4.7, it shows that the coefficient value of ROA*MVAIC is 0.1228. Meanwhile, the probability value of ROA*MVAIC is 0.000 <0.05. Thus, the results of this study indicate that profitability (ROA) is able to moderate or strengthen intellectual capital (MVAIC) against company value (Tobin's Q).

In contrast to the initial hypothesis, Company value is not significantly affected by the efficiency of capital use (Capital Employed Efficiency/CEE). Based on data collected from BEI (IDX, 2024), it is known that the value of capital employed is lower than the value added. This shows that money is not managed as a company resource optimally, resulting in lower profits. (Krisyadia et al., 2022; Mohapatra et al., 2019) have the same findings as this study, which indicates that CEE has no contribution to the company's value. The use of capital in effective investment is certainly in line with risk, Islamic banking capital that is used to the maximum will also bring high risks, but if it is too low it will also hinder the company's added value (Mohapatra et al., 2019). This is reinforced by the condition of the research period which is during the economic period during Covid-19, which causes most companies including Islamic banks to be reluctant to take too many risks to utilize physical resources in the midst of a declining global economy, resulting in a decline in the aspect of competitive advantage and the effectiveness of the company's added value and ending up not being an indicator of increasing the company's value. (Onumah & Duho, 2020).

The results of the H2 hypothesis show, the company's value is not significantly influenced by human resource efficiency, or Human Capital Efficiency/HCE. This finding shows that the costs incurred by Islamic banking staff have not been able to contribute to the Company's value. According toAprilyani et al., (2020) Human capital that does not have an impact on the company's value is caused by the lack of utilization of human resources in the company, for example, less competitive salaries and low benefits. In addition, the high costs invested by Islamic banking in human resources are not comparable to productivity due to a lack of understanding of the role of these resources. (Dewi et al., 2017). This condition is also reinforced by the shift in banking service methods from traditional to digital services. (Sugihyanto et al., 2022).

Furthermore, the results of the H3 hypothesis are accepted, which means that the company's value is significantly increased by Structural Capital Efficiency (SCE). This result is in line with previous studies conducted byBayraktaroglu et al., (2019); Diyanty et al., (2019); Sawarjuwono & Kadir, (2003), states that companies that invest in their structure and hierarchy through increased innovation and corporate development, will accelerate the increase in corporate profitability.

Hypothesis H4 shows thatRelational Capital Efficiency(RCE) has an impact on company value. Research conducted byEmeka et al., (2023; Momani et al., (2021; Wardifa & Yanthi, (2022) also found similar results. By attracting more customers, especially customers who are loyal to Islamic financial institutions, and expanding business lines with various creative products that meet market demand, Islamic banking builds strong partnerships. Continuously striving to improve customer service can increase added value, provide competitive advantages, and increase business value. (Fatmawati et al., 2019; Ullah et al., 2023)

Based on the results of the F-test data processing above, the H5 hypothesis is accepted, indicating that the company's value is significantly influenced by Intellectual Capital (IC). This result is in line with a study conducted by (Bayraktaroglu et al., 2019; J. Chen & Zhu, 2004; Diyanty et al., 2019; Maji & Goswami, 2017; Marr et al., 2003; Nisa', 2021; Nurseha et al., 2024; Ulum et al., 2017; Wardifa & Yanthi, 2022). Islamic banking is able to increase the value of the company because it is able to utilize and manage intellectual capital effectively and efficiently. in line with the resource based view theory that if

the company is able to utilize IC well, it will increase competitive advantage, this has an impact on improving the company's performance. Better performance can encourage investors to buy more shares, which will increase the stock price and increase the company's value.

Through the MRA test, it can be seen that H6 is accepted, which means that profitability using the ROA ratio can reduce the correlation between business value and intellectual capital. This result is in line with previous studies by (Nisa', 2021; Sayyidah & Saifi, 2017; Ulum, 2013). ROA is one of the measuring tools that is often used to evaluate the success of a company. In this research period, the ROA data of Islamic banking is quite stable so that it can be assessed as a success in managing Islamic banking assets. The success of managing these assets will affect the position of Islamic banking in the long term, thus providing an indication of the company's value that can continue to increase. (Tanjung, 2016; OJK, 2023).

CONCLUSION

The study examines the effect of M-VAIC on the value of Islamic banking companies in 2019-2023, and tests the profitability variable measured by ROA is able to moderate the M-VAIC variable on the value of Islamic banking companies in Indonesia. The results of the study are that Capital Employed Efficiency/CEE has no significant effect on company value, Human Capital Efficiency/HCE has no significant effect on company value, Structural Capital Efficiency (SCE) has a significant positive effect on company value, Relational Capital Efficiency (RCE) has an effect on company value, Intellectual Capital (IC) has a significant effect on company value, and ROA is able to moderate the relationship between intellectual capital and company value.

Based on the findings of this study, it can be concluded that during the research period, Islamic banking has not been fully able to manage and utilizeintellectual capitalwhich is proven by two indicators, namely Capital Employed Efficiency/CEE and Human Capital Efficiency/HCE which do not affect the company's value. The lack of effectiveness in utilizing IC results in the company's performance not increasing significantly, thus impacting the company's value which is not yet optimal. This answers the question in the background regarding the total assets of Islamic banking which have increased but are not followed by an increase in the company's value. This phenomenon can be caused by the management and utilization of intangible assets which have not become a primary concern in Islamic banking.

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