# A THEORETICAL PERSPECTIVE ON THE RELATIONSHIPS BETWEEN INTELLECTUAL CAPITAL, ORGANIZATIONAL PERFORMANCE, AND AGILITY

#### Mădălina-Elena STRATONE

National University of Political Studies and Public Administration Blvd. Expozitiei, No. 30 A, Sector 1, 012104, Bucharest, Romania madalina.stratone@facultateademanagement.ro

## Elena-Mădălina VĂTĂMĂNESCU

National University of Political Studies and Public Administration Blvd. Expozitiei, No. 30 A, Sector 1, 012104, Bucharest, Romania madalina.vatamanescu@facultateademanagement.ro

### **Andreea MITAN**

National University of Political Studies and Public Administration Blvd. Expozitiei, No. 30 A, Sector 1, 012104, Bucharest, Romania andreea.mitan@facultateademanagement.ro

**Abstract:** Organizations nowadays are directed towards a sustainable development, that is prepared to respond to unpredictable changes through continuous improvement of managerial approaches. In this way, one of the most important intangible resources of organizations that intend to develop a sustainable and competitive advantage is represented intellectual capital, which classically consists of human capital, structural capital, and relational capital. This research proposal aims to address the role of intellectual capital (focusing on its three dimensions) in the performance and agility of organizations. The present research aims to confirm that intellectual capital has the power to influence the development of organizations in diverse ways, such as increasing organizational performance, increasing the competitive advantage in the fast-changing market, and increasing the skills of the employees; thus, the interest of SMEs is justified in the development of the intellectual capital, in augmenting the quality of the human capital (through the process of attracting talents into the company), by investing in the development of human capital as it has on its turn a significant influence on both social and relational capital, as they are closely linked to people. Moreover, the research is intended to tackle how organizations could fasten their knowledge exchanges, agility, and competitiveness via intra and inter-organizational interactions. It aims to settle a reference point for managers, scholars, and public and/or private institutions looking for answers and solutions.

**Keywords:** intellectual capital; organizational performance; agility; human capital; relational capital; structural capital.

#### Introduction

If we look at the past, we can observe that the economy had been shaken from time to time by different events and there was always the need for improvement in organizational performance. Coming back to the present time, 2020 was a difficult year and an unexpected crisis hit the whole world, making it difficult for many organizations (especially SMEs) to survive or to adapt, particularly for the ones that were not agile and innovative. In order to learn how we can cope with the changes, we should understand what the needs of the organizations are during and after the pandemic, what were the companies' weaknesses before the COVID-19 crisis, and what should be improved in order for the economy to recover. The study of intellectual capital within an organization is not a new topic, but this research aims to bring something new and is focused on how the pandemic influenced and affected the economic sector and organizational behavior, on how organizations (especially SMEs) should cope with the changes and challenges faced and how human, structural and relational capital are helping to improve the performance of the organizations and pushing them to become more agile. The research will focus on the role of the intellectual in organizational agility and performance, focusing mostly on Romanian SMEs.

Our world is under a continuous transformation. One of the most important changes in the life of an organization is "the transition from focusing on the development of the tangible assets to the development of the intangible assets" (Todereciu, 2021, p. 1). Thus, due to globalization, the rise of the knowledge economy (Quintero-Quintero et al., 2021), and other unexpected events (such as the COVID-19 economic crisis), the researchers focused on how organizations can become more agile, ready to cope with new challenges and be able to reach higher performance (Barbu et al., 2021; Brătianu, 2021). Back in the past, researchers used to focus majorly on the external environment and how it affects the organizations, on identifying the opportunities (Radjenovic & Krstic, 2017) and the threats faced by them, on analyzing the strengths and the weaknesses, and on trying to find the right strategies that respond to the needs of the organization (Porter, 1980; Vătămănescu et al., 2019; Brătianu & Bejinaru, 2021). However, nowadays, intangible resources can be seen as a weapon that helps organizations to achieve better performance when compared to tangible resources.

Thus, organizations started to create value and obtain a competitive advantage through intellectual capital, which has become "the one indispensable asset" (Serrat, 2017, p. 1) and through knowledge (Vătămănescu et al., 2015, 2016a, 2016b; Shumik et al., 2021), which is another "strategic resource and a key factor for an organization's performance for its sustainability" (Todericiu, 2021, p. 199). Al-Omoush (2022, p. 549) supports that knowledge intangible assets "are closely connected with entrepreneurship strategy in heightened competitive environments, enabling the capitalization of a business's intellectual capital and turning it into innovation and agile responses to opportunities and threats, thus gaining superiority over other competitive organizations". However, both intellectual capital and knowledge are "offering greater power and an increased advantage to the knowledge-based society growth and development" and have the power to influence the environment and the competitiveness of a company, creativity, communication, the business models, and the job satisfaction (Mercader et al., 2021, p. 3).

Starting from these arguments, the current undertaking provides a theoretical approach to the role of intellectual capital within the organizational setting by tackling the issues of organizational performance and agility and the main relationships among the three constructs.

## Theoretical background

## Intellectual capital

In the present, the concept of "intellectual capital" has progressively caught the eyes of scholars, as it represents one of the main resources of an organization (Brătianu, 2018; Stratone & Vătămănescu, 2019), that can be used in order to gain a competitive advantage (Vătămănescu et al., 2019; Chahal et al., 2020; Vătămănescu et al., 2020a), to become more sustainable and innovative (Vale et al., 2022) and to increase job satisfaction (Nemțeanu et al., 2022). According to theorists, intellectual capital is made up of three principal components (Ali et al., 2021; Tran et al.2021): human capital, structural capital, and relational capital, each of them comprising other components and it "is based on various intangible resources such as employees, competence, knowledge, skill, intellectual agility, brand name, customer relation, and organizational structure" (Mohtar et al., 2015, p. 16).

Human capital is described often as "the cumulative capabilities and engagement of an organization's personnel" (Serrat, 2011, p. 2), here including the education, the skills and competences of the personnel, their experience, their creativity and innovation and their emotional intelligence and it represents an important "source of innovation, strategic renewal of a company and the company can thus realize and create value in the knowledge-based economy" (Williams & Kelechi, 2021, p. 129); structural capital "consists of intellectual capital (patents, copyrights, trademarks) as well as infrastructural assets (organizational culture, strategies, management processes, IT systems)" (Szelagowski, 2019, p. 208); and relational capital, which refers to the "organizational association with the internal and external stakeholders of a firm" (Lenart, 2014, p. 19), including here the employees, the suppliers, the stakeholders, the business partners and the customers, and being defined as the ability of the company "to create and strengthen the relationship of the organization with the stakeholders and encase it for the benefit of the organization" (Wegar, 2022, p. 172). Furthermore, Dindire and Dugan (n.d.) are underlining that the difference between the market value and the value of the companies' assets can be analyzed in terms of the intellectual capital; the most important indicators being the customers, the processes, the innovation, and the human capital (Cretu, 2017).

# Intellectual capital, organizational performance, and agility

The question that arises is whether, in the current context, intangible resources can be considered strategic resources and whether a certain combination of these resources might lead to a strategy that gives a company the necessary competitive advantage in terms of agility and performance. What is for sure is that, however, investing in the intangible assets of a company, in the case of the SMEs, is less expensive than investing in the tangible ones, this being one of the reasons why intellectual capital became a topic of interest nowadays (Tran et al. 2021).

In compliance with Williams and Kelechi (2021), "economic development and competitive authority of an organization and country are derived from knowledge" (p. 1), and all the intangible assets are imitable and non-substitutable. At the national level, according to a report made by the World Bank (World Bank, 2020), Romania was ranked 67th in the Human Capital Index, reaching the value of 0,584 in 2020 and it was also ranked as having the lowest percentage of the population attending training education after completing basic education (Paszko, 2020). Thus, Romania's ranking underlines the "need for urgent improvements in the health and education systems" (Chirileasa, 2020). Another idea that should be underlined is that intellectual capital is closely related to the agility and performance of organizations, no matter their kind. In this way, companies (especially SMEs) were affected directly by the pandemic (Stratone, 2021; Stratone et al., 2022; Vătămănescu et al., 2022b), and most of them needed to rethink their strategies, to replan their budgets and to move their activity online (Vătămănescu et al., 2017; Brătianu et al., 2020). This can be seen as an advantage, forcing the companies to become agile.

According to Stoica, Mircea, and Ghilic Micu (2013), the agility of a company is not only a necessity, but a condition for the organization to be able to survive in the market, being the only way to adapt nowadays to the customers` requests, to enhance the opportunities and to cope with the unexpected challenges. From this point of view, Romania has a low level of agility among companies, which is worrying, especially from the perspective of an economic recovery plan in the near future, as well as the survival of companies in the current situation (Oancea, 2020).

According to a study made by PwC Romania, at the top of the list of benefits of having an agile organization, the respondents mentioned: "increased capacity of the entire organization to adapt to change (47%), teams that adapt more easily to new conditions (41%), teams that are better able to create and offer valuable solutions for customers (41%), innovative teams (38%), improving product quality (36%) and better-informed decisions (29%)" (Bumbăcea, 2020).

While agility became a concept worldwide known, it still represents a very difficult construct to measure. In this way, in the last years, many measurement approaches have been suggested (Dove, 1995; Gill & Sellers, 2006; Yauch, 2011; Akkaya, 2020). Dove (1995) states that an organization's agility should be measured based on the following metrics: cost, time, robustness, and scope. Yauch (2011) suggested that in order to measure if an organization is agile, the environmental turbulence, the organizational success, and agility as a performance outcome (which combines the previous two) should be analyzed. On the other hand, Akkaya et. al (2020) support that the best way to analyze agility is to consider the behavior of the leaders. However, until nowadays, the best method was not found; thus, this research paper aims to analyze some of the measurement approaches suggested in the past and to find a way to improve them.

The performance of companies worldwide also lowered in the last few years, especially after the beginning of the COVID-19 pandemic. On this front, Mansion and Bausch (2020, p. 727) contend that SMEs "which successfully diversify into contested export markets, are generally considered to be a major source of socioeconomic prosperity". Furthermore, as Koch and Schermuly (2021, p. 1265) emphasized, the "COVID-19 pandemic is accelerating change on many levels, impacting organizations, societies and populations worldwide at scale", meaning that companies were forced to become more

agile and to innovate. Moreover, the COVID-19 pandemic created the opportunity to build new types of organizations characterized by virtualization, which is conducted through the creation of virtual teams or hybrid teams, that built the concept of digital leadership (Stratone et al., 2022). In this way, some articles (Nicolescu & Nicolescu, 2020; Streza, 2020; Făgădar, 2021; Popovici, 2021) support that, in Romania, the performance management of the companies is an inefficient process. Besides the fact that people and companies were not prepared to move entirely to the virtual world (Vătămănescu et al., 2018), once the pandemic started as they were not having enough financial resources, there was also a psychological pandemic, which led to the interruption of the interpersonal relationships, the installation of the feelings of fear and uncertainty (Brătianu, 2020; Javed et al., 2020; Morin & Carrier, 2020; Thakur & Jain, 2020; Parkitna & Urbanska, 2021).

Performance is a topic approached since the beginning of the first companies, when different tools were created to measure it. Friedman and Kass (2018, p. 19) are stating that organizational performance should be measured by taking into account the following metrics: "proper maintenance of infrastructure; customer satisfaction; retention of creative employees; providing meaningful work; increasing employee engagement; building a strong, positive reputation; and corporate social responsibility". Calli and Calli (2021) support that an organization's performance (especially SMEs) should be tackled by measuring their agility and digital maturity.

Barbu et al. (2021) are supporting that when the performance of an organization is evaluated and monitored, there should be taken into consideration the "financial dimension, innovation, management experience, quality, continuous improvement, and business excellence" (p. 2). Measuring the organization's performance is a topic approached in this research paper, as it represents a vital part of monitoring the progress.

When it comes to measuring intellectual capital, Pulic (2000) is proposing the VAIC (value-added intellectual coefficient) model, which "concerns the efficiency of three types of capital: human capital (HC), measured by the cost of employees; structural capital (SC), equal to the difference between the value added generated by the firm and human capital; and physical and financial capital employed (CE), i.e., the amount of financial capital available to the firm (Marzo, 2022 p. 1). Shortly, VAIC represents a "tool used to measure a company's intellectual capital performance" (Junita Sari & Putri, 2022, p. 17) and through this tool, "intellectual capital is measured by value-added generated by capital employed (VACA), human capital (VAHU), and structural capital (STVA)" (Iqbal et al., 2019, p. 3). Moreover, this model allows the managers, stakeholders, and shareholders of an organization to be able to monitor and evaluate the total efficiency of the resources and their composition by providing "an insight into the effectiveness of the value creation process" (Van et al., 2022, p. 3) and to obtain a glasslike understanding of the cause and effect relationship between the intellectual capital and the performance of an organization (Chen et al., 2021; Faria et al., 2021; Sujati & Januarti, 2021). Due to the fact that it was said that the VAIC model cannot measure the relational capital, Tran, Doan, and Tran (2021), suggested a modified valueadded intellectual coefficient (MVAIC), in which the "value of relational capital is obtained from the number of expenses incurred for marketing" (Tran et al., 2021, p. 5).

### Final considerations

In the last decades, the synergy of the intellectual capital and the success in the performance of an organization and its ability to be agile emerged as a recurring theme, since companies are pushed by globalization, increased competition, and the changing technologies to innovate (Hapenciuc et al., 2015; Păduraru et al., 2016; Vătămănescu et al., 2014, 2018; Papíková & Papík, 2022). Niwash et al. (2022) describe innovation speed as a company's rhythm of progress when innovating and commercializing a new product/service.

In this competitive environment, all companies need to adjust the flexibility of their policies and strategies and to use more efficiently both their tangible and intangible resources (Van et al., 2022) and be aware that intellectual capital "facilitates economic competitiveness and sustains long-term economic growth" (Sardar et al., 2021, p. 300). Looking at SMEs enterprises, we can observe that intellectual capital has an important role, as most of the time the resources of these types of companies are limited, which does not allow them to invest in tangible resources, so they prefer investing in the intangible ones, which as less expensive, but deliver more advantages (Tran et al. 2021).

As Hilkenmeier et al. (2021, p. 2) are supporting in their research, "SMEs have a high economic and social importance and traditionally contribute substantially to the innovativeness and competitiveness of the whole economy". Within Europe, according to the European Commission (2021), SMEs "are the backbone of Europe's economy", representing 99% of all businesses in the European Union. According to the last statistics, in 2018, Romania had a number of 485.757 SMEs (Sava, 2021). However, even if 485.757 looks like a good number, according to an Annual Report about SMEs that was published in 2019 by the EU (Executive Agency for Small and Medium-sized Enterprises, 2019), Romania ranked last, reaching only 29 SMEs/1000 habitats and being well below the European average of 58 SMEs/1000 inhabitants (Zamfir, 2019).

Due to the Covid-19 virus and the crisis it left behind, the number of SMEs opening in 2020 dropped off and many businesses were bankrupted. As it may be concluded from this situation, the number of SMEs is again very small compared to other countries from European Union; given this, SMEs are expected to further learn how to improve their performance and agility, and they should be more researched and studied, so they may surpass the economic crisis and arise more powerful and more able to adapt to drastic changes.

In conclusion, organizations that want to preserve the benefits that they have gained through the opportunities and challenges that were brought by the pandemic (such as faster decision-making, a better vision, adaptability, the need to increase creativity, digital leadership, and digitalization, the resistance to change, etc.) should shift toward an operating model that is agile and that help them reach a better performance (Filip et al., 2020; Nastacă & Năstăseanu, 2021) through better leverage of intellectual capital.

**Acknowledgment**: This work was supported by a grant from the Romanian Ministry of Education and Research, CNCS-UEFISCDI, project number PN-III-P1-1.1-TE-2019-1356, within PNCDI III.

#### References

Akkaya, B., Kayalidere, U.A.K., Aktas, R., & Kargin, S. (2020). Agile Leadership Approach and Development of a Scale for Measuring Agile Leader's Behaviours. *Journal of Business Research-Turk*, *12*(2), 1605-1621. https://doi.org/10.20491/isarder.2020.932

Ali, M.A., Hussin, N., Haddad, H., Alkhodary, D., & Marei, A. (2021). Dynamic Capabilities and Their Impact on Intellectual Capital and Innovation Performance. *Sustainability*, *13*, 10028. https://doi.org/10.3390/su131810028

Al-Omoush, K.S. (2022). Understanding the Impact of Intellectual Capital on E-Business Entrepreneurial Orientation and Competitive Agility: An Empirical Study. *Inf Syst Front, 24*, 549–562. https://doi.org/10.1007/s10796-020-10092-7

Barbu, A., Militaru, G., Deselnicu, D.C., & Catana, S.-A. (2021). Key Success Factors That Enable IT Service Providers to Achieve Organizational Performance: Evidence from Romania. Sustainability, *13*, 10996. https://doi.org/10.3390/su131910996

Brătianu, C. (2018). Intellectual Capital Research and Practice: 7 Myths and One Golden Rule. *Management & Marketing: Challenges for the Knowledge Society*, *13*(2), 859-879. Doi: 10.2478/mmcks-2018-0010

Brătianu, C. (2020). A Knowledge Management Approach to Complex Crises. *Management Dynamics in the Knowledge Economy*, 8(4), 345-356. Doi: 10.2478/mdke-2020-0022

Brătianu, C., Prelipcean, G., & Bejinaru, R. (2020). Exploring the Latent Variables which Support SMEs to Become Learning Organizations. *Management & Marketing. Challenges for the Knowledge Society*, *15*(2), 154-171. Doi: 10.2478/mmcks-2020-0010.

Brătianu, C. (2021). Knowledge Management and Business Education. *Sustainability* 2021, 13. Doi: 10.2478/mmcks-2018-0010

Brătianu, C., & Bejinaru, R. (2021). COVID-19 Induced Emergent Knowledge Strategies. *Knowledge and Management Journal*, 28(1), 11-17. Doi: 10.1002/kpm1656

Bumbăcea, D. (2020). *Technology Is Essential for the Companies to Adapt to Changes, but Planning and Talent Make the Difference.* HotNews. https://economie.hotnews.ro/stiri-blogul\_pwc\_romania-24004889-covid-19-pandemie-coronavirus-tehnologie-adaptarea-companiilor-schimbari.htm

Calli, B.A., & Calli, L. (2021). Relationships between Digital Maturity, Organizational Agility, and Firm Performance: An Empirical Investigation on SMEs. *BMJI*, 9(2), 486-502. https://doi.org/10.15295/bmij.v9i2.1786

Chahal, H., Pereira, V., & Jyoti, J. (2020). Sustainable Business Practices for Rural Development – The Role of Intellectual Capital. *Palgrave Macmillan*. https://doi.org/10.1007/978-981-13-9298-6

Chen, J. H., Chua, S. G., & Tan, A. A. (2021). The Effect of Value Added Intellectual Coefficient, Firm Size, and Leverage on Business Performance in the ASEAN-5 Service Industry. https://animorepository.dlsu.edu.ph/etdb\_acc/10.

Chirileasa, A. (2020). *World Bank Report: Children in Romania will Reach only 58% of Their Productive Potential, Compared to 75% in Poland.* Romania Insider Journal. https://www.romania-insider.com/romania-education-world-bank-human-capital-index-2020

Cretu, R.F. (2017). Analysis of the Intellectual Capital – Resource Essential in the Creative Economy. *Economica Journal, Fundamental and Applied Economics*, 100(2), 83-88. http://oaji.net/articles/2017/1425-1507018204.pdf

Dindire, L.-M., & Dugan, S. (2013). Capitalul intelectual – activ intangibil concretizat în principalul motor de relansare economică a națiunilor. *Revista Strategii Manageriale, 2,* 14-23.

 $http://www.strategiimanageriale.ro/images/images\_site/articole/article\_b29cf8ebd1\\fbb2ff383dba6ef67086d0.pdf$ 

Dove, R. (1995). Measuring Agility: The Toll of Turmoil. *Journal of Applied Manufacturing Systems*, 7(2). https://www.researchgate.net/publication/248846319

European Commission (2021). *Entrepreneurship and Small and Medium-Sized Enterprises (SMEs)*. European Commission's Official Website. https://ec.europa.eu/growth/smes\_en

Executive Agency for Small and Medium-sized Enterprises (2019). *Annual Report on European SMEs 2018/2019*. Doi: 10.2826/603707.

Faria, V. F., Santos, V. P., & Zaidan, F. H. (2021) Value Added Intellectual Capital Coefficient (vaic) and Business Performance: The Impact of Intellectual Capital on Small and Medium-Sized Enterprises Performance. *Perspectivas em Gestão & Conhecimento*, 11, 2-17. 10.22478/ufpb.2236-417X.2021v11nEspecial.57562

Făgădar, M. (2021). The Impact of Investments on Economic Growth in Romania. *Annals of the "Constantin Brâncuși" University of Târgu Jiu, Economy Series, 2.* 

Filip, A., Ionuţiu, O., & Dragan, R. (2020). *Organizational Agility Index – Romanian Perspective*. McKinsey & Company Romania. https://www.mckinsey.com/ro/our-insights/organizational-agility-index-romanian-perspective

Friedman, H.H., & Kass, F. (2018). Substance Over Form`: Meaningful Ways to Measure Organizational Performance. *SSRN Electronic Journal*, 1-25. Doi: 10.2139/ssrn.3128595

Gill, A.Q., & Henderson-Sellers, B. (2006). Measuring Agility and Adoptability of Agile Methods: A 4-Dimensional Analytical Tool. *IADIS International Conference Applied Computing*, 503-507. https://www.researchgate.net/publication/268257179

Hapenciuc, C.V., Pînzaru, F., Vătămănescu, E.-M., & Stanciu, P. (2015). Converging Sustainable Entrepreneurship and the Contemporary Marketing Practices. An Insight into Romanian Start-Ups. *Amfiteatru Economic*, *17*(40), 938-954. http://www.amfiteatrueconomic.ro/ArticolEN.aspx?CodArticol=2440

Hilkenmeier, F., Fechtelpeter, C., & Decius, J. (2021) How to Foster Innovation in SMEs: Evidence of the Effectiveness of a Project-Based Technology Transfer Approach. *J Technol Transf.* https://doi.org/10.1007/s10961-021-09913-x

Iqbal, A., Sutrisno, T., & Roekhudin. (2019). Corporate Social Responsibility and Financial Performance: Moderating Role of Intellectual Capital. *International Journal of Social and Local Economic Governance*, *5*(1), 1-11. DOI: 10.21776/ub.ijleg.2019.005.01.1

Javed, B., Sarwer, A., Soto, E.B., & Mashwani, Z.R. (2020). The Coronavirus (COVID-19) Pandemic's Impact on Mental Health. *Health Planning Management*, *35*(5). Doi: 10.1002/hpm.3008

Junita Sari, H.M.E., & Putri, M. (2022). Measuring of Intellectual Capital on Company's Value. *Journal of US-China Public Administration*, 19(1), 17-23. Doi: 10.17265/1548-6591/2022.01.002

Koch, J., & Schermuly, C.C. (2021). Managing the Crisis: How COVID-19 Demands Interact with Agile Project Management in Predicting Employee Exhaustion. *British Journal of Management*, *32*, 1265-1283. Doi: 10.1111/1467-8551.12536

Lenart, R. (2014). Relational Capital as an Instrument of Increasing Competitiveness. In I. Popa, C. Dobrin, & C.N. Ciocoiu (Eds.), *Proceedings of the 8th International Management Conference "Management Challenges for Sustainable Development"*. Bucharest University of Economic Studies.

http://conferinta.management.ase.ro/archives/2014/pdf/2.pdf

Mansion, S.E., & Bausch, A. (2020). Intangible Assets and SMEs' Export Behavior: A Meta-Analytical Perspective. *Small Bus Econ*, *55*, 727–760. https://doi.org/10.1007/s11187-019-00182-5

Marzo, G. (2022). A Theoretical Analysis of the Value Added Intellectual Coefficient (VAIC). *J Manag Gov, 26*, 551–577. https://doi.org/10.1007/s10997-021-09565-x

Mercader, V., Galván-Vela, E., Ravina-Ripoll, R., & Popescu, C.R.G. (2021). A Focus on Ethical Value under the Vision of Leadership, Teamwork, Effective Communication and Productivity. *J. Risk Financial Manag.*, 14, 522. https://doi.org/10.3390/jrfm14110522

Mohtar, S., Safura, I., Rahman, A., & Abbas, M. (2015). Intellectual Capital and its Major Components. *Journal of Technology and Operations Management*, *10*(1), 15-21. https://www.researchgate.net/publication/303689702

Morin, C.M., & Carrier, J. (2020). The Acute Effects of the COVID-19 Pandemic on Insomnia and Psychological Symptoms. *Sleep Medicine*, *77*, 346-347. https://doi.org/10.1016/j.sleep.2020.06.005

Nastacă, C-C., & Năstăseanu, A. (2021). A Comparative Analysis of National Strategies to Underpin Innovation Progress in Romania and Portugal. *Review of International Comparative Management*, 22(1). Doi: 10.24818/RMCI.2021.1.4

Nemţeanu, M. S., Dinu, V., Pop, R. A., & Dabija, D. C. (2022). Predicting Job Satisfaction and Work Engagement Behavior in the COVID-19 Pandemic: A Conservation of Resources Theory Approach. *E&M Economics and Management*, *25*(2), 23–40. https://doi.org/10.15240/tul/001/2022-2-002

Nicolescu, O., & Nicolescu, C. (2020). The Dynamics of the Romanian National Management Strengths and Weaknesses between 2009 and 2018. *Trivent Publishing*.

https://www.trivent-

publishing.eu/books/romanian management studies/1.%200 vidiu%20 Nicolescu,%20 Ciprian%20 Nicolescu.pdf

Niwash, M.N.K., Cek, K., & Eyupoglu, S.Z. (2022). Intellectual Capital and Competitive Advantage and the Mediation Effect of Innovation Quality and Speed, and Business Intelligence. *Sustainability*, *14*, 3497. https://doi.org/10.3390/su14063497

Oancea, D. (2020). McKinsey Study: Romanian Companies Have a Low Agility. *Financial Journal*. https://www.zf.ro/companii/studiu-mckinsey-companiile-romanesti-au-o-agilitate-organizationala-19730652

Papíková, L., & Papík, M. (2022). Intellectual capital and its impacts on SMEs profitability during COVID-19 pandemic. *Journal of Eastern European and Central Asian Research (JEECAR)*, 9(3), 521-531. https://doi.org/10.15549/jeecar.v9i3.894

Parkitna, A., & Urbanska, K. (2021). *Success of SMEs Enterprises in the Era of Pandemics*. ResearchGate. https://www.researchgate.net/publication/349412196

Paszko, J. (2020). Intellectual Capital of European Union Countries (EU – 28) – Measurement Concept. *Optimum Economic Studies*, *11*(3). Doi:10.15290/oes.2020.03.101.09

Păduraru, T., Vătămănescu, E.-M., Andrei, A.G., Pînzaru, F., Zbuchea, A., Maha, L.G., & Boldureanu, G. (2016). Sustainability in Relationship Marketing: An Exploratory Model for the Industrial Field. *Environmental Engineering and Management Journal*, *15*(7), 1635-1647. Doi: 10.30638/eemj.2016.176

Popovici, O.C. (2021). Romania Economy Briefing: The Status Quo of Romania` State-Owned Enterprises and Its Representative Enterprises. *Chine-CEE Institute*, *37*(2). https://china-cee.eu/wp-content/uploads/2021/02/2021e02\_Romania.pdf

Porter, M.E. (1980). *Competitive Strategy. Techniques for Analyzing Industries and Competitors.* The Free Press.

Pulic, A. (2000) Vaic: An Accounting Tool for Ic Management. *International Journal of Technology Management*, 20(5-8), 702-714. Doi: 10.1504/IJTM.2000.002891

Quintero-Quintero, W., Blanco-Ariza, A., & Garzón-Castrillón, M. (2021). Intellectual Capital: A Review and Bibliometric Analysis. *Publications*, 9, 46. https://doi.org/10.3390/publications9040046

Radjenovic, T., & Kristic, B. (2017). Intellectual Capital in the Theory of the Firm. *Ekonomika*, *63*(4), 13-27. Doi: 10.5937/ekonomika1704013R

Sardar, T., Jianqiu, Z, Bilal, M., & Syed, N. (2021). Impact of ICT on Entrepreneurial Self-efficacy in Emerging Economy: Sustaining Lock-down During COVID-19 Pandemic. *Human Systems Management*, *40*(2). 299-314. Doi: 10.3233/HSM-201066.

Serrat, O. (2017). *A Primer on Intellectual Capital. Knowledge Solutions*. Springer. https://doi.org/10.1007/978-981-10-0983-9 20

Shumik, E.G., Bembeev, M.N., & Blinov, M.P. (2021). Impact of Education and Training on the Development of an Organization's Intellectual Capital in the Digital Economy.

Nuances: Estudos Sobre Educação, 32(00), 1-15. https://doi.org/10.32930/nuances.v32i00.9208

Stoica, M., Mircea, M., & Ghilic-Micu, B. (2013). Software Development: Agile vs. Traditional. *Economic Informatics*, 17(4). Doi: 10.12948/issn14531305/17.4.2013.06

Stratone, M.-E., & Vătămănescu, E.-M. (2019). The Human Capital Dimension within the Organizational Euqation. Gliding Between Virtual and Traditional Teams. *Management Dynamics in the Knowledge Economy*, *7*(4), 447-467. https://doi.org/10.25019/mdke/7.4.01

Stratone, M-E. (2021). IMM-urile din România în context pandemic, absorbţia de fonduri şi conştientizarea nevoii de digitalizare. In F. Pînzaru, & A. Zbuchea (Eds.), După COVID-19: provocări de management între digitalizare, sustenabilitate şi rezilienţă (pp. 201-2022). Tritonic.

Stratone, M.-E., Vătămănescu, E.-M., Treapăt, L.-M., Rusu, M., & Vidu, C.-M. (2022). Contrasting Traditional and Virtual Teams within the Context of COVID-19 Pandemic: From Team Culture towards Objectives Achievement. *Sustainability*, *14*, 4558. https://doi.org/10.3390/su14084558

Streza, G. (2020). *Valoria Survey: Performance Management in Romanian Companies*. LinkedIn. https://www.linkedin.com/pulse/romania-23-companies-say-performance-management-process-streza/

Szelagowski, M. (2019). Dynamic Business Process Management in the Knowledge Economy. *Springer Nature Switzerland*, 203-210. https://doi.org/10.1007/978-3-030-17141-4

Thakur, V., & Jain, A. (2020). COVID 2019 – Suicides: A Global Psychological Pandemic. *Brain Behavior and Immunity, 88*, 952-953. Doi: 10.1016/j.bbi.2020.04.062

Todericiu, R. (2021). The Impact of Intellectual Capital on the SMEs Performance: A Study of the Romanian Central Region SMEs. *Studies in Business and Economics*, *16*(1), 198-209. https://doi.org/10.2478/sbe-2021-0016

Tran, Q., Doan, A-T., & Tran, T. (2021). What Are the Drivers of SMEs` Financial Performance? The Interaction of Intellectual Capital and Ownership. *Australian Economic Papers*, 1-27. Doi: : 10.1111/1467-8454.12239

Vale, J., Miranda, R., Azevedo, G., & Tavares, M.C. (2022). The Impact of Sustainable Intellectual Capital on Sustainable Performance: A Case Study. *Sustainability*, *14*, 4382. https://doi.org/10.3390/su14084382.

Van, L. T. H., Vo, D. H., Hoang, H. T. T., & Tran, N. P. (2022). Does Corporate Governance Moderate the Relationship between Intellectual Capital and Firm's Performance?. *Knowledge and Process Management*, 1–10. https://doi.org/10.1002/kpm.1714

Vătămănescu, E.-M., Alexandru, V.-A., & Gorgos, E.-A. (2014). The Five Cs Model of Business Internationalization (CMBI) – a preliminary theoretical insight into today's business internationalization challenges. In C. Brătianu, A. Zbuchea, F. Pînzaru, & E.M. Vătămănescu (Eds.), *Strategica. Management, Finance, and Ethics* (pp. 537-558). Tritonic.

Vătămănescu, E.-M., Andrei, A.-G., Leovaridis, C., & Dumitriu, L.-D. (2015). Exploring network-based intellectual capital as a competitive advantage. An insight into European universities from developing economies. In J.G. Cegarra Navarro (Ed.), *Proceedings of the 7th European Conference on Intellectual Capital ECIC 2015* (pp. 350-358). Academic Conferences and Publishing International Limited.

Vătămănescu, E.-M., Pînzaru, F., Andrei, A.G., & Zbuchea, A. (2016a). Investigating SMEs sustainability with partial least squares structural equation modeling. *Transformations in Business & Economics (TIBE)*, 15(3), 259-273. http://www.transformations.knf.vu.lt/39/article/inve

Vătămănescu E.-M., Zbuchea, A., Pînzaru, F., & Andrei, A.G. (2016b). The Impact of Relational Capital on SME Internationalization. Leveraging Online Versus Offline Business Networking. In S. Moffett, & B. Galbraith (Eds.), *Proceedings of the 17th European Conference on Knowledge Management* (pp. 926-935). Academic Conferences and Publishing International Limited.

Vătămănescu, E-M., Andrei, A.G., Nicolescu, L., Pînzaru, F., & Zbuchea, A. (2017). The Influence of Competitiveness on SMEs Internationalization Effectiveness. Online Versus Offline Business Networking. *Information Systems Management*, *34*(3), 205-219. Doi: 10.1080/10580530.2017.1329997

Vătămănescu, E.-M., Andrei, A.G., & Pînzaru, F. (2018). Investigating the online social network development through the Five Cs Model of Similarity: the Facebook case. *Information Technology & People, 31*(1), 84-110. https://doi.org/10.1108/ITP-06-2016-0135

Vătămănescu, E.-M., Alexandru, V.-A., Cristea, G., Radu, L., & Chirica, O. (2018). A Demand-Side Perspective of Bioeconomy: The Influence of Online Intellectual Capital on Consumption. *Amfiteatru Economic*, *20*(49), 536-552. DOI:10.24818/EA/2018/49/536

Vătămănescu, E-M., Gorgos, E-A., Ghigiu, A.M., & Pătruț, M. (2019). Bridging Intellectual Capital and SMEs Internationalization through the Lens of Sustainable Competitive Advantage: A Systematic Literature Review. *Sustainability 2019, 11*. Doi: 10.3390/su11092510

Vătămănescu, E-M., Cegarra-Navarro, J-G., Andrei, A.G., Dincă, V-M., & Alexandru, V-A. (2020a). SMEs Strategic Networks and Innovative Performance: A Relational Design and Methodology for Knowledge Sharing. *Journal of Knowledge Management*, 24(6), 1369-1392.

Vătămănescu, E.-M., Alexandru, V.-A., Mitan, A., & Dabija, D.-C. (2020b). From the Deliberate Managerial Strategy towards International Business Performance: A Psychic Distance vs. Global Mindset Approach. *Systems Research and Behavioral Science*, *37*(2), 374-387. https://doi.org/10.1002/sres.2658

Vătămănescu, E.-M., Mitan, A., Andrei, A.G., & Ghigiu, A.M. (2022a). Linking Coopetition Benefits and Innovative Performance within Small and Medium-sized Enterprises Networks: A Strategic Approach on Knowledge Sharing and Direct Collaboration. *Kybernetes*, *51*(7), 2193-2214. https://doi.org/10.1108/K-11-2020-0731

Vătămănescu, E.-M., Dinu, E., Stratone, M.-E., Stăneiu, R.-M., & Vintilă F. (2022b). Adding Knowledge to Virtual Teams in the New Normal: From Leader-Team Communication towards the Satisfaction with Teamwork. *Sustainability*, *14*(11), 6424. https://doi.org/10.3390/su14116424

Wegar, F. (2022). The Influence of Intellectual Capital on Indian Firms. *International Journal of Learning and Intellectual Capital*, 19(2), 169–188. Doi: 10.1504/IJLIC.2022.121249

Williams, G., & Kelechi, A.J. (2021). Intellectual Capital and Performance in Organizations: An Exploration of Issues. *International Journal of Management and Entrepreneurship*, *3*(1), 1-20.

https://ijmecoou.org/index.php/ijme/article/view/37/37

World Bank (2020). Human Capital Index (HCI) (scale 0-1) – Romania. *World Bank staff calculations based on the methodology described in World Bank (2018)*. https://data.worldbank.org/indicator/HD.HCI.OVRL?locations=RO

Yauch, C.A. (2011). Measuring Agility as a Performance Outcome. *Journal of Manufacturing Technology Management*, 22(3). Doi: 10.1108/1741038111112738

Zamfir, C. (2019). Românii și afacerile: Suntem tot pe ultimul loc în UE la ponderea firmelor mici și mijlocii cu tot cu Start-up Nation. Eforturile de finanțare nu s-au tradus în performanță puternică. Startup Café. https://www.startupcafe.ro/finantari/startupnation-imm-romania-raport-2019.htm