## **Doctoral Thesis Summary**

The Role of Intellectual Capital Management in the Organizational Agility and Performance

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When looking at the past, a noteworthy observation is that the economy has been shaken from time to time by different events (i.e., wars, economic crisis, etc.) and there have been growing calls for further improvement and better performance at various levels, that is, individual, organizational and social levels. 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 for small and medium-sized enterprises (SMEs), to survive or to adapt, particularly for the ones that were not sufficiently agile and innovative.

The business environment is under a continuous transformation and 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). In the present knowledge economy, intellectual capital is playing a significant role in the business, academic and institutional fields, as it helps with the transition towards competitive, sustainable, and innovative organizational development, no matter the size or type of organization (Vale et al., 2022; Vătămănescu et al., 2016a, 2016b, 2020a, 2020b, 2022a, 2022b). More than that, the intangible resources can be seen as a weapon that helps the organizations achieve better performance when compared to the tangible resources, especially nowadays, after the COVID-19 pandemic, when work has become remote more than before.

Thus, organizations started to create value and obtain a competitive advantage through an efficient management of intellectual capital, which has become "the one indispensable asset" (Serrat, 2017, p. 1) and through knowledge (Shumik et al., 2021; Vătămănescu et al., 2015, 2016a, 2016b), 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

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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).

Intellectual capital was conceptualized by Dave Ulrich (1998) as being a multiplicative function of abilities and commitment. Until the 1980s, some of the theories (Bergquist, 2017; Nicolaisen et al., 1991) focused on the external environment of an organization "as a basis for understanding the competitive advantage" (Radjenovic & Krstic, 2017, p. 14). Even though the concept of intellectual capital was formulated in the 1990s, it was defined generally as something that represents "the combined intangible assets of a company" (Martinidis et al., 2021, p. 2). Whether talking about small and medium-sized enterprises (SMEs), multinational corporations, non-governmental organizations, or public institutions, Ulrich (1998) states that intellectual capital is one of the core values of an organization. According to the author, its attributes are characterized by a high degree of complementarity, and they are all impacting the performance of an organization. According to Lekić, et al. (2022, p. 3), "intellectual capital can be seen as the holistic ability of a company to coordinate, organize and use its own available knowledge in order to create future values", thus, to survive in the constantly shifting business realms and have the knowledge to handle any obstacles.

In the last decades, the synergy of the management of the intellectual capital and the success in the performance of an organization and its ability to be agile emerged as a recurring theme, especially in the management studies, since companies are pushed by globalization, the increased competition, and the changing technologies to innovate (Hapenciuc et al., 2015; Păduraru et al., 2016; Papíková & Papík, 2022; Vătămănescu et al., 2014, 2018). Niwash et al. (2022) describe innovation speed as rhythm of progress that a company is having when it comes to innovating and commercializing a new product or a new service, or as the capability of the organization to speed up the tasks and the activities that take place through the development process of the new product or 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 the intellectual capital "facilitates economic competitiveness and sustain long-term economic growth" (Sardar et al., 2021, p. 300).

Looking at the small and medium-sized enterprises, intellectual capital has an important role, as most of the times 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).

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 the organizational behaviour, on how the organizations (especially SMEs) should cope with the changes and challenges (Pop et al., 2022; Vătămănescu & Brătianu, 2021) faced and how human, structural, and relational capital are helping to improve the performance of the organizations and pushing them to become more agile. This thesis seeks to demonstrate that effective management of intellectual capital can impact organizational development in a variety of ways, including improving employee skills, boosting competitive advantage in a market that is changing quickly, and improving organizational performance. For these reasons, small and medium-sized businesses have a reasoned interest in developing their intellectual capital and improving the level of excellence of their human capital -which they acquire through hiring talented individuals - because these resources have a direct impact on social and relational capital, which are inextricably linked to one another.

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), small and medium-sized enterprises "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 European Union (Executive Agency for Small and Medium-sized Enterprises, 2019), Romania ranked last, reaching only 29 SMEs/1000 habitants 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 that opened in 2020 dropped off and there is a high number of businesses that were bankrupted. As it may be concluded, the number of SMEs is again

very small compared to other countries in the European Union. Given this, SMEs are expected to further learn how to improve their performance and agility, 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 order to learn how we can cope with the economic challenges, we should understand what the needs of the organizations are during and after the pandemic, what were the SMEs' weaknesses before COVID-19 crisis, what should be improved in order for the economy to recover and reborn. Thus, to define a clear focus of the research theme, the main objective of the thesis is to analyse the role of the management of the intellectual capital (including here the human, structural and relational capital) in organizational agility and performance. This objective will be achieved by reaching the following specific objectives: 1. To investigate how the intellectual capital of organizations was affected by COVID-19, both in Europe and Romania, focusing on SMEs; 2. To analyse how the management of these three dimensions of intellectual capital (human, structural and relational) influence the agility and performance of the organizations, focusing on SMEs in Romania; 3. To elaborate an interdisciplinary theoretical model and research tool that correlatively incorporates the intellectual capital and the agility and performance of SMEs.

When it comes to the thesis's structure, it is important to underline that the first chapter begins with a bibliometric analysis, which was conducted using VOSviewer software and which aims to underline the most relevant topics and emerging trends in the management of intellectual capital, organizational agility and performance. The second chapter includes a comprehensive literature review covering the key concepts and theories of intellectual capital management and investigates the essential role that intellectual capital performs in increasing organizational performance and agility by utilizing a diverse range of academic research papers. The third chapter covers the research methodology, including the implementation of both qualitative and quantitative research designs and describes the development of the instruments, the conceptualization of the constructs, the sampling techniques used in the research and the significance of the data collected, providing in this way a solid basis for this thesis.

The fourth chapter illustrates the interpretation of the results and an extensive analysis of the quantitative and qualitative data. The first part of this chapter presents a detailed qualitative data analysis, using both Content Analysis and Qualitative Data Analysis Software (QDAS)-generated analysis to explore possible insights. In order conduct the qualitative data, ten managers

of Romanian SMEs were interviewed and provided their perspectives regarding the intellectual capital and its role on the organizational agility and performance. The second part of this chapter presents the quantitative data, which was examined using the software SMART-PLS, and points out the measurement model evaluation, the structural model and the results and discussions of the data collected through a sample applied to 121 respondents. The research findings are summarized in the final section, which also highlights the study's contributions and implications. It points out the theoretical and practical implications, presents the limitations of the study, and offers recommendations for future research.

By systematically addressing all these constructs and the relationships among them, this research seeks to expand the knowledge of the ways in which the management of the intellectual capital (human capital, structural capital and relational capital) influences organizational performance and agility, offering significant implications for both theoretical and practical applications.

In terms of the relevant findings, it is clear from the analysed studies that the working environment has a big impact on how a business manages its intellectual capital. The acquisition, use, and maintenance of intellectual capital are all impacted by specific dynamics that differ between traditional, virtual, and hybrid work situations. For instance, the digital transformation caused by virtual and hybrid work settings has increased the value of knowledge sharing and the requirement for efficient information management systems. For small and medium-sized enterprises that are looking to improve their performance and agility, understanding these dynamics is essential.

The review also emphasizes the significance of identifying and managing multiple types of intellectual capital, such as human, structural and relational. Employee knowledge and skills, or human capital, serve as the cornerstone upon which other types of capital are constructed. Processes, procedures, and intellectual property of the company are considered structural capital, whereas the network of relationships with stakeholders is relational capital. According to this research, SMEs that proactively manage and invest in all three types of intellectual capital show higher agility and better overall performance.

The research yielded a theoretical model that incorporates these components and highlights the complex and interconnected dynamics of intellectual capital management. In conclusion, this literature review underlines the connection between managing different types of intellectual capital

and the workplace environment, as well as the benefits of doing so for organizational performance and agility. All of these concepts and the links between them are all analysed through proxy variables or indicators, which are the only practical method of measurement. This acknowledgement highlights the difficulty in quantifying the varied aspects of intellectual capital, emphasizing the need for surrogate measures as a way to more fully understand and assess its influence and worth inside a company. Thus, for enterprises looking to successfully navigate the changing nature of work environments and find lasting success in a globally competitive market, understanding these links is essential.

Furthermore, the qualitative analysis that was conducted with the software AtlasTI illustrated significant insights regarding the perception of the ten managers that were interviewed regarding the management of intellectual capital and how it impacts the agility and performance of their organization. They emphasized how important are the financial indicators in achieving the success of the organization. They also underlined that setting objectives (both short term and long term), taking into account the feedback from the stakeholders and evaluating the performance of the employees is very important when it comes to the evaluation of the employees and organizational performance. Furthermore, the interviews pointed out the importance of digitalization (including artificial intelligence) (Căpăţînă et al., 2020) and the ability to adapt to the continuously changing market in becoming an organization characterized by agility (Ooi et al., 2023). This idea was also supported by the managers, who underscored that a culture of change and flexibility of work policies are the key drivers of agility and performance.

When it comes to the quantitative analysis, it provided empirical validation for the proposed theoretical model, most exactly highlighting the role of intellectual capital management in boosting the agility and performance of the SMEs. The majority of the hypothesis were validated through the analysis conducted with the software SmartPLS and indicated the importance of the intellectual capital management and organizational agility in boosting the performance of the SME.

The findings highlight the significance of relational and human capital management in fostering organizational performance and agility, whereas the contribution of structural capital management is still up for debate. The results presented here offer a clearer understanding of how successful intellectual capital management may boost organizational performance and agility.

However, further investigation is required in order to see the impact of structural capital management.

Switching to the practical implications, this thesis offers managers of small and medium-sized businesses (SMEs) in Romania insightful knowledge about how to strategically manage intellectual capital to improve organizational agility and performance and illustrates the need for the SMEs to invest in the human capital, to adapt quickly to the market changes and to invest their resources in integrating new technologies, alongside with building strong relationships (both inside and outside the organization) and to cultivate an adaptive organizational culture that is open to change and to learn. Shortly, this study provides guidance to the Romanian managers in finding the key to success, by ensuring competitiveness in the nowadays dynamic market, foster innovation and boost the agility and the performance of the organization.

Regarding the limitations of the study, there are some aspects that can be pointed out. First of all, the size of the sample is relatively small, and the perspectives provided by the 10 managers from Romanian SMEs may not fully reflect what is happening in different industries or organizational contexts. Also, the data collected from the interviewed managers are characterized by subjectivity, which may affect the validity of the conclusions provided after analyzing the data. Furthermore, the quantity and quality of the data collected can nevertheless set limitations on the quantitative analysis with SmartPLS, despite the fact that it offers strong statistical insights. This also might be the reason for having two hypothesis that were not validated.

Further studies should be conducted in order to provide more comprehensive insights about the management of intellectual capital in the organizational agility and performance by carrying out by researchers with larger sample sizes and by exploring the impact of structural capital on the performance and agility of the SMEs more. Additionally, the inclusion of control variables (i.e., gender, age, work experience of managers, etc.) for comparing subsamples may provide new and useful perspectives on the topic.