Journal of Business and Management Studies
ISSN: 2709-0876
DOI: 10.32996/jbms
Journal Homepage: www.al-kindipublisher.com/index.php/jbms

JBMS
AL-KINDI CENTER FOR RESEARCH AND DEVELOPMENT

| RESEARCH ARTICLE

Framework of Intellectual Capital-Based View in Improving Firm Agility

Ahmad Baikuni[1] ✉ **Dafik**[2], **Djoko Poernomo**[3] **and Ika Sisbintari**[4]
[1]*Doctoral Student at Administrative Science, University of Jember, Indonesia*
[2]*Department of Mathematics Education, University of Jember, Indonesia*
[34]*Department of Business Administration University of Jember, Indonesia*
Corresponding Author: Ahmad Baikuni, **E-mail**: baiqunia@ymail.com

| ABSTRACT
A hypercompetitive and unpredictable business environment requires companies to have resources that enable organizations to be proactive and responsive to the environment and improve organizational efficiency. By using library research methods, this paper tried to synthesize the theory of intellectual capital and resource-based view and then develop the indicators to be more specific. The results of the study showed that the dimensions of the intellectual capital-based view turned out as the support and guide for implementing agility in the company, and the firm agility will be more achievable if it has an intellectual capital-based view.

| KEYWORDS
Resource-based view, intellectual capital, agility

| ARTICLE DOI: 10.32996/jbms.2022.4.3.1

1. Introduction

In recent years, experts have conducted a series of studies to identify and answer questions about the key capabilities that organizations must possess to improve investor trust, customer commitment, productivity, and employee self-actualization for organizations to succeed. The capability mentioned here is something that the organization creatively does to provide value-added to stakeholders (Ulrich & Yeung, 2019). It is because, in an unpredictable and competitive business field, the organization must have different competitive resources to compete; otherwise, they will gradually be left behind.

This unpredictable situation causes significant changes in the strategic landscape of the organization. Traditional and contemporary business models are required to increase their competitive activities. In other words, old approaches and solutions are no longer able to answer organizational challenges. One of the resources in dealing with this uncertainty is agility which, according to Yeganegi & Azar (2012), enables an organization to be responsive to the environment and improves organizational efficiency. Agility is considered one of the solutions in responding to changes and improving company competitiveness. For this reason, Vecchiato (2015) emphasizes the importance of understanding environmental uncertainty because, in today's hypercompetitive environment, agile companies tend to be more successful (Roberts & Grover, 2012).

Walter (2020) highlights that in a dynamic environment, the most dangerous thing is being overconfident about the capabilities you have and considering the external threats on a small-scale. It is because uncertainty in the contemporary business context is increasingly leading companies to face big challenges, not only to remain successful but also to survive (Felipe et al., 2017). Although he also underlined that organizations must understand that agility is not the only solution, however, it is a choice in certain situations to remain competitive and grow.

One of the resources that can be used as agility capital in dealing with uncertainty is intellectual capital because the dimensions of intellectual capital can leverage agility dimensions such as strategy, structure, capability, employees, and leadership, which all of those can have a direct impact on organizational agility. By strengthening agility, the company can respond faster and more accurately to unpredictable changes (Appelbaum et al., 2017a, 2017b), especially if the organization has intellectual capital that can be categorized as a resource-based view.

This paper tried to discuss intellectual capital as a source of firm agility (Shami & Nastiezaie, 2019). It is important because, as far as the author knows, there are still few authors or researchers that specifically discuss the relationship between intellectual capital and firm agility. Whereas in this competitive era and a business climate that often experiences uncertainty, it is more difficult for the company to carry out strategic planning (Tsai & Yang, 2014). Besides that, this paper tried to develop indicators of intellectual capital within the framework of a resource-based view to be more specific. It is due to intellectual capital, which is widely studied in various fields and requires specific indicators according to the field of study.

2. Literature Review

2.1 Resource-Based View

Resource-based view emerges from a question of why some of the same organizations are successful and some are not, whereas they operate in the same external environment. This question is then answered by J Barney (J. Barney, 1991) that in one type of industry, it is impossible for an organization to have the exact same tangible and intangible resources. There are things that cannot be the same such as the organizational culture and the historical background of the organization. It is then considered as the source of the company's success because it is not easy to obtain and replicate.

The company's success is determined by several resources (bundles of resources) owned and the company's ability to turn those resources into economic benefits (Ismail et al., 2012), especially human resources. When the company has unique resources which is difficult to imitate by the competitors, - or Powers & Hahn (Powers & Hahn, 2004) termed "superior resources," - which are then processed through good company capabilities, the company will be able to gain a competitive advantage which will lead to superior performance.

Specifications of culture, organizational history, and company resources can be built through various forms of social relations with the community where the company is located. If this process goes well, it will automatically form a pattern that Rumelt (1984) calls "isolating mechanisms," which causes competitors to be unable to replicate the resources that become the distinctive advantages of an organization. The uniqueness and superiority of these resources are known as the resource-based view.

However, not all resources can be categorized as resource-based view; to be categorized as RBV, some experts provide the following characteristics:

Table 1. *category of RBV*

Author	Category of RBV
(Rumelt, 1984)	imperfect substitutability, imperfectly imitable
J. Barney (1991) J. B. Barney & Hesterly (2012)	Valuable, rare, inimitable and non-substitutable
Grant (1991)	durability, transparency, transferability, and replicability

2.2 Intellectual Capital

Intellectual capital is a concept that is studied in various perspectives ranging from economics, public policy, government, management, and accounting (Martín-de Castro et al., 2019). Therefore, the perspective and definition of intellectual capital often differ depending on the perspective and point of view of each science. For example, accounting views intellectual capital as something static; it assumes that intellectual capital is something that can be measured, while management often describes intellectual capital as something that is dynamic and can be actively influenced. For instance, human resource management is considered to be responsible for the development of human resources through recruitment, development, and knowledge management. In general, the management perspective implies that intellectual capital is a complex topic that is relevant and depends on each department, employee, and organization (Blankenburg, 2018).

Various definitions of intellectual capital are found in various literature, but after conducting a literature review of intellectual capital research, Pedro et al (2018) noted that of the various definitions, the most widely cited is the opinion of Stewart (1997), who defines intellectual capital as knowledge, information, intellectual property rights and experience that can be used to create wealth. From the various understandings that exist, it can be concluded that intellectual capital is an intangible asset in the form of information and knowledge that functions to improve competitive ability and can improve company performance whether it is stated implicitly in the financial statements or not.

2.2.1 Dimensions of Intellectual Capital

There are various dimensions of intellectual capital that can be found in various literature. However, from various existing frameworks, the three main dimensions of intellectual capital that have been widely accepted are; human capital, structural capital, and relational capital (Pedro et al., 2018). The three dimensions can be explained as follows:

a. Human Capital

Human capital is "the intelligence of organizational members". It contains features like employee intelligence, values, attitudes, talents, skills, abilities, individual relations, creativity, education, experience, qualifications, motivation, commitment, loyalty, determination, interaction, expertise, proactive, leadership ability, flexibility, learning capability, behavior, intellectual agility and courage to take risks (Inkinen, 2015). In essence, human capital is all attributes regarding human resources that come from the knowledge and skills that are embedded and available in employees.

b. Structural Capital

Structural capital is an organizational infrastructure that supports the performance of human resources (Beltramino et al., 2020). It includes elements such as employee support mechanisms and structures, organizational knowledge, technology (such as information systems and databases), routines, procedures and processes, corporate culture, methods, business development plans, intellectual property (patents, copyrights, and trademarks), strategies, organizational charts, manuals, and programs. Khalique & De Pablos (2015) summarized structural capital as knowledge embedded in information systems as well as a product of the conversion of knowledge and intellectual property of the company. In essence, structural capital is anything that makes the value of the company greater than the material.

c. Relational Capital

Relational capital is the knowledge that is embedded in the company's external relations, including relationships with agents, customers, suppliers, competitors, partners, clients, shareholders, industry associations, community members, societies, governments, countries, and informal networks (Inkinen, 2015). Thus, relational capital can be at the individual and institutional levels.

The description mentioned above implies that an individual can have the highest intellectual level, but if the organization does not have an efficient structure, system, and process that allows his contribution to be effective, then the company will not achieve optimal performance (Hasan & Cheung, 2018; Torres et al., 2018).

2.3 Intellectual capital-based view

The Intellectual capital-based view (hereinafter abbreviated as ICBV) is a derived concept from the synthesis between intellectual capital theory and the resource-based view. Intellectual capital-based view can be interpreted as intangible assets that can be in the form of information or knowledge that is valuable, rare, inimitable, and non-substitutable that serves to improve competitive ability and improve organizational performance, where these intangible assets are generated from the uniqueness of the historicity of the organization.

2.4 Agility

Agility is a concept that can be understood intuitively, but sometimes it is difficult to define specifically because the different frameworks, models, and characteristics of agility make the definition of agility very varied. However, Ulrich & Yeung (2019) defines agility as the ability to respond quickly to emerging market opportunities by combining the ability to change, constantly learn and act fast.

Ulrich & Yeung (2019) outlined four characteristics of *agility* as follows:

a. Creating the future: The emphasis of agility is manufacturing a future novelty instead of doing the revision or renewing the past.
b. Anticipating the opportunity: Agility highlights that chance is higher-seen than evolution; it focuses less on what is wrong but more on what is right.
c. Adaptability: Agility is superior to its movement, action, and adaptation.
d. Continuous Learning: Agility implies continuous learning.

These four play a vital role in four dimensions of agility (strategic, organizational, leadership and individual).

2.4.1 *Strategic agility*
Strategic agility was first introduced by Roth (1996, p. 30) as the capability to produce the right product at the right time and place. This term was then adopted by Long (2000) into the context of strategic management. He added that *strategic agility* concentrates on the strategic goal and its flexibility to get a swift response to the changing circumstances and opportunities. To sum up, *strategic agility* is not merely denoted to winning such competition, but how to build the capacity towards the changes and sustainability.

The concept of strategic agility was then further developed by Doz and Kosonen (2010) and Y. Doz (2020). As proposed by them, three dimensions circle the *strategic agility*; namely strategic sensitivity, leadership unity, and resource fluidity. Strategic sensitivity portrays the combination of internal and external awareness in a participatory way. Unity of leadership (known as collective commitment) enables top management to dare to have quick decision-making through collaboration and an integrative leadership style. Resource fluidity refers to an internal ability to reconfigure the capabilities quickly and re-allocate the resources once a new strategic direction is decided. In short, *Agility = Sensitivity x Unity x Fluidity*"(Y. L. Doz & Kosonen, 2010).

To be more comprehensive, the following is the definition of strategic agility

Table 2. *The Definition of strategic agility*

Author(s), year	*Definition*
Roth (1996)	The ability to produce the right product at the right place, at the right time, at the right price
Weill et al.(2002)	A series of business initiatives applied easily by the companies and described as a combination of brand, customer base, core competencies, infrastructure, and employee's ability to change
McCann (2004)	The ability to recognize and snatch opportunities, change direction and avoid collisions quickly.
Jamrog et al.2006)	Strategic agility to move quickly, decisively, and effectively in anticipating, initiating, and taking advantage of the changes.
Doz and Kosonen(2007a)	The ability to make strategic changes over time by having reorientation and re-innovation.
Morgan and Page(2008)	The ability to support and encourage the incidental changes occasionally to take advantage of market opportunities.
(Sampath & Krishnamoorthy, 2017)	The ability to respond (proactive/reactive) to both predictable and unpredictable changes by using resources and knowledge to generate innovative solutions which guarantee long-term life sustainability and short-term competitive advantage by renewing the business model.

Source: Sampath & Krishnamoorthy (2017)

2.4.2 Organizational agility
Organizational agility is defined as the ability possessed by an organization to proactively detect, sense, and evaluate as well as categorize its environment into threats or opportunities and then formulate the organizational responses (Chatwani, 2019, p. 5). It aims at allowing the organizations to get a quick-respond to changes and market-penetration; for instance, it is possibly done by assembling a special team assigned to respond to market dynamics and develop alternative strategies to bring out a conducive communication climate both within the organization and with customers.

2.4.3 Leadership agility
If strategic agility lies in organizational victory, the organizational agility emphasizes resource allocation, and then leadership agility centers on the ability to learn and adapt quickly and anticipate the opportunities because the way leaders think act, and create the organizational culture and behavior is accepted by the members bridged both organization and individuals.
Organizations adopting agility into their operations through agile leaders are in higher success in responding to change and providing value-added to stakeholders. Leadership agility allowed the organizations to position themselves better to uncover the developments in the business field and achieve agility within fewer resources (Attar & Abdul-Kareem, 2020). Therefore, the success of an organization depends on the extent to which individuals and leaders take heed of agility.

Nowadays, changes and globalization require new types of leadership that help organizations attain their goals and enhance their capabilities. Such leaders are able to come up with new ideas, empower and encourage employees to be more responsible. They are set and willing to respond to a dynamic environment by sensing, capturing, and managing opportunities. Such a leader is called modern leadership in management practices and changes (Muafi & Uyun, 2019).

Agile leaders are able to create a conducive work environment to make employees feel satisfied and work their best. Such leaders play an important role in building a culture of creativity and innovation. They act as a change agent to help organizations detect and react quickly to uncertainty and changes and then develop strategic agility to turn those changes into opportunities.

2.4.4 Individual agility

How an individual is competent to learn and develop (learning agility) both as a leader and as an employee is called as individual agility. Learning agility is one of the key indicators of effective individuals, so those who are incapable would be left behind if the demands of their work do not keep the pace with the swift changes. Individual agility is a mindset and skill. It refers to the ability to react and adapt to changes appropriately and quickly and enable one to take advantage of changes and turn them into opportunities (Patil & Suresh, 2019). Individual agility is a significant component of organizational agility (Queiroz et al., 2018). Therefore, individual agility is partly from predisposition (nature), but training would do it better.

Fostering individual agility is done in a flexible environment that allows them to communicate, exchange information, and collaborate (Wei et al., 2020). Task structure and communication intensity become the important factors to enhance employee agility as the information is exchanged between them through mutual coordination. Sherehiy and Karwowski (2014) suggested autonomy, job demands, and collaboration as important strategies for encouraging individuals to be agile.

3. Research Methods

This research was qualitative with a library research approach by conducting a literature study on several articles discussing resource-based views and intellectual capital, then synthesizing these theories, developing the indicators of the intellectual capital-based view dimensions, and providing guidance to get better insight into the framework of each of these indicators so that it was able to be adapted into a questionnaire instrument for the further researches, and finally discussed the theory upon agility theory.

4. Results and Discussions

4.1 Framework intellectual capital-based view

Concerning this research, the researchers adopted the indicators developed by Sveiby (1997). Each indicator of each dimension was viewed first to ensure it was included in the ICBV category; for instance, was knowledge, knowledge, in general, was not ICBV as it was gained from any sources such as educational institutions, course institutions, and so on; but ICBV stated to verify the knowledge; the knowledge must be specific to the needs of the company owned by the company only, whilst the competitors were in such capability to imitate or replicate the specific knowledge. Likewise, other indicators such as skills, competencies, and expertise were possible to be possessed by other companies; the company made sure that these indicators were relatable to its needs, and there was no way to replicate or replace with the other resources, then it was included as an ICBV indicator and capital in attaining *firm agility*.

The indicators included in the *structure capital* dimensions were given the same treatment under the same criteria; whether or not the intellectual capital was institutionalized and remained at the office even after the employee went back home, it could still be imitated by the competitors; for example patents, copyrights, licenses, IT and networking systems; whether they were registered with official institutions to ensure that no other company replicated these resources because when someone else did, he violated the law.

Relational capital, as the last dimension observed by the author, was the potential to be imitated by the competitors more than the other dimensions. Every company is commonplace and familiar with customer relationship, customer retention, and customer satisfaction; but the standard to assess it came from ICBV; besides meeting the *valuable, rare, in-imitable,* and *non-substitutable* elements, these resources resulted from the company's "*isolating mechanism*." so that although others had the same resources, the "mysticism" and the feeling were still different,

The specifications of these indicators are summed up in the following table:

Table 3. The framework of intellectual capital-based view

Dimension	Indicator	Framework and Questioner Instrument

Human Capital	Specific and distinctive knowledge	• Knowledge specifically related to the needs of the organization
	Specific and distinctive skills	• Skills related to productivity and become a distinctive advantage of the organization
	Specific and distinctive Competences	• How well he implemented the skill
	Specific and distinctive expertise	• Expertise that characterizes and excels the organization
	Motivation based on dedication	• Motivation is based on the spirit of dedication to the organization
	Specific and distinctive Innovation	• Output-based innovation from organizational R&D
	Entrepreneurial spirit	• Entrepreneurial spirit based on specific knowledge
	Leadership qualities based on career development	• Leader qualities result from the career development process • Resulted from organizational processes and dynamics
	Employee satisfaction	• Employee satisfaction due to the employment and appreciation of specific knowledge and skills
Structure Capital	Important information from stakeholders	• Important information from the stakeholder regarding the company's improvement
	R&D	• R&D Output becomes the object of organizational innovation and product development
	Patents	• Registered in official institution
	Copyrights	• Registered in official institution
	Philosophy of trademarks	• Trademark contains philosophical values • Product packaging represents philosophical values
	Licenses	• Registered in official institution
	Business Process	• Business processes that support organizational productivity
	Manual of SOP	• SOP that clearly regulate border of communication and coordination
	Databases	• Organizational database that supports organizational development
	IT systems	• IT System supports the effectiveness and productivity of the organization
	Networking systems	• Networking in organizational development
	Management Information System	• Organization is needed to guide business process control
	Philosophy	• Everyone involved in the organization understands the philosophy of the organization
	Corporate culture	• Produced from organizational dynamics that last for a relatively long period of time • Mutual adherence to organizational culture
Relational capital	Customer relationships	• Always prioritize existing customers in every service
	Customer retention	• Customers continue to use products that have been provided by the company
	Customer satisfaction	• There is feedback from customers on the products offered by the company
	Specific sales channels	• Sales or marketing channels created by the company itself and remain well established for a relatively long time
	Specific distribution channels	• Distribution channels created by the company and are part of the company
	Supplier relationships	• The presence of suppliers provides added value and profitability for the company

	Symbiosis mutualism in business collaborations	• Collaboration with companies using the principle of mutualism symbiotic
	Franchising agreements	• Company and partner compliance with all clauses in the financing agreements

4.2 The Role Intellectual capital-based view in improving agility

Human capital, as the attribute of human resources, which originally comes from knowledge and skills, becomes the main source in designing strategic and organizational agility, so as leadership agility which comes from individuals who have been forged in a long process of organizational dynamics.

Structural capital that is mostly mentioned in the literature is organizational culture, database, information system, process, manual, patent, routine, and structure are the infrastructure that supports the dimensions of agility. Individuals in an organization may have quality, but if the organization does not have the infrastructure that allows its contribution to be effective, then the company will not achieve optimum performance.

Relational capital relates to the external organization, including the relationship with an agent, customer, supplier, competitor, partner, client, shareholder, industry association, community member, society, government, state, and informal networks (Nasir & Morgan, 2017). It can be at the individual and institutional levels; with these broad relationships, the dimensions of agility were easier to implement.

5. Discussion

The development of intellectual capital-based view indicators in this paper adopted the indicators developed by Sveiby (1997) since these indicators are more widely used in research, and then it was modified to be more specific, although the terms or choice of diction could not be modified entirely, the principles of resource-based view such as valuable, rare, inimitable and non-substitutable still underlie these indicators.

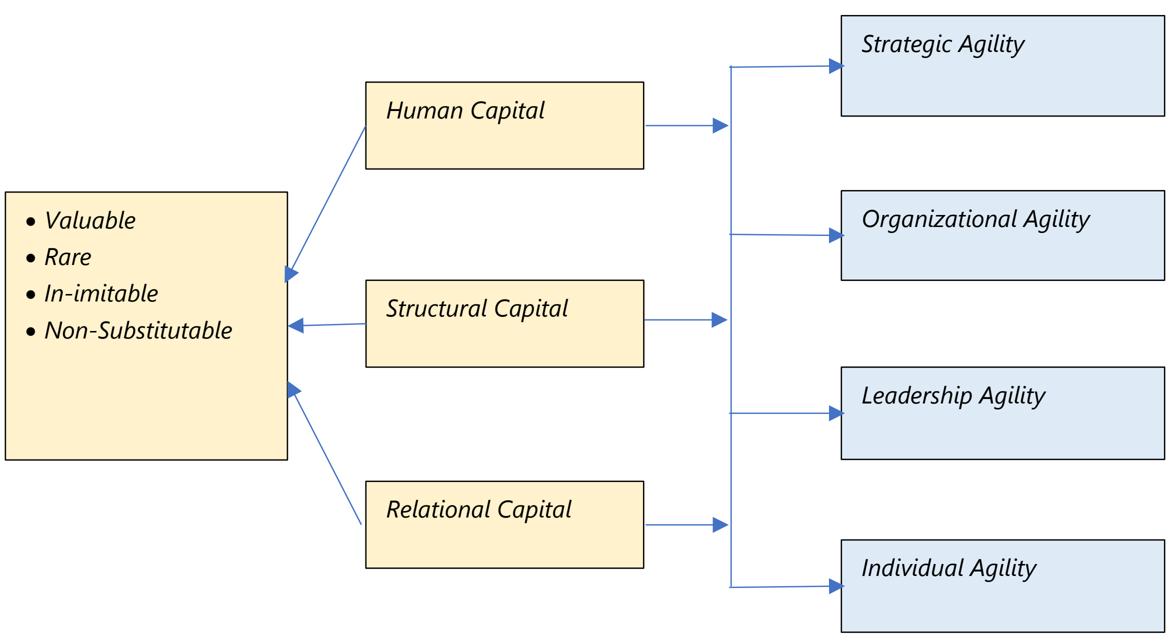

Figure 1. ICBV influence model on firm agility

The main dimension of ICBV is human capital; it has the most important role in the implementation of agility dimensions. Human capital, in this case, can be seen from two sides, namely the leadership side and the employee side. From the employee side, for example, knowledge, experience, and skills are the capital of strategic agility implementation; it needs to be supported by the quality of leadership agility because leadership agility is directly related to organizational agility and current business management requires leadership that can create capable organization and team in coping with the dynamics of environmental change. An agile leader develops strategies and provides direction on how to make the organization agile; he is visionary, tactical, and able to lead effectively in a rapidly changing business environment in which success demands multiple perspectives. He is also supported by employees who are able to translate that vision.

Likewise, the decision to reconfigure or re-allocate resources, for example, requires a leader’s long knowledge and experience. He not only has adequate skills or networking, but more than that, he needs employees and leaders who have an entrepreneurial spirit which means the availability of abundant human resources who have the same good skills, making it easier for leaders to make strategic choices as needed.

Structure capital is also support for companies to be proactive and responsive toward changes in the business environment; it is a guide for organizational agility (Shami & Nastiezaie, 2019) because, after all, organizational agility should not ruin the system that has been built. Management information systems, IT systems, and SOPs, for example, are things that should not be violated because they have become provisions that guide the direction and path of the company's business processes.

Indicators of structure capital that really help organizational agility are R&D and corporate culture. The speed and accuracy of a company's response to environmental changes to determine whether it is an opportunity or a threat are based on valid research, not just the desires of one or two people within the company. The response is implemented into three types of organizational agility (Park, 2011), namely;

- Sensing Agility: the organizational capacity to check and monitor changes (changes in customer preferences, movements of new competitors, new technologies) on time.
- Decision-Making Agility: the ability to accumulate, restructure, evaluate relevant information and at the same time reconfigure resources quickly.
- Acting Agility/Practicing: a series of activities to reconfigure organizational resources and modify business processes based on organizational working principles.

The improvement of individual agility can be carried out in a flexible environment where individuals intensely communicate and exchange information (Wei et al., 2020). This means that individual agility improvement requires a capital structure that is a supportive organizational culture. The task structure and the intensity of communication are important factors in improving employee agility Sherehiy & Karwowski. (2014) suggest autonomy, job demands, and collaboration as the important strategies that encourage employees to be more agile.

The relational capital dimension is also important in improving firm agility because by having a good relationship with customers and other external parties, companies can implement strategic choices more effectively and efficiently. Also, it can collaborate with other parties and thus generate mutualism.

Overall, this paper reinforced the idea of Ghafuri & Mansouri (2014) and Shami & Nastiezaie (2019) that organization can maximize their intellectual capital to strengthen firm agility. The limitations in this paper included the indicators of the intellectual capital dimension that are still specific to the business field, even though intellectual capital can also be adopted in other fields such as education, government, and others.

6. Conclusion

Company performance can be achieved more if agility is adopted by the company from the dimensions of strategy, organization, leadership, and individuals or employees in it. One of the resources that can support agility is the intellectual capital-based view. It is because the indicators of each dimension of intellectual capital are leverage for companies to implement agility.

Funding: This research received no external funding.
Conflicts of Interest: The authors declare no conflict of interest.
Publisher’s Note: All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers.

References

[1] Appelbaum, S. H., Calla, R., Desautels, D., & Hasan, L. (2017a). The challenges of organizational agility (part 1). *Industrial and Commercial*

Training, *49*(1), 6–14. https://www.emerald.com/insight/content/doi/10.1108/ICT-05-2016-0027/full/html

[2] Appelbaum, S. H., Calla, R., Desautels, D., & Hasan, L. N. (2017b). The challenges of organizational agility: part 2. *Industrial and Commercial Training*, *49*(2), 69–74. https://www.emerald.com/insight/content/doi/10.1108/ICT-05-2016-0028/full/html

[3] Attar, M., & Abdul-Kareem, A. (2020). The Role of Agile Leadership in Organisational Agility. In B. Akkaya (Ed.), *Agile Business Leadership Methods for Industry 4.0* (171–191). Emerald Publishing Limited. https://www.emerald.com/insight/content/doi/10.1108/978-1-80043-380-920201011/full/html

[4] Barney, J. (1991). Firm Resource and Sustained Competitive Advantage. *Journal of Management*, *17*(1), 99–120. https://doi.org/10.1177%2F014920639101700108

[5] Barney, J. B., & Hesterly, W. S. (2012). Strategic management and competitive advantage : concepts and cases. In *PHI Learning Private Limited* (4th ed.). PHI Learning Private Limited.https://www.pearson.com/store/p/strategic-management-and-competitive-advantage-concepts-and-cases/P100002737882/9780134741147?tab=table-of-contents

[6] Beltramino, N. S., García-Perez-de-Lema, D., & Valdez-Juárez, L. E. (2020). The structural capital, the innovation and the performance of the industrial SMES. *Journal of Intellectual Capital*. https://doi.org/10.1108/JIC-01-2019-0020

[7] Blankenburg, K. (2018). Intellectual Capital in German Non-profit Organisations. In *Springer Berlin*. Springer. https://link.springer.com/book/10.1007/978-3-319-62655-0

[8] Chatwani, N. (2019). *Organizational Agility Exploring the Impact of Identity on Knowledge Management*. Palgrave Macmillan Ltd. https://link.springer.com/book/10.1007/978-3-030-17249-7

[9] Doz, Y. (2020). Fostering strategic agility: How individual executives and human resource practices contribute. *Human Resource Management Review*, *30*(1), 100693.https://doi.org/10.1016/j.hrmr.2019.100693

[10] Doz, Y. L., & Kosonen, M. (2010). Embedding strategic agility: A leadership agenda for accelerating business model renewal. *Long Range Planning*, *43*(2–3), 370–382.https://doi.org/10.1016/j.lrp.2009.07.006

[11] Felipe, C. M., Roldán, J. L., & Leal-Rodríguez, A. L. (2017). Impact of Organizational Culture Values on Organizational Agility. *Sustainability*, *9*(12), 2354.https://doi.org/10.3390/su9122354

[12] Ghafuri, P., & Mansouri, A. (2014). Relationship between Intellectual Capital and Organizational Agility with Mediatory Role of Employee Empowering in Service Sector (Case Study: Karafarin Insurance Company). *International Journal of Economy, Management and Social Sciences*. www.tijournals.com https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.675.9300&rep=rep1&type=pdf

[13] Grant, R. M. (1991). The Resource-Based Theory of Competitive Advantage: Implications for Strategy Formulation. *California Management Review*, *33*(3), 114–135. https://doi.org/10.2307%2F41166664

[14] Hasan, M. M., & Cheung, A. (Wai K. (2018). Organization capital and firm life cycle. *Journal of Corporate Finance*, *48*, 556–578.https://doi.org/10.1016/j.jcorpfin.2017.12.003

[15] Inkinen, H. (2015). Review of empirical research on intellectual capital and firm performance. *Journal of Intellectual Capital*, *16*(3), 518–565.

[16] Khalique, M., & De Pablos, P. O. (2015). Intellectual capital and performance of electrical and electronics SMEs in Malaysia. *International Journal of Learning and Intellectual Capital*, *12*(3), 251–269.https://www.inderscienceonline.com/doi/pdf/10.1504/IJLIC.2015.070166

[17] Martín-de Castro, G., Díez-Vial, I., & Delgado-Verde, M. (2019). Intellectual capital and the firm: evolution and research trends. *Journal of Intellectual Capital*, *20*(4), 555–580.https://doi.org/10.1108/JIC-12-2018-0221

[18] Muafi, & Uyun, Q. (2019). Leadership agility, the influence on organizational learning and organizational innovation, and how to reduce imitation orientation. *International Journal for Quality Research*, *13*(2).https://oaji.net/articles/2019/452-1559581310.pdf

[19] Park, Y. K. (2011). *The dynamics of opportunity and threat management in turbulent environments: the role of information technologies*. The University of Southern California.https://www.amazon.in/Dynamics-Opportunity-Management-Turbulent-Environments/dp/1249877989

[20] Patil, M., & Suresh, M. (2019). Modeling the Enablers of Workforce Agility in IoT Projects: A TISM Approach. *Global Journal of Flexible Systems Management*, *20*(2), 157–175.https://doi.org/10.1007/s40171-019-00208-7

[21] Pedro, E., Leitão, J., & Alves, H. (2018). Back to the future of intellectual capital research: a systematic literature review. *Management Decision*, *56*(11), 2502–2583.https://doi.org/10.1108/MD-08-2017-0807

[22] Powers, T. L., & Hahn, W. (2004). Critical competitive methods, generic strategies, and firm performance. *International Journal of Bank Marketing*, *22*(1), 43–64.https://doi.org/10.1108/02652320410514924

[23] Queiroz, M., Tallon, P. P., Sharma, R., & Coltman, T. (2018). The role of IT application orchestration capability in improving agility and performance. *The Journal of Strategic Information Systems*, *27*(1), 4–21.https://doi.org/10.1016/j.jsis.2017.10.002

[24] Roberts, N., & Grover, V. (2012). Investigating firm's customer agility and firm performance: The importance of aligning sense and respond capabilities. *Journal of Business Research*, *65*(5), 579–585.https://doi.org/10.1016/j.jbusres.2011.02.009

[25] Roth, A. V. (1996). Achieving Strategic Agility through Economies of Knowledge. *Planning Review*, *24*(2), 30–36.https://doi.org/10.1108/eb054550

[26] Rumelt, R. P. (1984). Toward a strategic theory of the firm. In R. Lamb (Ed.), *Competitive Strategic Management* (pp. 556–570). Englewood Cliffs, NJ: Prentice-Hall.

[27] Sampath, G., & Krishnamoorthy, B. (2017). Is strategic agility the new Holy Grail? Exploring the strategic agility construct. *International Journal of Business Excellence*, *13*(2), 160–180.https://www.inderscienceonline.com/doi/pdf/10.1504/IJBEX.2017.086323

[28] Shami, S., & Nastiezaie, N. (2019). The relationship between intellectual capital and organizational agility through the mediating of organizational learning. *New Educational Review*, *56*(2), 184–194.https://tner.polsl.pl/e56/a15.pdf

[29] Sherehiy, B., & Karwowski, W. (2014). The relationship between work organization and workforce agility in small manufacturing enterprises. *International Journal of Industrial Ergonomics*, *44*(3), 466–473.https://doi.org/10.1016/j.ergon.2014.01.002

[30] Sveiby, K. E. (1997). The new organizational wealth: managing & measuring knowledge-based assets. In *Berrett Koehler* (Vol. 35, Issue 02). Berrett Koehler.

[31] Torres, A. I., Ferraz, S. S., & Santos-Rodrigues, H. (2018). The impact of knowledge management factors in organizational sustainable competitive advantage. *Journal of Intellectual Capital*, *19*(2), 453–472.https://doi.org/10.1108/JIC-12-2016-0143

[32] Tsai, K. H., & Yang, S. Y. (2014). The contingent value of firm innovativeness for business performance under environmental turbulence.

International Entrepreneurship and Management Journal, *10*(2), 343–366.https://link.springer.com/article/10.1007/s11365-012-0225-4

[33] Ulrich, D., & Yeung, A. (2019). Agility: the new response to dynamic change. *Strategic HR Review*, *18*(4), 161–167.https://doi.org/10.1108/SHR-04-2019-0032

[34] Vecchiato, R. (2015). Strategic planning and organizational flexibility in turbulent environments. *Foresight*, *17*(3), 257–273.https://doi.org/10.1108/FS-05-2014-0032

[35] Walter, A.-T. (2020). Organizational agility: ill-defined and somewhat confusing? A systematic literature review and conceptualization. *Management Review Quarterly*.https://link.springer.com/article/10.1007/s11301-020-00186-6

[36] Wei, C., Pitafi, A. H., Kanwal, S., Ali, A., & Ren, M. (2020). Improving Employee Agility Using Enterprise Social Media and Digital Fluency: Moderated Mediation Model. *IEEE Access*, *8*, 68799–68810.https://doi.org/10.1109/ACCESS.2020.2983480

[37] Yeganegi, K., & Azar, M. S. Z. (2012). The Effect of IT on Organizational Agility. *International Conference on Industrial Engineering and Operations Management*, *1*(2), 2537–2544.https://ieomsociety.org/ieom2012/pdfs/590.pdf