KnE Social Sciences
BICBATT 2023
Brawijaya International Conference on Business Administration, Taxation, and Tourism
Volume 2024

Research Article

Understanding the Impact of Intellectual Capital on Financial Performance and Its Impact on Firm Value: A Literature Review

Sayyid Pratama Yoesrona Tubara*, Sri Mangesti Rahayu, Ari Darmawan

Faculty of Administrative Sciences, University of Brawijaya, Malang, Indonesia

Abstract.
This research aims to find out whether intellectual capital can influence financial performance, thereby, impacting company value using the journal review method. Research journals containing the variables of intellectual capital, financial performance, and company value were used. The results of the research show that there is a relationship between intellectual capital and financial performance and its influence on company value through three components contained in intellectual capital: human capital efficiency (HCE), structural capital efficiency (SCE), and capital efficiency used (CEE), including physical and financial capital. The contribution of intellectual capital to company performance will vary from one industry to another. Industries that rely on creativity and innovation will require a higher level of intellectual capital. The results of this research conclude that the existence of intellectual capital within the company is an important company asset. Companies that can manage their intellectual capital effectively will have better financial performance and higher company value. Intellectual capital can influence financial performance and company value.

Keywords: intellectual capital, financial performance, company value

Corresponding Author: Sayyid Pratama Yoesrona Tubara; email: sayyidpratamayt@gmail.com

Published: 5 April 2024

Publishing services provided by Knowledge E

Selection and Peer-review under the responsibility of the BICBATT 2023 Conference Committee.

1. Introduction

It has been emphasized that a healthy market allows customers to choose and on what terms the market operates for investors, including in the way it operates, and it is the basis of the market that investors provide high value for the value they provide when investors get a better deal [1].

According to Adiputra and Atang [2], Company value is an indicator that measures a company and reflects the level of shareholders' wealth and is a measure of the company's activity process over several years, namely from the company's establishment to the present., these activities include profitability, which sees how well the company is in the operational process to generate profits [3].

In the signaling theory first coined by Spence [4] the essence of signaling is to provide signals to insiders (for example, executives or managers) who receive information about individuals, in financial reports, signaling is an action that can be taken by the management of the company so that it hopes to be a clue to investors about the management and prospects that exist in the company for the future [5] with an increase in financial performance, it shows that the company is well and efficiently managed, a signal for investors, giving them confidence to invest., which can ultimately be expected to increase the value of the company.[6] and intellectual capital, which has one of its components structural capital organizational processes and management processes and business strategies [7]. This, in turn, means that investors increasingly have similar information about firm, profitability and future prospects. [3] next, this signal can be used as information about activities or plans, as well as an overview of what the company has done to fulfill the owner's wishes [8] and to provide basic instructions and information to investors about the management, activities and prospects of a company in the future [5].

Moreover, in the Resource Based View theory argues that resources as physical assets, intangible assets [9] further Barney [10] The first is tangible, in the form of financial or physical resources, and the second is intangible, such as experience, knowledge and skills, and a company's reputation. Financial performance is also considered a tangible resource, for example, profitability is a measure of a company's ability to generate profits from net income.[11], and is the result obtained through efforts in managing funds obtained from owners and investors by measuring whether a company is good or bad based on financial reports [12] and it can be seen that high company profits create added value related to good financial performance and cause a positive response or signal from investors [11].

In addition, Barney [10] according to RBV theory, intangible assets can include knowledge and experience. Therefore, intellectual capital which includes employee training and development (human capital) can increase productivity and is part of intangible assets. [13] and can collect and disseminate knowledge [14] and improve the ability to establish relationships (relational capital) with stakeholders and markets in a sustainable and stable environment [15] and can contribute to customer satisfaction (customer perspective) and financial performance.

Stakeholder theory that any person or group can influence each other to achieve organizational or business goals. [16]. It is represented by the basic idea of Freeman [16] that the firm must serve the stakeholders through its activities and the management of the organization must be accountable by performing activities and reporting information deemed necessary by its stakeholders [17].

This theory explains the behavior of disclosing performance information to satisfy stakeholders by disclosing information necessary for investors and stakeholders [18]. companies that experience product improvements usually have larger customers which will ultimately improve their long-term performance [19], As a result, financial performance is important to many of a company's stakeholders [1]; It is hoped that the visible growth will be well received by investors and increase firm value. [20] as well as the importance of having strong relationships with stakeholders while managing their long-term expectations to optimize corporate wealth [21].

In 1969 and 1991, T.A. Stuart was an economist who first studied that intellectual capital is a process, experience, and management skills as well as technology that can take the form of information about customers and suppliers. [22]. It can also be interpreted that intellectual capital is in the form of a company's ability to exploit opportunities to create value, which includes all intangible resources available to the company that provide market advantages and long-term profits.[15] and in the research of Nguyen and Doan [23], Intellectual capital can be said to be the value of related knowledge such as training for company employees, employee abilities and ideas and ideas of a company that are not included in and are not included in the balance sheet. Intellectual capital can consist of human capital in the form of employee knowledge, abilities, experience, and expertise, then Structural capital which includes systems in the company, company structure, and processes within the company, and management and business strategy, and relational or customer capital, which consists of organizational relationships with customers, suppliers, shareholders, and other stakeholders.[7] Even though a company's intellectual capital is positively related to company performance, its influence or impact will differ between industries. [24].

Value Added Intellectual Coefficient (VAICTM) developed by Pulic [25] to measure efficiency in value creation in a company based on accounting numbers and measure how a company creates value through the efficiency of intellectual capital or also from the company's intellectual resources [26].

This research is based on what factors increase company value and see the phenomenon of a decrease in stock transactions during the period January 16-20, 2023 Indonesia Stock Exchange (IDX), and results in an impact on the value of the company in the eyes of investors due to the high debt burden. [27], while PT Astra International (ASII) shares increased due to positive prospects and financial reports, this is what made ASII shares the target of investors [27], therefore, researchers examined financial performance that can affect company value.

In addition, the researcher also took the Intellectual Capital variable based on a statement from Dedy Permadi, spokesman for the Ministry of Communication and Information quoted from CNBC Indonesia [28] that many start-ups fail due to managerial factors such as lack of experience and clear vision of the founder, therefore the researcher wants to test Intellectual Capital, which is revealed to be able to exploit opportunities to create value, which includes all intangible resources [15] (knowledge, experience and skills of employees and company reputation). Barney [10] is expected to affect financial performance and make an increase the value of a company.

The aim of this research is to develop an understanding of intellectual capital regarding its influence on financial performance and company value. To achieve this goal, a review of a number of relevant journal articles will be conducted. This in-depth journal review will help to identify trends, key findings and gaps in previous research.

The journal review will identify areas that have not been fully explored or require further research. In addition, this review will provide space for defining key variables that should be considered in analyses related to intellectual capital and financial performance.

This review will pay particular attention to the research methodologies, intellectual capital measurement indicators, and financial performance and firm value measures used in the selected journal articles. This will help to ensure that this study builds on existing research while addressing identified limitations and gaps.

It is hoped that this research will provide a deeper understanding of the relationship between intellectual capital, financial performance, and firm value. Through this review method, it is expected to identify new findings that can enrich the literature and guide further research in this area.

Based on the above explanation, the researcher places the dependent variable as intellectual capital and the independent variable as firm value and the intervening variable as financial performance. This research was taken from different journals, cases and locations because the results of intellectual capital on company performance vary from one industry to another [24].

2. Material and Methods

This journal uses a library research design with the goal of collecting data and information and studying written sources, such as scholarly journals, that are relevant to the research title. [29] According to experts, library research is an activity related to collecting data from the library so that it can then be read, recorded, and processed into research material (Yuliansyah 2016 in Achmad [29]) then carried out using qualitative analysis research methods with the aim of being able to describe and analyze phenomena, social activities, events and perceptions of society, both individuals and groups. (Sukmadinata, 2011 in Mubarok et al. [30]) and according to Yuliansyah as cited in Achmad [29]. In this literature study research, the author takes a problem script with the title “the influence of intellectual capital on financial performance and its impact on firm value”.

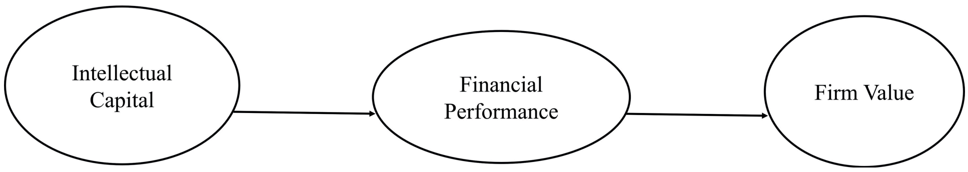

Figure 1: Research model studied by the researcher. Source: Author’s own work.

2.1. Data sources

Library data obtained from books, journals, newspapers, personal documents and so on. The main sources in this study are related to the independent variable as intellectual capital and research related to the dependent variable as firm value and research related to the intervening variable as intellectual capital.

Resources in this study can be divided into primary sources that are collected directly by researchers from the object of research, for example, journals that are the object of this research.

2.2. Methods of data collection and data analysis

The data collection technique is in the form of data from the library because this research is library research, the data that has been collected and selected are papers in the form of journals and national proceedings. [29], then the criteria for taking journals consists of 5 years under 2023 so that the journal results of the research are new, and taking different sectors and regions considering that intellectual capital on the performance of the company, the results will be different in each industry [24], and finally following keywords such as intellectual capital, financial performance and company value, then the data is collected reading and recording to get the results from the information to connect the results of different studies to answer questions and add new insights regarding the dimensions of intellectual capital and its effect on the value of the company.

3. Findings

3.1. Literature review

With this literature, it is hoped that we can find out the answers one by one, starting from intellectual capital on company value, intellectual capital on financial performance. , and then the influence of intellectual capital on financial performance so that it can influence company value. The following literature has been collected:

Table 1: Literature collection.

No	Hypothesis	Sector and	Region	Reference
1	Intellectual capital on financial performance	Bank	Indonesia	Rosita et al. [31]
		Agriculture	China	Xu and Zhang [32]
		Real Estate	Indonesia	Devita et al. [33]
		Fishing Industry	France	Pavlović et al. [34]
		Textile Company	Bangladesh	Chowdhury et al. [35]
		Manufacturing Industry	South Korea	Xu and Wang [36]
2	Intellectual capital on firm value	Companies that are listed on the Taiwan Stock Exchange (TWSE)	Taiwan	Ni et al. [37]
		Manufacturing company	Vietnam	Nguyen and Doan [23]
		International Integrated Reporting Council (IIRC) website	International	Salvi et al. [38]
3	Intellectual capital on financial performance and its impact on firm value	Companies listed on the IDX from 2012 to 2016	Indonesia	Margaretaa and Prasetyo [39]
		Manufacturing company	Indonesia	Madyan and Fikir [40]
		Companies listed in the Index SRI-Kehati	Indonesia	Robiyanto et al. [41]

3.2. Intellectual capital on financial performance

First: In a study conducted by Rosita et al. [31], There is a positive influence of VAIC on profitability, through a partial positive relationship between human and structural capital on ROA, which has a positive relationship and no positive relationship on ROE, these results indicate that the use of intellectual capital in capital placement does not require excessive focus, because it will be more It would be good if human resources and capital structure in state-owned banking companies were optimized.

Second: In the research of Xu and Zhang [32] Intellectual capital has a significant impact on improving corporate performance, particularly in human capital because, human resources are expected to be able to create and create a process that provides efficiency for a new product or service, leading to an increase in financial performance. The results of this study indicate that companies must prioritize placing intellectual capital in a strategic position to enhance financial performance. Companies should strategically position intellectual capital and strengthen its management. Additionally, they should invest in intellectual capital and fully utilize unique resources in the value process. Managers should encourage the subjective initiative and creativity of human capital. Companies should also control the cost of sales, design optimal research and development strategies, and avoid diseconomies of scale to reduce financial risk.

Third: In the research of Devita et al. [33] conducted research in the real estate and construction sector regarding the impact of financial performance on shareholder value in the IDX for 2014-2019.The study's results indicate that only STVA (structural capital) affects financial performance, while VACA (capital employed) and VAHU (human resources) have no effect. This suggests that managers of property and real estate companies may not prioritize resource management, including both capital employed and human capital.

Fourth: in the study [34] The study's empirical results indicate that French fishing companies improved their financial performance through the components of intellectual capital. Specifically, the results show that human capital played a significant role in increasing company profits. This demonstrates the significance of human capital and employee expertise in enhancing the performance of French fishing companies. However, this can also be attributed to factors such as the number of employees and salaries, which can have a substantial impact on financial performance. Additionally, structural capital also plays a role in financial performance, indicating that there is potential for companies to increase profits by investing in their capital.

Fifth: in the study by Chowdhury et al. [35] The study's results indicate that recognizing the significance of intellectual capital has an impact on financial performance. The findings suggest that textile companies in Bangladesh prioritize tangible assets over intangible ones. Consequently, the researchers concluded that demonstrating the value of intellectual capital is crucial for companies to showcase its importance and encourage investors to consider more than just tangible assets. This text provides guidance to managers on how to make investment decisions, measure and report intellectual capital, and incorporate intellectual capital into future strategic planning.

Sixth: Xu and Wang [36] in they research results show that there is a positive impact of intellectual capital on financial performance, so it is found that good use of intellectual capital will achieve greater profitability. There are known results that Korean manufacturing companies must be able to maintain and realize the importance of intellectual capital and maintain it by investing in intellectual capital. In addition, because structural capital is not significant with company's financial performance, it is recommended that companies invest more in intellectual capital to maintain a competitive advantage.It is recommended that companies can make the culture within the company grow positively and develop an appropriate management control system so that it can support company operations in line with the company's innovative capacity, because the results of the research found that structural capital cannot have a significant influence on financial performance. The negative impact should be a concern for managers in the Korean manufacturing sector. They can build a technological innovation network to improve technological innovation performance. In addition, when companies fund their intellectual assets in carrying out the company's long-term and sustainable development, they must be able to maintain the scale of their responsibilities at a reasonable level.

Based on the reviewed research, a conclusion can be drawn regarding the impact of intellectual capital on company performance, particularly its effect on financial performance. In addition, the results of this research show that the financial performance of a company which is influenced by intellectual capital will vary according to each industry, this is in line with Martins and Lopes' research. [24] that the contribution of intellectual capital will vary with the company's performance in each industry, also the results of intellectual capital indicators will vary in each sector or region. Intellectual capital can improve financial performance if it is placed according to the company's strategy as stated in Xu and Zhang [32] To fully utilize this intangible resource, managers should conduct employee training and education to improve financial performance. Effective management of intellectual capital utilization can also increase capital employed. It is important for policy makers, practitioners, and company owners to understand the significance of intellectual capital in enhancing company performance. [35] Furthermore, for structural capital, companies can utilize the structural capital contained in intellectual capital to encourage investment decisions in innovation activities in the environment or within the company. [42]. Based on the results of the aforementioned research, it can be concluded that intellectual capital has a positive impact on financial performance.

3.3. Intellectual capital on firm value

First, in the research conducted by Ni and Cheng [37] The study concludes that intellectual capital has an impact on firm value. This is due to the fact that companies with knowledgeable employees are better positioned to innovate and build a positive reputation. The study's empirical results indicate that companies with strong intellectual capital are better equipped to run their business and improve their financial performance. Therefore, it is important for companies to focus on developing their intellectual capital in order to increase their overall value.

Second, in the research conducted by Nguyen and Doan [23] This study analyzed data from 123 companies listed on the Ho Chi Minh and Hanoi Stock Exchanges. The sample included 32 companies from the Ho Chi Minh Stock Exchange and 29 companies from the Hanoi Stock Exchange that met the researcher's requirements. The results showed a positive and significant relationship between intellectual capital (VAIC) and firm value (Tobin's Q). It is important to note that only the positive effect relationship is greater. The study suggests that employees in Vietnamese stock market-listed companies may not be utilizing their full potential. However, the findings also indicate that investors may evaluate companies based on non-financial information in addition to financial information.

Third, in the study by Salvi et al. [38] the results show that disclosure of intellectual capital can have an influence or impact on company value.This is likely due to the impact of intellectual capital on financial performance in the medium to long term during the value creation process, which is reflected in firm value, the reporting of intellectual capital allows companies to highlight the linkages between tangible and intangible resources associated with their value creation process, furthermore, the disclosure of intellectual capital can reduce the information gap between the company and investors so that investors can see information about the company's activities, this shows that companies are voluntary with their intangible asset information.

By disclosing non-financial information or information about the company's intangible assets, it can increase in the eyes of investors and reduce the information gap between companies. Reporting on the company's activities or intellectual capital reporting is important for managers because according to Salvi et al. [38] that disclosure of intangible asset information is voluntary and therefore only owned by top management and to evaluate the value of a company, investors in addition to relying on financial information can also rely on non-financial information [23], The above conclusions indicate that intellectual capital has a positive impact on firm value.

3.4. Intellectual capital on financial performance and its impact on firm value

First, in Margareta and Prasetyo's [39] results show that financial performance can be significantly influenced by the intellectual capital in the bank. Good intellectual capital governance can provide guidance on competitive advantage and can make improve but not significant for company performance, this is because the banking industry in Indonesia has not been optimal in managing and developing its intellectual property to win the competition, therefore companies must be able to focus on managing their intellectual capital in order to increase profitability and company value, appropriate policies can expedite and facilitate the growth of a company so that ultimately the value creation process can provide positive direction for the company.

Second: In the research of Madyan and Fikir [40] results show, indicates that Financial performance can be significantly influenced by intellectual capital while also having an impact with company value. Specifically, the study found that Human Capital Efficiency (HCE) significant negative effect with financial performance (ROA). The study suggests that offering higher salaries and benefits to employees may not necessarily result in increased productivity, which could have a limited impact on financial performance. The study found that although the positive effect of Structural Capital Efficiency (SCE) on financial performance (ROA) was not statistically significant, Capital Employed Efficiency (CEE) have significant positive effect on financial performance (ROA). Additionally, the study suggests that the company is capable of fulfilling its routine processes, which may be attributed to tax and bung factors. The analysis shows that the company has effectively utilized its working capital to improve its financial performance. However, the study found that human capital efficiency does not significantly impact firm value (Tobin's Q), suggesting that investors do not view human resources as a company's competitive advantage when making investment decisions. Additionally, structural capital efficiency was found to have an insignificant positive effect on firm value (Tobin's Q), market prices can have an influence on a company's share price. Furthermore, Capital Employed Efficiency (CEE) has a positive value but an insignificant effect on the firm's value (Tobin's

Q). This suggests that the efficient use of CEE may not necessarily increase firm value, possibly because investors do not consider CEE when making investment decisions.

Third, in the research of Robiyanto et al. [41] The study results indicate that intellectual capital (IC) has a positive and significant effect on firm value, with financial performance acting as an intervening variable. The findings suggest that IC has a significant positive influence on financial performance, which ultimately affects financial performance and directly increases value. Therefore, effective implementation of IC in a company can lead to improved financial performance and increased company value.

Based on the studies mentioned above, it can be concluded that the presence of intellectual capital in a company will be able to have an impact on performance and financial value. Investors often use a company's performance as a reference for investment, but they may not consider the company's intellectual capital or intangible assets. This could be due to the company's lack of emphasis on intellectual capital in its disclosures. However, disclosing non-financial information can help bridge the gap between companies and investors.

Disclosure of non-financial information or information about a company's intangible assets can increase investor confidence and reduce information gaps between companies. When investors rely on non-financial information, it can encourage managers to focus on their intellectual capital. The research shows that intellectual capital has a positive effect on financial performance and firm value.

4. Conclusion

The author draws conclusions about the variables related to their title based on research and discussions in several journals.

First, intellectual capital affects employee performance, but each dimension will have different results, both strong and weak, each dimension of intellectual capital has different results, perhaps this is influenced by each industry and region.

Second, intellectual capital can affect financial performance if managers in the company can manage or invest in each dimension of intellectual capital, for example, human capital, which provides training to employees, so it can affect financial performance.

Third, Intellectual capital can influence company value if there is clear disclosure regarding the company's intellectual capital, which is expected so that investors can see what activities the company carries out.

Fourth, intellectual capital can affect financial performance and have an impact on firm value through improved financial performance involving intellectual capital.

Fifth, for investors, this is a way to invest, not only look at financial information, but can also see non-financial information, if investors in a region see non-financial information or intangible assets, then disclosure of intellectual capital will be important for companies, it is also expected that companies can focus on their intellectual capital.

Acknowledgment

These should be included at the end of the text and not in footnotes. Personal acknowledgments should precede those of institutions or agencies.

References

[1] Harrison JS, Wicks AC. Stakeholder theory, value, and firm performance. Business Ethics Quarterly. 2013;23(1):97-124. https://doi.org/10.5840/beq20132314

[2] Adiputra IG, Hermawan A. The effect of corporate social responsibility, firm size, dividend policy and liquidity on firm value: Evidence from manufacturing companies in Indonesia. International Journal of Innovation, Creativity and Change. 2020;11(6):325-338.

[3] Reschiwati R, Syahdina A, Handayani S. Effect of liquidity, profitability, and size of companies on firm value. Utopia y Praxis Latinoamericana. 2020;25(6):325-332.

[4] Spence M. Job market signaling. Quarterly Journal of Economics. 1973;87:355-379.

[5] Pattiruhu JR, Paais M. Effect of liquidity, profitability, leverage, and firm size on dividend policy. The Journal of Asian Finance, Economics and Business. 2020;7(10):35-42. https://doi.org/10.13106/JAFEB.2020.VOL7.NO10.035

[6] Kurniawansyah D, Kurnianto S. The influence of corporate social responsibility, corporate governance and firm size, on the value of manufacturing companies in Indonesia: Profitability as mediation. International Journal of Innovation, Creativity and Change. 2020;10(12):448-462.

[7] Ozkan N, Cakan S, Kayacan M. Intellectual capital and financial performance: A study of the Turkish banking sector. Borsa Istanbul Review. 2017;17(3):190-198. https://doi.org/10.1016/j.bir.2016.03.001

[8] Midiantari PN, Agustia D. Impact of intellectual capital on firm value through corporate reputation as a mediating variable. Journal of Security and Sustainability Issues. 2020;9(4):1203-1213.

[9] Wernerfelt B. A resource-based view of the firm. Strategic Management Journal. 1984;5(2):171-180. https://doi.org/10.1002/smj.4250050207

[10] Barney J. Firm resources and sustained competitive advantage. Journal of Management. 1991;17(1):99-120. https://doi.org/10.1177/014920639101700108

[11] Oktaviani RM, Susanti DT, Sunarto S, Udin U. The effect of profitability, tax avoidance and information transparency on firm value: An empirical study in Indonesia. International Journal of Scientific and Technology Research. 2019;8(11):3777-8780.

[12] Pamungkas ID, Purwantoro P, Sari MP, Hersugondo H. Corporate governance and financial performance on firm value: The case of Indonesia. WSEAS Transactions on Business and Economics. 2022;20:92-103. https://doi.org/10.37394/23207.2023.20.10

[13] Ramezan M. Intellectual capital and organizational organic structure in knowledge society: How are these concepts related? International Journal of Information Management. 2011;31(1):88-95. https://doi.org/10.1016/j.ijinfomgt.2010.10.004

[14] Ali MA, Hussin N, Haddad H, Al-Araj R, Abed IA. A multidimensional view of intellectual capital: The impact on innovation performance. Journal of Open Innovation: Technology, Market, and Complexity. 2021;7(4):216. https://doi.org/10.3390/joitmc7040216

[15] Gogan LM, Artene A, Sarca I, Draghici A. The impact of intellectual capital on organizational performance. Procedia - Social and Behavioral Sciences. 2016;221:194-202. https://doi.org/10.1016/j.sbspro.2016.05.106

[16] Freeman RE. Strategic management: A stakeholder approach. UK: Cambridge University Press; 1984. 294 p.

[17] Tarjo T, Anggono A, Yuliana R et al. Corporate social responsibility, financial fraud, and firm's value in Indonesia and Malaysia. Heliyon. 2022;8(12):e11907. https://doi.org/10.1016/j.heliyon.2022.e11907

[18] Ibhagui OW, Olokoyo FO. Leverage and firm performance: New evidence on the role of firm size. The North American Journal of Economics and Finance. 2018;45:57-82. https://doi.org/10.1016/j.najef.2018.02.002

[19] Andries P, Stephan U. Environmental innovation and firm performance: How firm size and motives matter. Sustainability. 2019;11(13):3585. https://doi.org/10.3390/su11133585

[20] Hirdinis M. Capital structure and firm size on firm value moderated by profitability. International Journal of Economics and Business Administration. 2019;7(1):174-191.

[21] Shahbaz M, Mubarik MS, Mahmood T. The dynamics of intellectual capital in current era. Singapore: Springer; 2021.

[22] Lentjushenkova O, Lapina I. The classification of the intellectual capital investments of an enterprise. Procedia - Social and Behavioral Sciences. 2014;156:53-57. https://doi.org/10.1016/j.sbspro.2014.11.118

[23] Nguyen AH, Doan DT. The impact of intellectual capital on firm value: Empirical evidence from Vietnam. International Journal of Financial Research. 2020;11(4):74-85. https://doi.org/10.5430/ijfr.v11n4p74

[24] Martins MM, Lopes IT. Intellectual capital and profitability: A firm value approach in the European companies. Verslas: Teorija ir Praktika. 2016;17(3):234-242. https://doi.org/10.3846/btp.2016.673

[25] Pulic A. Mva and vaic^{TM} analysis of randomly selected companies from FTSE 250. London: Austrian Intellectual Capital Research Center, Graz; 2000.

[26] Berzkalne I, Zelgalve E. Intellectual capital and company value. Procedia - Social and Behavioral Sciences. 2014;110:887-896. https://doi.org/10.1016/j.sbspro.2013.12.934

[27] Tim Riset CNBC Indonesia. Utang BUMN karya menggunung, laba jadi korban [Internet]. Indonesia: CNBC Indonesia; 2023 [cited 2023 Jun 16]. Available from: https://www.cnbcindonesia.com/market/20230214020056-17-413500/utang-bumn-karya-menggunung-laba-jadi-korban.

[28] Dewi IR. Deretan startup Indonesia yang gulung tikar, apa penyebabnya? [Internet]. Jakarta: CNBC Indonesia; 2022 [cited 2023 Mar 16]. Available from: https://www.cnbcindonesia.com/tech/20220524093006-37-341362/deretan-startup-indonesia-yang-gulung-tikar-apa-penyebabnya.

[29] Achmad W. Citizen and netizen society: The meaning of social change from a technology point of view. Jurnal Mantik. 2021;5(3):1564-1570.

[30] Mubarok MS, Ramadhani R, Putri MD. Educational method in the Quran: Analysis of Islamic education science surah An-Nahl verse 125. International Journal of Islamic Khazanah. 2023;13(1):35-47. https://doi.org/10.15575/ijik.v13i1.19752

[31] Rosita R, Ghozali I, Harto P, Susanto H, Zainuddin F. Intellectual capital and financial performance of state-owned banking: Evidence from Indonesia. International Journal of Learning and Intellectual Capital. 2020;17(1):47-60. https://doi.org/10.1504/IJLIC.2020.105322

[32] Xu J, Zhang Y. Does intellectual capital measurement matter in financial performance? An investigation of chinese agricultural listed companies. Agronomy. 2021;11(9):1872. https://doi.org/10.3390/agronomy11091872

[33] Devita H, Setyadi D, Paminto A, Defung F, Adhimursandi D. Antecedents of financial performance influence on intellectual capital and firm

value. Universal Journal of Accounting and Finance. 2021;9(6):1394-1404. https://doi.org/10.13189/ujaf.2021.090618

[34] Pavlovic V, Knezevic G, Petkovic M. The impact of intellectual capital on financial performance in the fishing industry: Evidence from france. Custos Agronegocio Line. 2021;17:445-467.

[35] Chowdhury LAM, Rana T, Akter M, Hoque M. Impact of intellectual capital on financial performance: Evidence from the Bangladeshi textile sector. Journal of Accounting & Organizational Change. 2018;14(4):429-454. https://doi.org/10.1108/JAOC-11-2017-0109

[36] Xu J, Wang B. Intellectual capital, financial performance and companies' sustainable growth: Evidence from the Korean manufacturing industry. Sustainability. 2018;10(12):4651. https://doi.org/10.3390/su10124651

[37] Ni Y, Cheng Y-R, Huang P. Do intellectual capitals matter to firm value enhancement? Evidences from Taiwan. Journal of Intellectual Capital. 2021;22(4):725-743. https://doi.org/10.1108/JIC-10-2019-0235

[38] Salvi A, Vitolla F, Giakoumelou A, Raimo N, Rubino M. Intellectual capital disclosure in integrated reports: The effect on firm value. Technological Forecasting and Social Change. 2020;160:120228. https://doi.org/10.1016/j.techfore.2020.120228

[39] Margareta CR, Prasetyo K. Financial performance as an intervening variable in the relationship between intellectual capital and firm value. Cuadernos de Economía. 2020:428-434.

[40] Madyan M, Fikir HR. Intellectual capital, financial performance, and value of company. Journal of Advanced Research in Dynamical and Control System. 2019;11:1276-1284.

[41] Robiyanto R, Putra AR, Lako A. The effect of corporate governance and intellectual capital toward financial performance and firm value of socially responsible firms. Contaduría y administración. 2021;66(1):1-24.

[42] Sumiati S, Wijayanti R, Yuana P, Nikmah C. Improving company value: The role of human capital, structural capital, capital employed, investment decisions, and manager's attitude to risk. BISMA (Bisnis dan Manajemen). 2022;14(2):110-123.