Universitas Warmadewa
Editorial Office: Program Studi Magister Manajemen | Program Pascasarjana | Universitas Warmadewa
Jl. Terompong No.24, Sumerta Kelod, Kec. Denpasar Timur, Kota Denpasar, Bali 80239

Jurnal Ekonomi dan Bisnis Jagaditha

Volume 11, Number 1, 2024

ISSN: 2355-4150 (Print) | 2579-8162 (Online)
Publication details, Including author guidelines
visit URL: https://www.ejournal.warmadewa.ac.id/index.php/jagaditha/authorguideline

Intellectual Capital Research Opportunities on The Sustainable Growth of The MSME Industry in Indonesia

Author Name(s): Ni Nengah Seri Ekayani[1]*, Ida Bagus Anom Purbawangsa[2], Luh Gede Sri Artini[2], Henny Rahyuda[2]
1 Universitas Warmadewa, Indonesia
2 Universitas Udayana, Indonesia

Article History
Received: December 12, 2024
Revised:March 1, 2024
Accepted: March 3, 2024

How to cite this article (APA)
Ekayani, N, N, S., Purbawangsa, I, B, A., Artini, L, G, S., Rahyuda, H. (2024). Intellectual Capital Research Opportunities on The Sustainable Growth of The MSME Industry in Indonesia. Jurnal Ekonomi dan Bisnis Jagaditha. 11(1), 1-9. https://doi.org/10.22225/jj.11.1.2024.1-9

*Corespondence regarding this article should be addressed to:
Ni Nengah Seri Ekayani
Email: sriekayani@gmail.com

ISSN 2355-4150 (Print)
ISSN 2579-8162 (Electronic)

Jurnal Ekonomi dan Bisnis Jagaditha
Volume 11, Number 1, 2024

Intellectual capital research opportunities on the sustainable growth of the MSME Industry in Indonesia

Ni Nengah Seri Ekayani[1]*, Ida Bagus Anom Purbawangsa[2], Luh Gede Sri Artini[2], Henny Rahyuda[2]

1. Universitas Warmadewa, Indonesia
2. Universitas Udayana, Indonesia

Abstract: The purpose of this paper is to briefly review the literature on intellectual capital and sustainability growth in manufacturing companies, service companies or other industries and propose research opportunities related to the role of intellectual capital in influencing sustainable growth in the Micro, Small and Medium Enterprises (MSME) industry. Two steps are involved in developing a research proposition. First, identify the characteristics of the contingent faced by each type of business. Second, match the characteristics of the contingent for each type of company with the appropriate intellectual capital based on the results of previous research. The contingent characteristics of the type of MSME business can be identified as innovation, management knowledge, competence, competitive advantage, and technological ability to be able to demonstrate sustainable growth of a business. These variables can be used and combined to improve managerial performance as the basis for sustainable growth of a business. From the various problems experienced by MSMEs, it is deemed necessary to raise the issue of the influence of intellectual capital on sustainability growth with a combination of these variables.

Keywords: intellectual capital; sustainable growth; MSME industry.

Introduction

In the 1990s in business and accounting practice there has emerged an awareness of the importance of the value of intangible assets. One of the approaches used in the assessment and measurement of intangible assets is intellectual capital which has become the focus of attention in various fields, including management, information technology, sociology, and accounting (Demartini & Beretta, 2020; Sánchez & Elena, 2006). The attractiveness of intellectual capital as an intangible asset is that it has the same priority as tangible assets and is able to attract the attention of various stakeholders (Temouri et al., 2021). First, there is a consideration that has developed where intellectual capital which is manifested as knowledge, employee competence, organizational structure, internal control, and technological intelligence is more valuable than physical assets such as land, vehicles, buildings and other types of tangible assets (Jordão & Novas, 2017; Muwardi et al., 2020). Many companies or business entities have begun to develop their focus on employee training programs to improve their competencies, rather than expanding their businesses such as buying land or expanding and building new factories or business units (Alvino et al., 2021; Ousama et al., 2020; Sánchez & Elena, 2006). Second, many investors today have put the disclosure of intellectual capital into consideration in the investment decision-making system. Third, in current developments, intellectual capital has become a valuable asset (Mention,

*Correspondence regarding this article should be addressed to:
Ni Nengah Seri Ekayani. Universitas Warmadewa, Indonesia.
Email: sriekayani@gmail.com

2012; Ousama et al., 2020; Putra, 2012).

The start of the "new economy" era which is principally driven by the development of information technology and science also triggers the development of usefulness in intellectual capital (Alvino et al., 2021; Jordão & Novas, 2017; Mention, 2012; Ousama et al., 2020). One area that has attracted the attention of both academics and practitioners is related to the use of intellectual capital as an instrument to determine the prospects for sustainable business growth (Abhayawansa & Guthrie, 2010; Lu et al., 2021; Mention, 2012; Ulum , 2008). Business sustainability, one of the main topics in financial management, has attracted a lot of concern in recent years. The main objective of business is to maximize the wealth of shareholders (Alipour, 2012; Marr, 2004; X. L. Xu et al., 2020). Profits can provide the power for sustainable business development, but achieving them doesn't have to be at all costs. Financial management has focused on the relationship between real business and sustainable financial performance (Alves et al., 2021; Asare et al., 2017; Molodchik et al., 2014). Studying sustainable financial performance involves assessing a company's future development capabilities. Although corporate managers can improve a firm's financial performance, they are unlikely to truly understand the firm's long-term sustainable development capabilities, especially the influence of IC on sustainable growth (Firer & Mitchell Williams, 2003; Pulic, 2004; Roos et al., 2001). Therefore, it is very important to study the relationship of IC-business sustainability in the knowledge economy (Alipour, 2012; Lu et al., 2021; Xu et al., 2020).

Method

After conducting a literature review, the researcher does not stop until he only reads the literature, but also summarizes, analyzes and synthesizes critically and deeply from the reviewed or reviewed papers. The results of this summary, analysis and synthesis are then written in the form of scientific papers which we often categorize into survey papers. The types and methods used by researchers to conduct a literature review or literature review and then summarize it into a paper using the Systematic Mapping Study (Scoping Study) method. Systematic mapping study is a systematic literature review method using predefined stages (Elberzhager et al., 2012). The selection of papers is also not done subjectively by the researchers, but uses the protocols and filters that have been set in advance. Systematic mapping studies are usually carried out for broader research topics than traditional reviews (Neto et al., 2011). Usually the results are in the form of clusters and classifications of the findings obtained on a research topic. Sometimes it is done to identify future research trends of a research topic.

Discussion

Review of Previous Research on Intellectual Capital and Sustainable Growth

Many researches related to IC have been carried out abroad, such as those conducted by Demartini and Beretta (2020); Jordão and Novas (2017) on the MSME industry stated that the role played by intellectual capital (IC) is very important in the context of small and medium enterprises (MSMEs). However, the IC literature that focuses on regulating MSMEs is limited and fragmented. This study provides a structured literature review of the available evidence regarding the influence of IC on MSME performance. The findings show that strategic outcomes such as innovation, knowledge management, core competencies and performance of SME firms are influenced by IC.

Muwardi et al. (2020); Sánchez and Elena (2006) researched IC in the public sector, namely in the education industry (universities). The growing interest in intangible assets and intellectual capital (IC) has extended from companies to public institutions such as universities and research centers over the last decade. Since universities are considered

important institutional actors in national innovation systems, European higher education and research institutions are going through an important transformation process with the aim of making them more comparable, flexible, transparent and competitive (Asare et al., 2017; Molodchik et al., 2014).). Furthermore, Xu & Wang (2018) conducted research by combining IC with sustainable growth. This study empirically investigates the impact of IC on financial performance and sustainable growth in the Korean manufacturing industry. The result is that IC has a positive effect on financial performance and sustainable growth. In addition, company performance and sustainable growth also have a positive influence on physical capital, human capital, and relational capital (Asare et al., 2020; Boekestein, 2009). The results of this study broaden IC's understanding of creating corporate value and building sustainable excellence in business.

Ousama et al. (2020) also examines IC on the market value of companies listed on the Qatar Stock Exchange. This study finds that there is a significant relationship between IC information and the market value of the firm. This finding suggests that companies report their IC to help stakeholders (eg shareholders, investors) to understand the true value of the company (which includes IC value). Another study from Lu et al. (2021), this study examines the impact of the dimensions of Intellectual Capital (IC), human capital, structural capital, and relational capital on sustainable growth with the mediating role of sustainable competitive advantage. This study was conducted on companies registered in China and Pakistan. The result is that IC has a significant influence on the differentiation strategy in Chinese and Pakistani firms. Asar et al. (2017) conducted research on the banking industry in Ghana. The result of this study is that basically the quality of bank assets in Ghana is generally not affected by intellectual capital. However, when intellectual capital is divided according to its components, the study shows that there is a significant positive effect between asset quality and the two components of intellectual capital. Thus, structural capital and human capital efficiency have a positive effect on the quality of bank assets. Chowdhury et al. (2018) researching textile companies in Bangladesh which states that IC has an impact on financial performance and also shows various relationships with changes in financial indicators. The IC component significantly influences productivity outcomes, with tangible capital playing a major role in productivity and profitability (Brennan & Connell, 2000; Buszko & Mroziewski, 2009).

Freeburg (2018) in his research conducted on religious organizations. This research was conducted in South American churches. The results of this study indicate that when the complexity of the approach matches the complexity for identifying IC problems, churches are more optimistic about their ability to extract asset values. This study adds to existing research on the complexities of IC and provides insights into the organization that is unique to IC research (Bontis, 1998; Bontis et al., 2000). Troise et al. (2020) grouped three well-known IC dimensions, namely human, structural and relational capital as independent variables and company growth and employment growth as dependent variables. The results of the study found that three variables, namely previous industry experience (human capital), product innovation (structural capital) and equity offered (relational capital) were significant and positively related to the growth of equity-crowdfunded firms.

Wang et al. (2019) found that the efficiency of intellectual capital (IC) and its sub-dimensions (ie human capital efficiency, organizational capital efficiency and capital efficiency used) have a significant positive effect on dynamic technology capabilities. The results also show that the positive effect of IC on dynamic technology capabilities will strengthen SOEs compared to non-SOEs in China. Smriti and Das (2018) research on intellectual capital in companies listed on the Indian stock exchange states that companies listed in India appear to be performing well and efficiently in utilizing their IC. Overall, human capital has a major impact on a company's productivity. Furthermore, empirical analysis shows that structural capital efficiency and efficiency of capital employed are equally important contributors to firm sales growth and market value (Chen & Zhu, 2004; Firer & Mitchell Williams, 2003). The growing importance of IC's contribution to value creation is consistently reflected in the financial performance of these companies in India.

Resource-based Theory (RBT) Approach in Intellectual Capital Research

Resource-based theory (RBT) is a further development of Ricardo's Economic Rent theory and Porter's structure-performance-conduct (Barney, 2001). This theory arises because of strategic questions about why a company can outperform other companies and have sustainable superior performance. Companies that build their own resources and can control them will have the ability to maintain their advantages compared to if the company buys or obtains resources from outside the organization. The unique set of resources owned and controlled by the firm enables the firm to achieve and maintain sustainable superior performance (Barney, 1991). Unique resources referred to in RBT are resources that have useful/valuable properties, are rare, cannot be imitated, and cannot be replaced. Valuable means that it can be used for company activities, rare means that it is only owned by a few companies. Immutable means that the resource is protected from being imitated by competitors. Irreplaceable means that resources are only owned by certain companies and cannot be replaced with other products (Barney, 2001). This type of resource can lead the company to achieve competitive advantage. The development of RBT is quite rapid, especially in proving its consistency by using empirical studies in various fields of science. The area that first developed it was strategic management (Chen & Zhu, 2004; Firer & Mitchell Williams, 2003) which later developed in other fields of science, such as human resource management (Park et al., 2019), and accounting (Farah et al., 2019). al., 2019).

So the success of the company's growth and sustainability will depend on developing new resources or by exploiting old resources (Belkaoui & Riahi, 2003). Thus, the Resource-Based View also pays attention to organizational learning, knowledge accumulation, ability development, and associational change processes (Bhargava et al., 2011). Intangible strategic resources can be in the form of intellectual capital (Intellectual Capital). Edvinsson (1997) divides Intellectual Capital into three parts, namely Human Capital, Structural Capital and Customer Capital. Based on this, identifying, developing and preserving resources as core competencies is an important effort that companies need to make in order to create a sustainable competitive advantage.

Intellectual Capital and Sustainable Growth

Regarding sustainable growth, Xu and Wang's research (2018) found that IC has a positive influence on sustainable growth in a business. Lu et al. (2021) proposed the concept of a sustainable growth rate to describe optimal growth from a financial perspective assuming a given strategy with clear finances. Simply put, this is the maximum rate at which a company can use its own internal funds to achieve its growth without borrowing money from banks or financial institutions. Companies that maintain sustainable growth will ultimately avoid unprofitable growth. Companies that manage sustainable growth can avoid straining financial resources and extend their financial leverage.

In the context of Industry 4.0, innovative capital (for example, R&D and intellectual property rights) can be a determinant of internal resource allocation, development of new products, and expansion of new markets. Research and development (R&D) activities with high risk require companies to establish solid system guarantees, and structural capital (SC) can provide environmental guarantees for the growth of manufacturing companies. In addition, stakeholders have an important impact on the survival of a company. The closer the relationship with various stakeholders, the greater the impact of relational capital (RC) on shareholder market behavior.

Mukherjee and Sen (2019) found that intellectual capital (IC) shows a significant impact on the company's sustainable growth. Significantly, the results also reveal that almost all explanatory variables, namely physical capital training, relational capital, innovation capital, and process capital have an effect on explaining the company's sustainable growth. In addition, the results show that Innovation Capital (controlling the influence of Physical Capital) is the IC component that has the most influence on the company's sustainable growth. Research conducted by Xu et al. (2020) in Shanghai and Shenzhen China mentioned

that companies should invest in human capital and their executives and policymakers should start accumulating the intellectual capital needed to enable adaptation to the frequently changing business environment. In the spirit of the intellectual farm concept, presents several new ways to study company performance using intellectual capital and offers suggestions that can help modernize the industry.

Intellectual Capital Framework in Practice

In recent years there has been a particular stream of management accounting research that focuses on issues of interest to practitioners. This research is concerned with the development and application of cost management techniques, non-financial performance measurement and strategic management accounting. In fact, much of the early research in management accounting was based on the concept of economic rationality; behavior is perceived by practitioners as abstract and unrelated to their needs. Demartini and Paoloni (2013) proposed a framework for IC research in practice in companies, which were carried out in electronics and defense companies.

The early literature on IC (Bontis, 1998; Edvinsson, 1997; Nahapiet & Ghoshal, 1998; Wiig, 1997) focused on visualizing and identifying the main components of IC namely human, organizational/structural and customer/social capital, and then looking for stable causal relationships. among these major components (Petty & Guthrie, 2000) and/or their main role in lagging the market value of firms (Bontis et al., 2000). Furthermore, several approaches to measuring intangible assets have been developed by academics and practitioners (Buszko & Mroziewski, 2009; Dumay, 2009; Mouritsen, 2003; Pulic, 2004).

In early 2000, critical accounting researchers Fincham and Roslender (2003) told of personal experiences of things like building a brand, developing intellectual property or creating a culture of innovation lying on the opposite end of the spectrum by providing a strong financial assessment of the elements of IC. . Mouritsen (2006), based on the Latourian theoretical distinction between ostensive and performative definitions of reality (Latour, 1986), recognizes two basic research streams: IC-ostensive vs. IC-performative and, consequently, the two are interrelated but differ in their measurement roles. According to the IC-otensive research stream, knowledge and strategy are concerned with causal mapping and related to effects on value creation. Thus, measurement is the "essence", useful for finding assets that generate value not visible in the balance sheet of the company. On the other hand, the IC performance research stream recognizes that IC is a representation of a knowledge resource, a transformative quality that emerges in applications. Thus measurement is a “convention”, useful for understanding the idiosyncratic qualities of IC and interpreting its role in the organizational context.

As is well known there is no "optimal" approach to IC measurement. In fact, to choose which model is more suitable, it is important to determine the company's information needs. This means that, to be useful, IC reporting must offer relevant and reliable information to internal and external stakeholders interested in its assessment. In practice, the measures used by managers are generally consistent with their interests and cognitive processes (Romano et al., 2014; Roos et al., 2001). So there is no best portfolio related to measurements so that it can be identified. Furthermore IC measurement cannot be presented as a solution in value creation and there is an additional management control agenda where information about IC is an input for management activities.

Dumay (2009) criticizes real efforts to develop more IC frameworks, as most IC measurement frameworks already exist (Demartini & Paoloni, 2013). In addition, Dumay (2009) openly questions the need to further develop IC theory and advocates a way forward by outlining critical approaches to researching and applying IC in practice. The main critical factor arising from the process to date is the accuracy of identification of actors involved in decision making and whether they are users or providers of IC information. Conceptually proposed by Demartini and Paoloni (2013) are first, different actors can influence the selection and implementation of the process based on the power they have in selecting the

appropriate IC for the company For example, the manager of the parent company (CEO, CFO, Board of Directors) has a significant influence different from members of the IC research group (corporate managers, consultants and academics) (Buenechea-Elberdin, 2017; Subramaniam & Youndt, 2005). Thus, the identification of the decision maker's goals is the starting point of the research group's agenda. This is an important factor because decision makers have multiple goals that can be achieved through the use of different IC approaches and tools (Dong & Chen, 2010; Forte et al., 2017; Wang et al., 2019). Therefore group research must first help decision makers highlight their goals, and then must map information users and their needs. However, some decision makers often do not consider the relevance or usefulness of the results of joint research groups (Buszko & Mroziewski, 2009; Chen & Zhu, 2004).

Second, it is important to distinguish IC information users, from providers. While attention to the first concept is very basic for analyzing information needs. Thus research groups need to identify the owners of the information and develop procedures for gathering numbers within the firm (Asare et al., 2020; Boekestein, 2009; Chowdhury et al., 2018). From an organizational point of view, this implies a strong commitment from company management so that information owners actively collaborate in providing information. Another important aspect of implementing the framework concerns the collection of information (Alves et al., 2021). The implementation process provides a comprehensive view of IC practices in the company. Data retrieval involves identifying these individuals, which is not always easy in big business as it requires interaction with multiple parties to obtain all contributions (Molodchik et al., 2014). The framework proposed by Demartini and Paoloni (2013) is debatable because the framework is still in the experimental stage and has not been widely accepted in business management systems.

IC Research Opportunities on the Sustainable Growth of the MSME Industry in Indonesia

According to Nonaka and Takeuchi (1995), the fundamental reason why companies in Japan are successful is because of their skills and experience in managing/creating knowledge in organizations where knowledge is the intellectual capital owned by humans as an element of human capital. One of the causes of the performance of MSMEs in Indonesia is much lower than the performance of MSMEs in developed countries, is the low development or mastery of science and technology which is the intellectual capital owned by MSMEs in Indonesia.

Business development in Indonesia is currently leading to the growth of MSMEs. Khalique et al. (2015) emphasize the economic and social importance of MSMEs as the main generators of employment and because they represent more than 90% of the world's enterprises. Significant competition in the MSME industry in developing countries (eg, Indonesia) faces many internal and external pressures, including those related to business sustainability. At present, rising labor costs and intense international competition have greatly influenced the growth of MSMEs in Indonesia to play a major role in the rapidly growing market conditions. In 2019, the 4.0 business innovation strategy was issued by the Indonesian government, one of which is to increase competitiveness in the MSME industry. The MSME industry requires skill specialization and is subject to implicit organizational knowledge and capabilities. Furthermore, the resilience of the MSME industry is highly dependent on the number of skilled employees and the volume of physical capital. The micro, small and medium enterprise (MSME) sector has an important role in national economic growth. From the number of actors, labor absorption, and contribution to GDP, MSMEs are significant. According to data from the Ministry of Cooperatives and MSMEs, the number of MSME actors currently stands at 64.1 million or 99 percent of the total number of business actors in Indonesia. The workforce absorbed in the

MSME sector reached 116 million and MSMEs contributed 58% of GDP. This makes the MSME sector an attractive industry for IC research.

Conclusion

This article aims to briefly review research on IC in manufacturing, service, and other industries and propose research opportunities on the role of IC in the sustainable growth of MSMEs, where in the current condition MSMEs are the focus of the state and society. Based on a review conducted on research on IC and sustainability growth in manufacturing, service and other industries, several contingent variables were found, namely innovation, management knowledge, competence, competitive advantage, and technological capability. The suitability of the combination of these variables with IC and sustainability growth can improve performance.

These variables can be used and combined to improve managerial performance. From the various problems experienced by MSMEs, it is deemed necessary to raise the issue of the influence of IC on sustainability growth with a combination of these variables. The problem faced by SMEs today is that the awareness and willingness of entrepreneurs to apply appropriate science and technology in companies is still very limited. The entrepreneur's lack of courage to try innovations related to technology makes the quality of human resources weak. Most small businesses grow conventionally and are family businesses that have been passed down from generation to generation. The limited quality of human resources in MSMEs, both in terms of formal education and knowledge and skills, greatly affects the management of their business, so that the business is difficult to develop optimally. MSMEs are also relatively difficult to adopt new technological developments to increase the competitiveness of the products they produce. For this reason, it is deemed necessary to conduct research on the influence of IC on the sustainable growth of MSMEs with a combination of innovation variables, competence, technological capabilities, management knowledge, and competitive advantage, as well as the possibility that there are other contextual variables such as the cultural dimension.

References

Abhayawansa, S., & Guthrie, J. (2010). Intellectual capital and the capital market: a review and synthesis. *Journal of Human Resource Costing & Accounting*, *14*(3), 196–226. https://doi.org/10.1108/14013381011095472

Alipour, M. (2012). The effect of intellectual capital on firm performance: An investigation of Iran insurance companies. *Measuring Business Excellence*, *16*(1), 53–66. https://doi.org/10.1108/13683041211204671

Alves, H., Cepeda-Carrion, I., Ortega-Gutierrez, J., & Edvardsson, B. (2021). The role of intellectual capital in fostering SD-Orientation and firm performance. *Journal of Intellectual Capital*, *22* (1), 57– 75. https://doi.org/10.1108/JIC-11-2019-0262

Alvino, F., Di Vaio, A., Hassan, R., & Palladino, R. (2021). Intellectual capital and sustainable development: a systematic literature review. *Journal of Intellectual Capital*, *22*(1), 76–94. https://doi.org/10.1108/JIC-11-2019-0259

Asare, N., Alhassan, A. L., Asamoah, M. E., & Ntow-Gyamfi, M. (2017). Intellectual capital and profitability in an emerging insurance market. *Journal of Economic and Administrative Sciences*, *33*(1), 2–19. https://doi.org/10.1108/jeas-06-2016-0016

Asare, N., Laryea, M. M., Onumah, J. M., & Asamoah, M. E. (2020). Intellectual capital and asset quality in an emerging banking market. *Asian Journal of Accounting Research*, *6*(1), 55–68. https://

doi.org/10.1108/ajar-05-2020-0034

Boekestein, B. (2009). Acquisitions reveal the hidden intellectual capital of pharmaceutical companies. *Journal of Intellectual Capital*, *10*(3), 389–400. https://doi.org/10.1108/14691930910977806

Bontis, N. (1998). Mapping the human capital management research trends using bibliometric analysis. *Management Decision*, *32*(6), 63–76.

Bontis, N., William Chua Chong, K., & Richardson, S. (2000). Intellectual capital and business performance in Malaysian industries. *Journal of Intellectual Capital*, *1*(1), 85–100. https://doi.org/10.1108/14691930010324188

Brennan, N., & Connell, B. (2000). Intellectual capital: Current issues and policy implications. *Journal of Intellectual Capital*, *1*(3), 206–240. https://doi.org/10.1108/14691930010350792

Buenechea-Elberdin, M. (2017). Structured literature review about intellectual capital and innovation. *Journal of Intellectual Capital*, *18*(2), 262–285. https://doi.org/10.1108/JIC-07-2016- 0069

Buszko, A., & Mroziewski, M. (2009). The intellectual capital impact on Polish construction companies during the transformation period. *Journal of Human Resource Costing & Accounting*, *13*(3), 206–220. https://doi.org/10.1108/14013380910995502

Chen, J., & Zhu, Z. (2004). Measuring intellectual capital: A new model and empirical study. *Journal of Intellectual Capital*, *5*(1), 195–212. https://doi.org/10.1108/14691930410513003

Chowdhury, L. A. M., Rana, T., Akter, M., & Hoque, M. (2018). Impact of intellectual capital on financial performance: evidence from the Bangladeshi textile sector. *Journal of Accounting and Organizational Change*, *14*(4), 429–454. https://doi.org/10.1108/JAOC-11-2017-0109

Demartini, M. C., & Beretta, V. (2020). Intellectual capital and SMEs' performance: A structured literature review. *Journal of Small Business Management*, *58*(2), 288–332. https://doi.org/10.1080/00472778.2019.1659680

Demartini, P., & Paoloni, P. (2013). Implementing an intellectual capital framework in practice *Journal of Intellectual Capital*, *14*(1), 69–83. https://doi.org/10.1108/14691931311289020

Dong, T.-P., & Chen, W.-C. (2010). Measurement Indocators of Intellectual Capital – a Critical Review. *Marketing and Management Sciences*, *23*(4), 203–207. https://doi.org/10.1142/9781848165106_0037

Dumay, J. C. (2009). Intellectual capital measurement: A critical approach. *Journal of Intellectual Capital*, *10*(2), 190–210. https://doi.org/10.1108/14691930910952614

Edvinsson, L. (1997). Developing intellectual capital at Skandia. *Long Range Planning*, *30*(3), 366– 373. https://doi.org/10.1016/s0024-6301(97)90248-x

Firer, S., & Mitchell Williams, S. (2003). Intellectual capital and traditional measures of corporate performance. *Journal of Intellectual Capital*, *4*(3), 348–360. https://doi.org/10.1108/14691930310487806

Forte, W., Tucker, J., Matonti, G., & Nicolò, G. (2017). Measuring the Intellectual Capital of Italian listed companies. In *Journal of Intellectual Capital* (Vol. 32, Issue 1). https://doi.org/10.1515/arbi-2013-0082

Freeburg, D. (2018). Problems and Approaches in the Management of Intellectual Capital in Religious Organisations: An Issue of Complexity. *Journal of Information and Knowledge Management*, *17*(4), 1–26. https://doi.org/10.1142/S0219649218500466

Jordão, R. V. D., & Novas, J. C. (2017). Knowledge management and intellectual capital in networks of small- and medium-sized enterprises. *Journal of Intellectual Capital*, *18*(3), 667–692. https://doi.org/10.1108/JIC-11-2016-0120

Lu, Y., Li, G., Luo, Z., Anwar, M., & Zhang, Y. (2021). Does Intellectual Capital Spur Sustainable Competitive Advantage and Sustainable Growth?: A Study of Chinese and Pakistani Firms. *SAGE Open*, *11*(1). https://doi.org/10.1177/2158244021996702

Marr, B. (2004). Measuring and benchmarking intellectual capital. *Benchmarking: An International Journal*, *11*(6), 559–570. https://doi.org/10.1108/14635770410566474

Mention, A.-L. (2012). Intellectual Capital, Innovation and Performance: a Systematic Review of the Literature. *Business and Economic Research*, *2*(1), 1–37. https://doi.org/10.5296/ber.v2i1.1937

Molodchik, M. A., Shakina, E. A., & Barajas, A. (2014). Metrics for the elements of intellectual capital in an economy driven by knowledge. *Journal of Intellectual Capital*, *15*(2), 206–226. https://doi.org/10.1108/JIC-08-2013-0091

Mouritsen, J. (2003). Intellectual capital and the capital market: The circulability of intellectual capital. *Accounting, Auditing & Accountability Journal*, *16*(1), 18–30. https://doi.org/10.1108/09513570310464246

Mukherjee, T., & Sen, S. S. (2019). Intellectual Capital and Corporate Sustainable Growth: The Indian Evidence. *Journal of Business Economics and Environmental Studies*, *9*(2), 5–15. https://doi.org/10.13106/jbees.2019.vol9.no2.5

Muwardi, D., Saide, S., Eko Indrajit, R., Iqbal, M., Siti Astuti, E., & Herzavina, H. (2020). Intangible resources and institution performance: The concern of intellectual capital, employee performance, job satisfaction, and its impact on organization performance. *International Journal of Innovation Management*, *24*(5), 1–21. https://doi.org/10.1142/S1363919621500092

Nahapiet, J., & Ghoshal, S. (1998). Social Capital, Intellectual Capital, And The Organizational Advantage. *Academy of Managemeni Review*, *23*(2), 242–266.

Ousama, A. A., Al-Mutairi, M. T., & Fatima, A. H. (2020). The relationship between intellectual capital information and firms' market value: a study from an emerging economy. *Measuring Business Excellence*, *24*(1), 39–51. https://doi.org/10.1108/MBE-01-2019-0002

Petty, R., & Guthrie, J. (2000). Intellectual capital literature review: Measurement, reporting and management. *Journal of Intellectual Capital*, *1*(2), 155–176. https://doi.org/10.1007/978-3-540- 71496-5_54

Pulic, A. (2004). Intellectual capital – does it create or destroy value? *Measuring Business Excellence*, *8* (1), 62–68. https://doi.org/10.1108/13683040410524757

Putra, I. G. C. (2012). Pengaruh Modal Intelektual Pada Nilai Perusahaan Perbankan Yang Go Public Di Bursa Efek Indonesia. *Jurnal Ilmiah Akuntansi Dan Humanika*, *2*(1), 1–22.

Romano, M., Catalfo, P., & Nicotra, M. (2014). Science parks and intellectual capital: An integrated model for intangibles' representation, evaluation and control. *Journal of Intellectual Capital*, *15*(4), 537–553.

Roos, G., Bainbridge, A., & Jacobsen, K. (2001). Intellectual capital analysis as a strategic tool. *Strategy & Leadership*, *29*(4), 21–26. https://doi.org/10.1108/10878570110400116

Sánchez, M. P., & Elena, S. (2006). Intellectual capital in universities: Improving transparency and internal management. *Journal of Intellectual Capital*, *7*(4), 529–548. https://doi.org/10.1108/14691930610709158

Smriti, N., & Das, N. (2018). The impact of intellectual capital on firm performance: a study of Indian firms listed in COSPI. *Journal of Intellectual Capital*, *19*(5), 935–964. https://doi.org/10.1108/JIC-11-2017-0156

Subramaniam, M., & Youndt, M. A. (2005). The influence of intellectual capital on the types of innovative capabilities. *Academy of Management Journal*, *48*(3), 450–463. https://doi.org/10.5465/AMJ.2005.17407911

Temouri, Y., Pereira, V., Muschert, G. W., Ramiah, V., & Babula, M. (2021). How does cluster location and intellectual capital impact entrepreneurial success within high-growth firms? *Journal of Intellectual Capital*, *22*(1), 171–189. https://doi.org/10.1108/JIC-02-2020-0066

Troise, C., Matricano, D., Candelo, E., & Sorrentino, M. (2020). Crowdfunded and then? The role of intellectual capital in the growth of equity-crowdfunded companies. *Measuring Business Excellence*, *24*(4), 475–494. https://doi.org/10.1108/MBE-02-2020-0031

Ulum, I. (2008). Intellectual Capital Performance Sektor Perbankan di Indonesia. *Jurnal Akuntansi Dan Keuangan*, *10*(2), 77–84. https://doi.org/10.9744/jak.10.2.PP.77-84

Wang, Y., Su, X., Wang, H., & Zou, R. (2019). Intellectual capital and technological dynamic capability: evidence from Chinese enterprises. *Journal of Intellectual Capital*, *20*(4), 453–471. https://doi.org/10.1108/JIC-06-2018-0096

Wiig, K. M. (1997). Integrating intellectual capital and knowledge management. *Long Range Planning*, *30*(3), 399–405. https://doi.org/10.1016/s0024-6301(97)90256-9

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

Xu, X. L., Chen, H. H., & Zhang, R. R. (2020). The impact of intellectual capital efficiency on corporate sustainable growth-evidence from smart agriculture in China. *Agriculture (Switzerland)*, *10*(6), 1–15. https://doi.org/10.3390/agriculture10060199