

Are Technical Skills, Digitalization, and Cultural Intelligence Competitive Advantages for Modern Organizations?

Alina Nicoleta Dobre¹, Maria Andreea Tilibaşa² and Irina Tărăban³

¹⁾²⁾³⁾ Bucharest University of Economic Studies, Bucharest, Romania

E-mail: alina.dobre@man.ase.ro; E-mail: maria.tilibasa@gmail.com.

E-mail: irinataraban@gmail.com

Please cite this paper as:

Dobre, A.N., Tilibaşa, M.A. and Tărăban, I., 2022. Are Technical Skills, Digitalization, and Cultural Intelligence Competitive Advantages for Modern Organizations? In: R. Pamfilie, V. Dinu, C. Vasiliu, D. Pleşea, L. Tăchiciu eds. 2022. *8th BASIQ International Conference on New Trends in Sustainable Business and Consumption*. Graz, Austria, 25-27 May 2022. Bucharest: ASE, pp.383-390.

DOI: 10.24818/BASIQ/2022/08/051

Abstract

Over the last few years, skills-based education and their use in business have played an important role in increasing organizational performance. Skills acquired by employees in the education system and further developed on the job are divided into hard and soft skills. Hard skills refer to technical and technological skills as well as problem solving, while soft skills refer to interpersonal skills that are largely acquired throughout the professional life. Thus, the purpose of this study is to identify whether these skills are essential for an employee in the modern organization. Though a considerable amount of research has been dedicated to each of these skills leading, individually, to a competitive advantage, through this descriptive analysis, the research contributes to the existing academic literature as well as to business practice by emphasizing the necessity for modern employees to have both hard and soft skills to help their organization gain a competitive advantage on the market. This study is a starting point for future research and would help education institutions to train their students for the challenges of the labor market, and also contribute to a better use of these benefits by the business environment.

Keywords

competitive advantage; cultural intelligence; digitalization; technical skills.

DOI: 10.24818/BASIQ/2022/08/051

Introduction

In the modern business environment, characterized by globalization, diversity, complexities, fast changing economic conditions, and technological advancements, combined with intense international competition (Van Dyne and Ang, 2005), organizations must find innovative ways to create a sustainable competitive advantage. Competitive advantage, “the invisible component of the strategy” (p. 60), is the reason why any organization is in business. It is obtained when a firm succeeds in creating more economic value than their adversaries (Popa, et al., 2011). Michael Porter (1985) classifies competitive advantage into two types: cost leadership and differentiation which, depending on the scope of activities the firm undertakes to gain, will result in 3 generic strategies that organizations can implement for obtaining above average performance: cost leadership, differentiation, and focus. The focus strategy can, in turn, be divided into cost focus and differentiation focus. According to Popa, et al., (2011), there are three main sources of competitive advantage:

- superior financial, physical, and human resources;
- superior technical, economic, organizational, and managerial skills;
- superior position on the market.

Day and Wensley (1988) define skills as “distinctive capabilities” of an organization’s employees, which differentiates them from those of the competitors’, and resources as “more tangible requirements for advantage which enable a firm to exercise its capabilities” (p. 3).

According to the Resource-Based Theory, an organization's resources, which include "all assets, capabilities, organizational processes, firm attributes, information, knowledge, etc." (Barney, 1991, p.101), can become sources of competitive advantage as long as they are valuable, rare, imperfectly imitable, and if they don't have strategically equivalent substitutes. This requires leaders to precisely identify the skills and resources which possess the greatest edge on position and performance and make strategic choices to blend them together to obtain a competitive advantage (Day and Wensley, 1988).

Considering all of the above, this paper aims to analyze the profile of an employee within the modern organization in the era of digitalization while analyzing the technical but also the intercultural skills, which could allow an organization to become competitive on the market. Therefore, in this paper we will discuss whether technical skills in the light of business digitalization as well as the intercultural skills of the employees may foster competitive advantages within an organization.

1. Research Methodology

In this paper the researchers have synthesized the relevant state of the art pertaining to an organization's capabilities leading to new competitive advantages. The method used is a preliminary descriptive analysis of the literature on the role of organizational capabilities which could drive competitive advantages. The carried research encompasses on-line and published sources, such as Web of Science, Science Direct, Elsevier, eBooks, Emerald Management, EJournals, Scopus, J-Stor, and others, these research platforms offering quick access to qualitative research data.

The research focused on comparing such capabilities in terms of the way they could contribute to an organization's competitive edge. As a result of the analysis, we identified two main directions, namely digitalization, technical and technological skills of graduates and future employees on the one hand, and interpersonal skills of existing employees in an organization, more specifically, cultural intelligence, on the other hand. The discoveries led to highlighting the importance of digitalization, technical and technological skills combined with cultural intelligence as essential organizational capabilities leading to competitive advantages.

2. Literature review

2.1. Technical skills and digitalization as competitive advantages

In the context of the knowledge-based economy, the level of education of employees requires continuous improvement through the development of essential skills in today's business environment. Challenges such as globalization, the accelerated pace of change in the labor market, and the growth of technologies require human resources with key skills such as the ability to constantly acquire knowledge, the ability to put knowledge into practice by finding ways to solve problems (Makasheva et al., 2016).

Thus, skill development becomes a strategic management tool (Sousa and Wilks, 2018) as well as a research issue in educational institutions, which is an important goal for stakeholders in the education system. A recent study (Rodrigues et al., 2021) shows that a central issue in a country's education and social policies is the development of technological skills. During their school career, students have the opportunity to develop various skills that will become useful for both academic and professional life. The same authors (Rodrigues et al., 2021) identify the main skills of the 21st century as problem solving, transforming information into knowledge, critical thinking, technological skills and communication. All this is essential for the future satisfaction of the people.

In this sense, technological ability is considered an organizational technique, and distinctive technological skills refer to the organization's ability to use technical knowledge to improve the processes and underlying the development of the organization's products (Roustapishch and Yazdizadeh, 2019).

Given the technological dynamics, employment opportunities are based on various professional skills mentioning eight directions of key competencies in the workplace: global skills, communication skills, personality skills, information use, information research, complex thinking, creativity. To increase the chances of employment, it is important to have a practical training course to educate students to familiarize them with the responsibilities and tasks of the job. In this sense, Marinaş et. al. (2021) identifies two categories of skills that contribute to increasing employability: technical skills (hard) specific to each job and business and managerial skills (soft). Thus, it is considered necessary to pay more attention to the technical knowledge and skills that can be developed through partnerships between educational institutions and economic agents, these being specific to the job for which the student is preparing since school.

However, to help increase organizational efficiency, future candidates should also have soft skills, such as employment skills, that allow them to develop their careers in the context of technological change. The literature specifies that employment skills involve the acquisition of entrepreneurial skills by students, such as problem solving, teamwork, empathy, innovative thinking, and the ability to relate. In this case, the labor market offers them the opportunity to work on practical projects to be able to lay the foundations of a professional experience (Pardo-Garcia and Barac, 2020). The same authors identified directions to be followed by educational institutions to increase employability:

- diversification of the curriculum by inviting employers to courses, greater use of foreign languages, and ICT;
- teaching business protocols that involve training students in decision making and problem solving, improving communication and teamwork skills, creating business plans;
- job matching through internships, accessing job search forums;
- learning from the experience of graduates by organizing visits to companies where graduates work and other activities.

In this context, organizations focus on hiring people with key competencies to create new benefits that lead to increased customer satisfaction and a stronger position in the face of competition. Popa et al. (2011), are of the opinion that a company that creates an economic value higher than the competition has a competitive advantage. Therefore, the first step in gaining a competitive advantage is to create value for your employees. Thus, employees with professional, technical and entrepreneurial skills contribute to increasing productivity and organizational performance, being willing to make an extra effort to accomplish the tasks that lead to meeting organizational goals. Furthermore, Sousa and Wilks (2018) believe that organizations need to invest in the development of their employees so that they are motivated to stay in the company and contribute to gaining competitive advantage. They identify the following benefits that skilled workers can bring to the companies in which they work:

- reduction of labor costs (fewer and more qualified employees, reduction of training expenses);
- reducing the delivery time of products on the market;
- increase productivity;
- increasing the quality of products;
- diversification of production (automation of manual labor);
- creating new products and services;
- analysis of a larger volume of data;
- changes in the organizational structure.

It is not enough just to gain the competitive advantage, but it must be maintained in the long run because in today's environment there is a need for sustainable development in all areas. First, sustainability has its starting point in education, which is a tool for change. A recent study (Pouratashi, 2021) showed that skills such as empathy, systemic thinking, participatory skills, anticipatory thinking, and creative thinking have a key role to play in increasing the sustainability and efficiency of future employees. However, Vehmaa, Karvinen and Keskinen (2018) consider that the inclusion of sustainability in the education system is not enough, and the skills and knowledge gained through education must be transferred to the practices of professional life. The same authors state that there is not enough knowledge on how graduates can integrate sustainability skills into job-specific tasks.

Therefore, the organization must harness the many benefits that come from developing employee skills to ensure its long-term sustainability. Rapid changes that occur in the labor market require constant updating of skills and their matching with job requirements so that organizations can cope with technological problems (Popescu, et al., 2020). In order to improve the skills and increase the professional potential of the employees, it is recommended to use a system of incentives regarding salaries and other economic benefits, job satisfaction. All this will contribute to corporate sustainability and the establishment of strategies to increase performance and competitiveness.

The benefits of digital transformation are obvious and can apply to all sorts of organizations including educational institutions. The process of digitalization usually aims at implementing digital technologies, but a broader perspective can include change and transformation at multiple organizational levels (Pettersson, 2020). According to Pettersson (2020) these changes can refer to new knowledge, pedagogical skills, communication or even the process of organizational skills at institutional level.

Rensfeldt and Player-Koro (2020) who have analyzed the major Swedish school digitalization reforms over the past 50 years and its results in a future imaginary society, highlight the importance of the digital competencies for an employee in the modern organization who should constantly acquire new knowledge

and competencies in order to improve results. These digital skills means being able to successfully use a wide range of digital devices such as computers and smart pads but also programs and digital resources for further study in the field of education and business. They also state that digital technology is a key factor in the future emerging society and this process has been taking place since the end of the IInd World War when the world made its transition to a „digitally-based economy” (Rensfeldt and Player-Koro, 2020, p.13.). This is why the education system in Sweden was subject to many reforms like those from the 1960, 1990s and 2010s with an enormous impact on school curricula and technology use. Rensfeldt and Player-Koro (2020) conclude that digitalization is a powerful instrument for improving different aspects of schooling which will become more efficient and streamlined.

On the other hand, concerning the benefits of digitalization for companies, Ferreira, Fernandes and Ferreira (2019) developed a study that analyzed the factors which influenced companies to adopt new digital processes and their impact on innovation or performance. Their study included 983 companies in Portugal in which was applied a questionnaire concerning companies market share, the access to new markets or the service quality or the range of products. The final results of the study demonstrated that the digital transformation can significantly contribute to a company differentiation in terms of competitive advantages. However, the same studies also explain that the impact of ICT technologies may vary from one industry to another depending on the business profile for instance an agricultural firm might differ from a manufacturing or service company which led to the conclusion that the impact of digitalization is “homogenous amongst firms”.

The main findings of the study support the idea that the more innovative a company is the more competitive it becomes on the market. More than this, the study also suggests that “to be digital would be a question of surviving and an entrepreneurial opportunity to increase the company's innovation and performance” (Ferreira, Fernandes and Ferreira, 2019, p.589). They also mention the importance of university-company collaboration because companies need to distinguish themselves from the competition and this is the reason why they have to seek out sources of knowledge and innovation, namely, centers of learning.

In addition to this, Gray and Rumpe (2015) differentiate between various models of digitalization ranging from the business domain where digitalization mostly informs on variables like buying and selling rates or the relationship with customers as compared to other domains like production, water and energy supply or transportation, where digitalization would mean designing products, information on the status, physical distribution or sustainability. They also underline the importance of model personalization which would mean creating meta models for different domains using digital tools so as to integrate technology into all aspects of daily life (smart homes, e-healthcare, security, social media relationships or even services in e-government).

Knudsen et al., (2021) argue that digitalization has benefits that are unprecedented and mainly consists of the symbiosis between Big Data and the use of network effects. They continue to say that the competitive advantage is directly proportional with the complementarity between Big Data and network effects and vice versa. However, other voices have previously claimed that digitalization comes with some risks and disadvantages.

For instance, Shah (2022) claimed that on the one hand organizations that are highly digitalized have functions that are very explicit and also available to every individual of the organization through libraries, databases and other practices. On the other hand, the intellectual capital becomes quite vulnerable through codification because of an increased risk of information leaks. Still, considering the paper based records from the past, which could be only managed and checked through a laborious process or audits, the codified knowledge offered a competitive advantage due to the process efficiency. He continues to emphasize the importance of digitalization because the use of computers favored automatization which could guarantee easy access of information, quick transactions and decision making which were also a competitive advantage that allowed some companies to stay ahead of their competitors.

Shah (2022) gives the example of Amazon which used Big data analytics (BDA) in order to collect real time information about its customers and suppliers, to create algorithms, personalize product recommendations and even predict future behavior. The same author identifies the following elements that ensure the competitive advantage in the business world:

- Data Authenticity- the use of reliable information acquired via a very solid input of information;
- Real-time access; instant access to available data at any moment;
- Versatility of applicability- BDA can be applied across sectors ranging from text or web analytics to sales and marketing, Risk Management, Customer Service and even Workforce Planning.

In addition to making information available to anyone at any time, it is also important to use digital tools and processes to promote innovation and performance.

Fernández-Portillo et al. (2022) state that the internet has allowed all sorts of companies to access more easily markets, information on competition and the business environment. Still the competitive advantage offered by digitalization is not equally spread among all firms. This was the reason why Fernández-Portillo et al. (2022) carried out research in order to understand why “the improvement in performance doesn’t take place in all companies?” especially because companies usually make important investments to achieve their digitalization. Their initial presumption was that digitalization doesn’t ensure a business performance alone, but it should be aligned with an innovation strategy in order to attain economic and financial performance. In the conclusions of their study, following their Multivariate Analysis and survey carried out in 805,588 mercantile companies in Spain in 2016 they confirmed that innovation has a high influence on the relationship between digitalization and business performance. In addition to this, Fernández-Portillo et al. (2022) they point out the importance of the human resources who must be trained and gain experience in using new digital resources.

2.2. Cultural intelligence as competitive advantage

With globalization becoming an integral part of all aspects of the society (Ang, Rockstuhl and Tan, 2015), the necessity for an employee in the modern organization to become culturally adept, ready to face the challenges brought about by the increasingly diverse composition of communities, has become more and more obvious (Azevedo and Shane, 2019).

According to Earley and Ang (2003), Cultural Intelligence (CQ) is an individual’s ability to work and interact effectively in a culturally diverse environment. The same authors (2003) developed the CQ framework, aiming to define the capabilities necessary for an effective interaction in a multicultural environment. This conceptual framework, expanded by Ang and Van Dyne in 2008, consists of four dimensions: Metacognitive CQ, Cognitive CQ, Motivational CQ and Behavioral CQ. Van Dyne et al., (2012) have identified eleven sub-dimensions for the four main dimensions, which can become important capabilities the modern employee in an organization will need in order to work effectively with colleagues and business partners from multicultural backgrounds.

CQ Drive is the degree to which individuals feel motivated and determined to persevere in tackling situations involving cultural diversity (Livermore, 2011). The same author defines CQ Knowledge as the degree to which an individual is able to understand the implications culture has on the way people think and act, as well as the differences among cultures. In the same book, Livermore (2011) defines CQ strategy the degree to which an individual is aware of the events occurring in multicultural contexts and their ability to use this awareness to their advantage in solving problems effectively. The fourth element of the CQ framework, CQ Action, has been defined by Livermore (2011) as the appropriateness with which an individual can handle a situation in a multicultural context, their flexibility using verbal and non-verbal behavior, and the extent to which they can adapt to various norms of culture. Although each of these four capabilities can be seen as independent from one another, together, they are essential to building successful relationships at every level in an organization. While a valuable resource for the organization and an important source of competitive advantage, for it to lead to a sustainable competitive advantage, CQ capability needs to be discovered in job candidates and trained in existing employees.

Currently, Cultural intelligence (CQ) is not part of the academic curriculum at undergraduate levels. However, the necessity for an increase in teacher CQ has surfaced, especially in geographies with high student diversity. Two competitive advantages schools could gain from integrating CQ in their curriculum, would be a reduction in the number of students wrongly placed in special needs schools for lack of teacher intercultural training (Gay, 2002), as well as an increase in the number of interculturally educated and globally engaged future citizens, equipped with the necessary skills to study in international environments during study exchange programs even at high-school levels (Gog, 2012).

The most prevalent cases of Cultural Intelligence (CQ) training occur within the organizations. Faced with the challenges of the fast-changing global society, organizations have realized that interculturally-effective leaders are a valuable, rare, and inimitable resource which can lead to competitive advantage (Barney, 1991), and therefore are making constant efforts to implement CQ in their business strategy. They then intervene in enhancing global leadership effectiveness through in-house cross-cultural training programs provided by consulting firms. Through these programs employees gain specific intercultural skills and abilities like cross-cultural difference awareness, knowledge of appropriate behavior when working in diverse teams, or international business and management knowledge. Another way organizations equip

their employees with the necessary CQ capabilities is through a more holistic exposure to a foreign environment – the opportunity to live and work abroad (Ng, Van Dyne and Ang, 2009).

According to Livermore (2016), high CQ organizations could gain a competitive advantage in the following areas:

- *access to diverse markets* (through their employees' ability to adapt the local delivery of products and services to the specific needs of those markets);
- *provision of high-quality service to culturally diverse clients* (through their employees' deep understanding of different cultures they can anticipate various needs of culturally diverse clients as well as handle miscommunication appropriately);
- *speed and efficiency* (their employees' ability to act effectively in diverse situations will lead to effective and efficient deal closing);
- *productivity in global assignments* (their employees high CQ will lead to successful and sustainable worldwide assignments);
- *becoming an employer of choice* (global talent will be easily attracted to corporations where cultural intelligence is appreciated and used as a model across the organization);
- *profitability and cost saving* (in a global environment, high CQ employees make a great contribution to high quality results and bottom-line performance);
- *multicultural team effectiveness* (effective communication of high CQ employees in diverse teams leads to high performance).

In conclusion, while CQ is not a competitive advantage per se, we believe that it should become an indispensable part of any organization's business strategy, and that by making constant efforts to discover, acquire, develop, and retain high CQ talent, organizations will be able to gain a sustainable competitive advantage.

3. Results and discussions

As a result of the analysis, the authors showed that both hard and soft skills, namely digitalization, technical and technological skills together with interpersonal skills and cultural intelligence contribute to gaining competitive advantage on the market. This approach allowed the authors to provide a holistic understanding of the skills required in a modern organization which can always adapt and reinvent itself in order to outperform its competitors. The employees and their skills are the main source of competitive advantage, enabling modern companies to evolve and thrive on a market subject to sudden changes, and under constant development.

In the context of the growing role of competency-based education in business, we have identified that in order to increase the performance of modern organizations; it is necessary for human resources to have varied and essential skills to adapt to rapidly changing business environments. Thus, we took into account those skills which are formed within the education system, being later adapted and developed in organizations, also called hard skills, such as technical and technological skills, problem solving, information use, digitization knowledge, etc. In addition, we considered it appropriate to research the skills that are being developed within organizations, also called soft skills, which include interpersonal skills and focus, in particular, on the cultural intelligence of employees.

Conclusions

After researching the literature, we found that new digital technologies contribute to adding value to the companies and help promote innovation and performance. Those employees who have acquired technical skills in school add a lot of value to the organization in which they work because they contribute to the process of digitalization which will entail lots of benefits like an increased qualitative productivity, easy access of information, quick transactions, diversification of production (automation of manual labor), improved data management, etc. The new digital skills will therefore become a competitive advantage that allows some companies to stay ahead of their competitors. At the same time, the literature has shown that the most important skill developed within the organization is cultural intelligence, through which employees acquire specific intercultural skills and abilities, such as awareness of intercultural differences, knowledge of appropriate behavior when working in diverse teams, or international knowledge. business

and management. This leads to competitive advantages such as access to diverse markets, provision of high-quality service to culturally diverse clients, speed and efficiency, productivity in global assignments, profitability and cost saving, as well as multicultural team effectiveness.

In conclusion, employees in the modern organization can contribute to enhancing the competitive advantage of an organization if he possesses technical and digital skills on the one hand and if he is interculturally-effective on the other hand. Organizations must harness the variety of benefits which arise from developing the skills presented to increase their performance, maintain competitiveness, and ensure long-term sustainability.

Given the results of the research, several implications can be determined both in the academic environment and in the business environment. For the academic environment, this study is relevant because it presents elements that need to be deepened to train successful graduates on the labor market, such as curriculum diversification, teaching business protocols, internships in companies, and integrating the study of cultural intelligence into the curriculum. Furthermore, in the context where digital transformation can significantly contribute to a company differentiation in terms of competitive advantages, it is essential for organizations to adapt their recruitment process and seek the employment of people able to use digital tools in order to optimize the results of the company. Besides innovation and digital performance, companies can become competitive by employing culturally intelligent students, capable of handling work in culturally diverse environments, especially in a fast-changing global society which makes interculturally-effective leaders a valuable, rare, and inimitable resource on the market.

Acknowledgement: This paper was co-financed by The Bucharest University of Economic Studies during the PhD program

References

- Ang, S. and Van Dyne, L., 2008. *Handbook of Cultural Intelligence Theory, Measurement and Applications*. 1st ed. New York: Routledge.
- Ang, S., Rockstuhl, T. and Tan, M.L., 2015. Cultural Intelligence and Competencies. *International Encyclopedia of the Social and Behavioral Sciences*, pp.433-439. <https://doi.org/10.1016/b978-0-08-097086-8.25050-2>.
- Azevedo, A. and Shane, M.J., 2019. A new training program in developing cultural intelligence can also improve innovative work behavior and resilience: A longitudinal pilot study of graduate students and professional employees. *The International Journal of Management Education*, 17(3), pp.100-303.
- Barney, J., 1991. Firm Resources and sustained competitive advantage. *Journal of Management*, 17(1), pp.99–120. <https://doi.org/10.1177/014920639101700108>.
- Day, G. and Wensley, R., 1988. Assessing Advantage: A Framework for Diagnosing Competitive Superiority. *Journal of Marketing*, 52(2), pp.1-20. <https://doi.org/10.1177/002224298805200201>.
- Earley, P.C. and Ang, S., 2003. *Cultural intelligence: individual interactions across cultures*. Stanford, Calif: Stanford University Press.
- Fernández-Portillo, A., Almodóvar-González, M., Sánchez-Escobedo, M. and Coca-Pérez, J., 2022. The role of innovation in the relationship between digitalization and economic and financial performance. A company-level research. *European Research on Management and Business Economics*, 28(3), p.100190. <https://doi.org/10.1016/j.iedeen.2021.100190>.
- Ferreira, J., Fernandes, C. and Ferreira, F., 2019. To be or not to be digital, that is the question: Firm innovation and performance. *Journal of Business Research*, 101, pp.583-590.
- Gay, G., 2002. Culturally responsive teaching in special education for ethnically diverse students: Setting the stage. *International Journal of Qualitative Studies in Education*, 15(6), pp.613-629. <https://doi.org/10.1080/0951839022000014349>.
- Gog, M., 2012. Teaching with cultural intelligence: developing multiculturally educated and globally engaged citizens. *Asia Pacific Journal of Education*, 32(4), pp.395-415. <https://doi.org/10.1080/02188791.2012.738679>.
- Gray, J. and Rumpe, B., 2015. Models for digitalization. *Software and Systems Modeling*, [online] 14(4), pp.1319–1320. <https://doi.org/10.1007/s10270-015-0494-9>.
- Knudsen, E., Lien, L., Timmermans, B., Belik, I. and Pandey, S., 2021. Stability in turbulent times? The effect of digitalization on the sustainability of competitive advantage. *Journal of Business Research*, 128, pp.360-369.

- Livermore, D.A., 2011. *The cultural intelligence difference: master the one skill you can't do without in today's global economy*. New York: AMACOM, American Management Association.
- Livermore, D.A., 2016. *Driven by difference: How great companies fuel innovation through diversity*. New York: AMACOM, American Management Association.
- Makasheva, N., Ischuk, T., Makasheva, Y. and Kalashnikova, D.S., 2016. Education in the system of today's employee values. *IOP Conference Series: Earth and Environmental Science*, 43, p.012095. <https://doi.org/10.1088/1755-1315/43/1/012095>.
- Marinaş, C., Goia, S., Gora, A., Igreţ, R., Roman, M. and Ştefan, S., 2021. A Bibliometric Analysis of the Relationship Internship – Skills – Employ-Ability. *Managing People and Organizations in a Global Crisis*, 15(1), pp.669-681. DOI: 10.24818/IMC/2021/04.03.
- Ng, K.-Y., Van Dyne, L. and Ang, S., 2009. From Experience to experiential learning: Cultural intelligence as a learning capability for global leader development. *Academy of Management Learning and Education*, 8(4), pp.511-526. <https://doi.org/10.5465/AMLE.2009.47785470>.
- Pardo-Garcia, C. and Barac, M., 2020. Promoting Employability in Higher Education: A Case Study on Boosting Entrepreneurship Skills. *Sustainability*, 12(10), p.4004. <https://doi.org/10.3390/su12104004>.
- Pettersson, F., 2020. Understanding digitalization and educational change in school by means of activity theory and the levels of learning concept. *Education and Information Technologies*, 26, pp.187-204. <https://doi.org/10.1007/s10639-020-10239-8>.
- Popa, I., Dobrin, C., Popescu, D. and Draghici, M., 2011. Competitive Advantage in the Public Sector. *Theoretical and Empirical Researches in Urban Management*, 6(4), pp.60-66.
- Popescu, L., Iancu, A., Avram, M., Avram, D. and Popescu, V., 2020. The role of managerial skills in the sustainable development of SMEs in Mehedinti County, Romania. *Sustainability*, 12(3), p.1119. doi:10.3390/su12031119.
- Porter, M.E., 1985. *Competitive advantage: Creating and sustaining superior performance*. New York: The Free Press.
- Pouratashi, M., 2021. The Influence of Formal and Informal Education on Students' Sustainable Development Skills, a Study in Iran. *Zagreb International Review of Economics and Business*, 24(2), pp.25-35. <https://doi.org/10.2478/zireb-2021-0009>.
- Rensfeldt, A. and Player-Koro, C., 2020. "Back to the future": Socio-technical imaginaries in 50 years of school digitalization curriculum reforms. *Seminar.net*, 16(2), 20. DOI: 10.7577/seminar.4048.
- Rodrigues, A.L., Cerdeira, L., Machado-Taylor, M.D. and Alves, H., 2021. Technological skills in higher education—Different needs and different uses. *Education Sciences*, 11(7), 326. <https://doi.org/10.3390/educsci11070326>.
- Roustapisheh, N. and Yazdizadeh, H.N., 2019. Effects of Top Management Support, Technological Skills, and Capabilities on Entrepreneurship and Organizational Performance. *International Transaction Journal of Engineering, Management, Applied Sciences and Technologies*, 10(17), 10A17F:112. DOI: 10.14456/ITJEMAST.2019.232.
- Shah, T., 2022. Can big data analytics help organizations achieve sustainable competitive advantage? A developmental enquiry. *Technology in Society*, 68, 101801. <https://doi.org/10.1016/j.tech-soc.2021.101801>.
- Sousa, M.J. and Wilks, D., 2018. Sustainable skills for the world of work in the digital age. *Systems Research and Behavioral Science*, 35(4), pp.399-405. DOI: 10.1002/sres.2540.
- Van Dyne, L. and Ang, S., 2005. Getting more than you expect: Global Leader Initiative to Span Structural Holes and Reputational Effectiveness. *Advances in Global Leadership*, 4, pp.101-122. [https://doi.org/10.1016/S1535-1203\(06\)04008-1](https://doi.org/10.1016/S1535-1203(06)04008-1).
- Van Dyne, L., Ang, S., Ng, K.Y., Rockstuhl, T., Tan, M.L. and Koh, C., 2012. Sub-Dimensions of the Four Factor Model of Cultural Intelligence: Expanding the Conceptualization and Measurement of Cultural Intelligence. *Social and Personality Psychology Compass*, 6(4), pp.295-313. <https://doi.org/10.1111/j.1751-9004.2012.00429.x>
- Vehmaa, A., Karvinen, M. and Keskinen, M., 2018. Building a more sustainable society? A case study on the role of sustainable development in the education and early career of water and environmental engineers. *Sustainability*, 10(8), p.2605. doi:10.3390/su10082605.