JIC 25,7

176

Received 27 May 2024 Revised 23 September 2024 Accepted 23 September 2024

Boosting intellectual capital and digital maturity of SMEs: an investigation of enterprises in an Italian Southern tourist district

Debora Tortora Department of Business and Law, University of Milan–Bicocca, Milan, Italy Cinzia Genovino and Federico De Andreis Giustino Fortunato Telematic University, Benevento, Italy Francesca Loia

Department of Economics, University of Campania Luigi Vanvitelli, Capua, Italy, and

Maria Teresa Cuomo

Department of Economic and Statistical Sciences, University of Salerno, Salerno, Italy and

Brunel Business School, Brunel University of London, London, UK

Abstract

Purpose – This study intends to analyze the relationship between the digital maturity of SMEs and intellectual capital, investigating the determining factors. Starting from the endowment in terms of intellectual capital and evaluating Management Style, Decision-Making Competences, and Business Network, a model is proposed aiming to provide a comprehensive measure of SMEs' digital maturity and thus to improve understanding and, consequently, effectiveness. The empirical analysis allows assessing the validity and applicability of the suggested model, providing valuable insights for the improvement of digital strategy and competitiveness of SMEs in the Amalfi Coast Tourist District (Italy), with evident implications also for policymakers and the community.

Design/methodology/approach – A mixed-methods research strategy was utilized to confirm research hypotheses that were derived from literature review. The field study was organized into two separate phases: the first phase, which is qualitative, employed focus groups comprising key stakeholders (managers and entrepreneurs) from various companies within the Amalfi Coast Tourist District. This phase adhered to the principles of homogeneity (to facilitate deeper discussions) and heterogeneity (to allow for a broader range of viewpoints among participants). The insights gathered from these preliminary focus groups informed the subsequent quantitative phase. In this second phase, structured interviews were conducted using a questionnaire to probe the participants' views on digital maturity. This analysis involved 94 companies, all part of the Amalfi Coast Tourist District, assessing their digitalization levels and highlighting key management attributes. Logistic regression was applied to quantitatively analyze the data, effectively assessing the impact of various independent variables (such as Management Style, Decision-Making Competencies and Business Network) on the dependent variable, digital maturity. Employing both qualitative and quantitative methods provides a thorough and nuanced understanding of the digital maturity landscape within the specified context. Findings – The main results suggest the existence of a correlation between the analyzed variables and digital maturity. Innovation, indeed, increases by applying a data-driven leadership style. Intellectual capital (measured in its three components of human capital: decision-making competences; structural capital: management style; and relational capital: business network) influences digital maturity, although some of the variables used are not equally weighted. **Originality/value** – The main contribution of this article is to provide an in-depth understanding of the company components that favor digital maturity, to support strategic choices oriented towards a conscious digital transition. The results enrich the existing literature on intellectual capital in terms of its contribution to the digitalization of organizations, which can be a critical success factor in the context of SMEs.

Keywords Digital maturity, Digitazation, Tourist district, Intellectual capital, Hospitality and tourism industries **Paper type** Research paper



Journal of Intellectual Capital Vol. 25 No. 7, 2024 pp. 176-198 Emerald Publishing Limited 1469-1930 DOI 10.1108/JIC-05-2024-0156 © Debora Tortora, Cinzia Genovino, Federico De Andreis, Francesca Loia and Maria Teresa Cuomo. Published by Emerald Publishing Limited. This article is published under the Creative Commons Attribution (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen at http://creativecommons.org/licences/by/4.0/legalcode

1. Introduction

The rise of the digital economy and digital technologies have led to significant organizational transformations, requiring businesses to adapt dynamically to maintain competitiveness. This shift has brought intellectual capital—comprising intangible and knowledge-based resources—to the forefront as a critical factor for business success (Li *et al.*, 2023; Del Giudice *et al.*, 2023). Since its introduction by Galbraith (1969), intellectual capital has been recognized for impacting on performance, competitiveness, and innovation (Porter and Millar, 1985; Kogut and Zander, 1996; Davenport, 1999; Yuliana *et al.*, 2019).

Intellectual capital is closely linked to innovation capability (Bontis, 1998; Subramaniam and Youndt, 2005), organizational commitment (Zlatković, 2018; Del Giudice *et al.*, 2021), and knowledge management (Lerro *et al.*, 2012; Wu and Sivalogathasan, 2013; Chen *et al.*, 2012; Irawan *et al.*, 2019). The interaction between intellectual capital, organizational learning, and digital transformation is particularly impactful for SMEs, enhancing performance (Ganawati *et al.*, 2021; Scuotto *et al.*, 2021). The relationship between intellectual capital and digital transition, including the development of digital skills and knowledge, is complex, with strong intellectual capital fostering proactive digital adoption and vice versa (Bontis, 1998; Pokrovskaia *et al.*, 2021).

Understanding the relationship between intellectual capital and digital maturity is crucial for companies seeking to stay competitive in the digital era. This study, focusing on companies within the Amalfi Coast Tourist District, explores this connection, aiming to answer whether there is a relationship between intellectual capital and digital maturity (Chu *et al.*, 2011; Ahmed *et al.*, 2020; Campos *et al.*, 2020). The study seeks to provide insights into how these factors influence business performance and suggests new research directions.

The paper is structured as follows: Section 2 reviews the literature on intellectual capital and digital maturity; Section 2.1 presents the research hypotheses and model. Section 3 outlines the methodology, combining qualitative focus groups and quantitative surveys conducted with 94 companies in the Amalfi Coast Tourist District. The results are discussed in Section 4, followed by the study's implications in Section 5. Finally, Section 6 highlights limitations and concludes the study.

2. Literature review and hypotheses development

2.1 The strategic value of intellectual capital in the digital era

The literature highlights the strong interconnection between digital transformation, digital maturity, and the strategic value of intellectual capital in enabling organizations to adapt and evolve in the digital era (Kane *et al.*, 2015; Nambisan *et al.*, 2019; Pirogova and Plotnikov, 2020; Ritala *et al.*, 2021; Chernenko *et al.*, 2021).

Research on the impact of intellectual capital on the digitization of service companies, especially SMEs in the Amalfi Coast Tourist District, forms the basis of this study. Intellectual capital, an intangible resource that influences company performance, is increasingly recognized as vital for creating value in the business system (Bontis, 1998; Hayton, 2005; Guthrie and Dumay, 2015; Dumay and Garanina, 2013; Garanina and Dumay, 2017; Panno, 2011). Intellectual capital is typically categorized into human, structural, and relational capital, each playing a critical role in organizational success (Pike and Ross, 2004; Ross *et al.*, 2007; Roos and Pike, 2018; Paternostro, 2009).

The relevance of intellectual capital is further underscored by its contribution to sustainable value creation, as recognized in corporate reporting and sustainability analyses (Hristov *et al.*, 2020). Strategic management of intellectual capital is crucial for companies to adapt to technological advancements and market dynamics, enabling long-term success and growth (Pappas *et al.*, 2023). Intellectual capital is characterized by its development on existing forms of capital, accumulation of skills, and its role in driving innovation and competitiveness (Felice, 2015; Shaik *et al.*, 2023). The management of intellectual capital is essential for achieving strategic objectives and navigating the complexities of the modern business environment.

Thus, intellectual capital is fundamental for creating a competitive advantage, particularly through its influence on innovation and management style (Koch *et al.*, 2002; Bornemann and Wiedenhofer, 2014).

Journal of Intellectual Capital

2.2 Intellectual capital, leadership and management style

Studies have established a correlation between intellectual capital, digital maturity, and management style, emphasizing the need for further research into how these dynamics affect an organization's ability to adapt and thrive in a rapidly changing environment (Švarc *et al.*, 2021; Bharadwaj *et al.*, 2013). The concept of organizational ambidexterity, which balances exploiting current technologies with exploring new digital advances, is crucial for maintaining competitiveness in the digital era (Tushman and O'Reilly, 2002; O'Really III and Tushman, 2008; Liao and Zhang, 2022). This strategic approach is crucial for organizations to move more effectively through increased digitalization in the complexities of the digital landscape and remain competitive (Reese, 2019; Wang *et al.*, 2021). Effective leadership and management practices are fundamental to addressing digital transformation, with strategic and proactive management approaches positively linked to higher levels of digital maturity (Westerman *et al.*, 2014; Henderikx and Stoffers, 2022; Aragón-Correa *et al.*, 2008; Bonanomi *et al.*, 2019; Garcia *et al.*, 2018; Smith *et al.*, 2020; Nasiri *et al.*, 2022).

Digital maturity includes various dimensions, such as leadership, organizational readiness, and the alignment of digital strategies with business models (Porfírio *et al.*, 2021; Halpern *et al.*, 2021; Salume *et al.*, 2021). This underscores the importance of how organizations strategically manage their resources and capabilities to adapt to digital transformation (Kane *et al.*, 2015; Li *et al.*, 2017; Warner and Wäger, 2019). Understanding these dimensions and aligning digital transformation strategies with organizational objectives is relevant for successfully navigating the digital economy (Quinton *et al.*, 2017; Cao *et al.*, 2023). Strategic and proactive management involves leadership that is forward-looking, with a commitment to continuous innovation and adaptation to new technologies (Williams *et al.*, 2024; Broccardo *et al.*, 2024).

A proactive and strategic management approach influences digital maturity by defining a clear vision for digital integration, fostering a culture of innovation, positioning business processes with digital opportunities, and developing necessary digital skills through strategic human resource management (Waugh and Streib, 2006; Hortovanyi *et al.*, 2023; Escoz Barragan *et al.*, 2024; Malodia *et al.*, 2023; Singh *et al.*, 2023; Christofi *et al.*, 2023; Joel *et al.*, 2024; Alsharari, 2024; Popoola *et al.*, 2024; Orieno *et al.*, 2024; Gadzali *et al.*, 2023; Pingali *et al.*, 2023). Such management also enhances organizational agility, enabling rapid responses to digital shifts and emerging opportunities. The interconnection between leadership, organizational culture, and digital outcomes stresses the importance of focusing on these aspects to shape the digital success of companies (Leso *et al.*, 2023; Truong *et al.*, 2024; Balconi and Fronda, 2020).

2.3 Intellectual capital and digital maturity

The literature underscores that digital transformation compels companies to navigate radical changes and uncertainties, necessitating a new understanding of leadership at all management levels (Zhang and Chen, 2023; Henderikx and Stoffers, 2022). Digital transformation impacts both formal and informal organizational structures, highlighting the importance of leadership styles in driving successful organizational change (Bonanomi *et al.*, 2019; Nambisan *et al.*, 2019; Türk, 2023). Digital transformation involves the comprehensive use of digital technologies to renew processes, services, and business models to enhance performance and meet customer needs in a competitive environment (Li *et al.*, 2023; Zhang *et al.*, 2023; Joel *et al.*, 2024).

Digital maturity, on the other hand, reflects an organization's competence in managing and leveraging digital technologies to gain a competitive advantage. It involves having a solid digital infrastructure, optimized processes, skilled employees, and a culture favorable to digital innovation (Senna *et al.*, 2023; Perera *et al.*, 2023). While digital transformation represents the "what," digital maturity represents the "how" of successfully implementing these changes (Aras and Büyüközkan, 2023; Leso *et al.*, 2024). Both are critical for long-term success in the dynamic digital business environment (Schwertner, 2017; Kraus *et al.*, 2022).

Traditional management practices, focused on hierarchy and control, may need substantial revision to address the challenges posed by the digital landscape (Mukhorava *et al.*, 2020;

JIC 25,7

Mizanbekova *et al.*, 2020; Martincevic, 2022). In this regard, numerous authors have emphasized the importance of adapting leadership styles to the new digital era (Westerman *et al.*, 2014a) and the central connection of intellectual capital with digital technologies, highlighting the necessary integration of digital innovations with intellectual capital (Table 1) (Wang *et al.*, 2017; Manuylenko *et al.*, 2022).

2.4 Research hypotheses

In this study, intellectual capital is analyzed through three components: structural capital (including managerial style, organizational culture, procedures, and leadership), human capital (focusing on decision-making skills), and relational capital (covering the company's external relationships) (Pike and Ross, 2004; Ross *et al.*, 2007; Roos and Pike, 2018; Paternostro, 2009). Based on the literature and the context of the Amalfi Coast Tourist District, several research hypotheses were developed. The literature indicates that managerial style is critical in promoting the adoption of digital technologies within organizations. Managers who embrace change and innovation tend to foster environments that support the effective use of digital technologies, which is particularly important in SMEs where leadership strongly influences organizational culture and resource allocation. Therefore, it is hypothesized that a digitally-oriented managerial style positively impacts the digital maturity of companies (Dorozalla and Klus, 2019; Alma Çalli *et al.*, 2022).

H1. Managerial style positively influences the digital maturity of SMEs.

| | Elements of intellectual capital | Digitalization elements |
|-----------------|---|--|
| Human | Knowledge Skills | Knowledge and skills of using specialized software |
| | Experience and length of service Creative skills Moral values Culture of Labor and Organizational Relations | Willingness to master and use in the work of new types of software and new devices that increase the level of digitalization |
| | Physical and Mental Health | |
| Organizational | Hardware and software Database | Hardware and software Databases providing operational activities |
| | Trademarks Organizational structure | Organizational forms and structures, standards, norms, regulations, focused on the use of digital solutions |
| | Organization culture Organizational standards, norms | A corporate culture that incorporates the use of digital solutions |
| Relational | Partner Relations | Customer databases |
| Ticlucional | Customer Relations Customer Information | Own Internet solutions, customer interaction platforms |
| | Customer Relationship History | Databases about suppliers |
| | Trademark (brand) | Means of digital communication with Stakeholders (advertising, public relations)etc. |
| Source(s): Auth | ors' work. Authors' elaborat | ion based on Pirogova, Plotnikov (2020) |

Table 1. Relationship between elements of intellectual capital and digitalization elements

Journal of Intellectual Capital Adequate decision-making competences are crucial for successfully managing the implementation and use of digital technologies in SMEs. The literature emphasizes that informed and timely decisions are key to enhancing a company's digital maturity. These competences, as part of human capital, can be examined from both strategic and operational perspectives. Strategically, high decision-making competences enable SMEs to identify and invest in suitable digital solutions while effectively managing the challenges and opportunities of digital transformation (Messina, 2018; Felicetti *et al.*, 2023). Operationally, digital technologies allow companies to collect and analyze real-time data, leading to better-informed decisions and improved operational efficiency (Hoßfeld, 2017). From such a perspective, a further two research hypotheses can be developed as follows:

- *H2.1.* Strategic decision-making competences positively influence the digital maturity of SMEs.
- *H2.2.* Operational decision-making competences are positively influenced by the digital maturity of SMEs.

Carrying on the last component of intellectual capital, and namely relational capital, SMEs that are part of networks or collaborations with other companies or entities can benefit from an environment richer in resources, knowledge, and opportunities for mutual learning. The literature has highlighted that ties with other actors can facilitate the exchange of knowledge and practices related to digital transformation, thereby contributing to the digital maturity of SMEs (Belz *et al.*, 2019; Ellerani, 2020; Choi, Hyun, 2022). Therefore, the following research hypothesis can be postulated:

H3. The network in which SMEs are embedded positively influences their digital maturity.

Finally, intellectual capital, which includes knowledge, skills, and relationships within the company, is crucial for fully harnessing the potential of digital technologies. Studies have shown that SMEs investing in intellectual capital are better able to adapt to digital transformation and derive greater benefits from it. Considering the key role of intellectual capital in generating and utilizing digital innovation, it is reasonable to hypothesize that a high level of intellectual capital can positively influence the digital maturity of SMEs (Ganawati *et al.*, 2021; Yilmaz and Tuzlukaya, 2024). Consequently, taking into consideration all the components of the intellectual capital, a fourth research hypothesis can be developed:

H4. Intellectual capital positively influences the digital maturity of SMEs.

A conceptual model has been constructed, considering the hypotheses mentioned above. The model illustrates the relationships investigated, (Figure 1).

3. Methodology

The study aims to evaluate how intellectual capital (Chierici *et al.*, 2020) influences the digital maturity of businesses. The research, guided by hypotheses developed through an in-depth literature review, used a qualitative-quantitative approach structured in two phases. The study explores the value of intellectual capital, including management style, decision-making competences, and networking, in enhancing the digital maturity of SMEs.

The concept of intellectual capital arose to explain value creation and company growth beyond financial metrics, addressing gaps in traditional value concepts (Maditinos *et al.*, 2011). The first phase of the research used focus groups with 12 managers and entrepreneurs from the Italian Amalfi Coast Tourist District, a hybrid public-private entity established to promote sustainable tourism and improve residents' quality of life. The focus group aimed to explore the application of digital maturity in SMEs, generating reliable and detailed empirical evidence (Cameron, 2005; Morgan, 1996; Greenbaum, 1998; Calderon *et al.*, 2000).

JIC 25,7



Figure 1. The research model

Insights from the focus group informed the second, quantitative phase, which analyzed the relationship between intellectual capital and digital maturity in SMEs. A survey was conducted with 94 firms within the Amalfi Coast Tourist District, and 76 valid responses were analyzed. The district's model, characterized by knowledge circulation through spatial proximity and shared cultural values, supports innovation, including digital innovation (Muscio, 2006; Hoyt and Gopal-Agge, 2007). The study employed logistic regression to test the hypotheses, using the logit model to understand the effect of independent variables on the probability of binary outcomes (Demaris, 1992).

This methodological approach provides a comprehensive understanding of digitalization levels and managerial resources within the district, aligning with the integrated reporting framework (Abeysekera, 2013).

4. Results and discussion

4.1 Main implications from the focus group

The research hypotheses, derived from a thorough literature review, were tested using a qualitative-quantitative approach. Intellectual capital, essential for understanding value creation and company growth beyond financial metrics (Maditinos et al., 2011), was examined in the context of SMEs in the Amalfi Coast Tourist District. The study's first phase utilized a focus group with 12 managers and entrepreneurs from the District, which is a hybrid publicprivate entity created to promote sustainable growth and innovation in tourism. The focus group aimed to explore the application of digital maturity in SMEs, employing principles of participant homogeneity and heterogeneity to generate rich empirical data (Cameron, 2005; Morgan, 1996; Greenbaum, 1998; Calderon et al., 2000). The insights gained formed the basis for the second, quantitative phase. In this phase, data were collected through a survey distributed to all 94 firms operating within the district, with 76 valid responses used for analysis. The district model, characterized by knowledge circulation through spatial proximity and shared cultural values, supports innovation and digital transformation (Muscio, 2006; Hoyt and Gopal-Agge, 2007). Logistic regression, a common method for analyzing binary outcomes (Demaris, 1992), was used to test the hypotheses, providing a detailed understanding of digitalization and managerial resources in the district, aligned with the integrated reporting framework (Abeysekera, 2013).

4.2 Results of the logistic regression and discussion

The sample of companies belonging to the Amalfi Coast Tourist District – composed of 94 firms (76 valid responses) – has been described in Table 2, with reference to the core business,

Table 2. Characteristics of the sample

| Operators | % | Tools | | % | Enabling technologies | % |
|---|------|-------------------|-----------------------|--------------|-------------------------------------|------------|
| Serviced and not serviced accommodation | 63.2 | Website | | 93 | Cloud | 56.1 |
| Travel agency, tour operator and booking services | 15.8 | Social media | Facebook Instagram | 90 86 | Big data and analytics | 37.2 |
| Catering | 10.5 | Email WhatsApp | Business | 90.7 65.1 | – Virtual reality | - 16.3* |
| Other tourist activities | 10.5 | Messaging | g systems | 52.1 | Electronic data interchange | 39.5* |
| | | CRM | | 18.6 | Information systems * only interest | 27.9* |
| Source(s): Authors' work | | | | | - | |

the main electronic tools applied and the enabling technologies for digital transition, already applied or taken into consideration for a forthcoming implementation.

Continuing the analysis with the validation of the research hypotheses, the following emerges.

The first component of Intellectual Capital investigated by means of a binary logistic regression model is that of Human Capital. To study its impact on digital maturity (dependent variable), companies' managerial style has been observed, divided into data-driven management style, authoritarian management style and consultative management style (independent variables), as in Table 3.

As suggested by data, data-driven management style (*p*-value 0.0064) has a significant effect digital maturity, that is expressed by number and type of enabling technologies. On the contrary, an authoritarian management style (*p*-value 0.1878, greater than the significance level of 0.05) seems not have a significant effect on digital maturity. Finally, participative/ consultative management style (*p*-value 0.0135) has a significant effect on digital maturity. The study suggests that firms leveraging data analytics for informed decision-making progress along the "spectrum" of digital maturity by proactively adopting and adapting to digital technologies. This progression is not merely about having the latest tools but effectively using them to drive innovation, efficiency, and growth, particularly impacting governance.

Table 3. Impact of managerial style on digital maturity of SMEs

| | Coef. | Std. error | Ζ | <i>p</i> -value | |
|--|--|-----------------|------------------------------|-----------------|----------------------|
| Data-driven management style | 0.761407 | 0.382312 | 1.992 | 0.0064 | *** |
| Authoritarian management style | 0.14255 | 0.867378 | -1.317 | 0.1878 | |
| Consultative management style | 0.447101 | 0.274590 | 1.628 | 0.0135 | ** |
| Average dependent variable Log-likelihood | 1.342105 -43.87450 | SQM d Akaike | ependent variab Criterion | le | 0.477567 95.74899 |
| Schwarz Criterion | 105.0719 | Hannan | I-Quinn | | 99.47489 |
| Note(s): Dependent variable: Digita Standard errors based on Hessian m Number of cases "predicted correct f(beta'x) in the average of the indep Source(s): Authors' work | ıl Maturity atrix ly" = 51 (67.3%) endent variables = | = 0.488 | | | |

JIC 25,7

A consultative management style, which involves employees in decision-making, fosters a participative culture, enhancing flexibility, adaptability, and innovation in the digital landscape. In contrast, an authoritarian management style, characterized by strong authority and control, may hinder digital maturity due to several factors:

Skill Diversity: Authoritarian leadership may not align with the digital skills required today.

Resistance to Change: This style often favors established practices, resisting new digital tools or processes.

Generational Differences: Older managers with authoritarian tendencies may lack the digital skills necessary for effective technology adoption.

Organizational Culture: An authoritarian culture may not promote a technology-oriented environment, limiting digital integration. The findings support the hypothesis that a consultative, data-driven management style positively influences the digital maturity of SMEs, emphasizing the importance of a participative, collaboration-oriented organizational culture in supporting digital transformation.

The study investigates the impact of Structural Capital on digital maturity using a binary logistic regression model, focusing on decision-making competency as a key factor for organizational success. Decision-making competency is divided into two components: strategic and operational. Strategic decision-making competency involves the ability to make decisions that shape the organization's direction, strategy, and long-term objectives. The study examines variables like research and development for innovation and information systems that support strategic decision-making. Operational decision-making competency focuses on the practical implementation of strategic decisions in daily operations. This includes the use of technological tools in areas such as digital marketing, sales and supply chain management, and financial management.

Together, these competencies are crucial for an organization's success. Strategic competency provides long-term vision, while operational competency ensures effective execution in daily activities. Their combination allows organizations to adapt quickly to changes, capitalize on opportunities, and achieve high performance.

The study of the analysis of strategic decision-making competency on digital maturity of SMEs is summarized in Table 4.

As shown, research and development (*p*-value of 0.00891) has a significant impact on digital maturity, with a very low probability that the observed effect is due to chance. This

| | Coef | Std. error | Ζ | <i>p</i> -value | |
|--|--|------------|------------------|-----------------|----------|
| Research and development | 0.780623 | 0.429516 | 1.817 | 0.00891 | ** |
| Information systems | 1.20994 | 0.632847 | 1.912 | 0.00959 | ** |
| Average dependent variable | 0.342105 | SQM | dependent varial | ble | 0.477567 |
| Log-likelihood | -49.56036 | Akail | ke Criterion | | 105.1207 |
| Schwarz Criterion | 112.1129 | Hann | an-Quinn | | 107.9151 |
| Note(s): Dependent variable: Di Standard errors based on Hessiau Number of cases "predicted corr f(beta'x) in the average of the in Source(s): Authors' work | gital Maturity 1 matrix ectly" = 49 (64.5%) dependent variables | = 0.478 | | | |

Table 4. Impact of strategic decision-making competency on digital maturity of SMEs

suggests that an increase in strategic decision-making competency related to research and development is associated with an increase in digital maturity. Also the variable identified with information systems (with a positive coefficient of 1.20994 and a *p*-value of 0.00959) shows a significant impact on digital maturity, with a low probability that the observed effect is random. This suggests that an increase in strategic decision-making competency related to information systems is associated with a further increase in digital maturity. These results imply that greater strategic decision-making competency in key areas contributes in a determinant manner to plan a proper digital strategy.

With reference to the operational decision-making competency, the study supposes a reverse effect of digital maturity on functional requirements/activities. Therefore, key practical activities related to accounting and finance, marketing and logistics have been individually observed (Tables 5–8).

According to the data, a positive (coefficient 0.810930) and statistical significant (*p*-value 0.0238) association suggests that there is a positive effect of digital maturity on operational decision-making competence in the area of accounting and finance.

Data suggest a positive (coefficient 1.20397) and significant (*p*-value 0.0097) association between digital maturity and operational decision-making competence in marketing activities.

Also data relative to the impact of digital maturity on operational decision-making competence in logistic activities suggest a positive association (coefficient 1.70475), very high in terms of statistical significance (*p*-value 0.0017).

| | Coef. | Std.error | Ζ | <i>p</i> -value | |
|---|---|-----------|--|-----------------|----------------------------------|
| Digital maturity | 0.810930 | 0.424918 | 1.908 | 0.0238 | ** |
| Average dependent va Log-likelihood Schwarz Criterion | Average dependent variable 0.763158 Log-likelihood –50.70565 Schwarz Critorion 105 7420 | | SQM dependent va Akaike Criterion Hannan-Quinn | ariable | 0.427970 103.4113 104.3428 |
| Note(s): Dependent variable: Accounting and Finance operations Standard errors based on Hessian matrix Number of cases "predicted correctly" = 48 (63.15%) f(beta'x) in the average of the independent variables = 0.428 Source(s): Authors' work | | | | | |

Table 5. Impact of digital maturity of SMEs on accounting and finance operations

| Table 6. | Impact of | digital | maturity | of SM | Es on | marketing | operations |
|----------|-----------|---------|----------|-------|-------|-----------|------------|
| | | - / | / | | | / 1 | |

| | Coef | Std.error | Ζ | <i>p</i> -value | |
|--|---------|--------------|-------------------------------------|-----------------|----------------------|
| Digital maturity | 1.20397 | 0.465475 | 2.587 | 0.0097 | *** |
| Average dependent var Log-likelihood | iable | 0.723684 | SQM dependent v Akaike Criterion | ariable | 0.450146 99.40533 |
| Schwarz Criterion 101.7361 Note(s): Dependent variable: Marketing operations Standard errors based on Hessian matrix Number of cases "predicted correctly" = 55 (72.4%) 3 f(beta'x) in the average of the independent variables = 0.450 Source(s): Authors' work | | Hannan-Quinn | | 100.3368 | |

184

JIC

25,7

| Table 7. Impact of dig | gital maturity of | SMEs on logistic ope | rations | | | Journal of | | |
|--|--|---|----------------------------------|-----------------|----------------------|-------------------------|--|--|
| | Coef. | Std.error | Ζ | <i>p</i> -value | | Intellectual Capital | | |
| Digital maturity | 1.70475 | 0.543557 | 3.136 | 0.0017 | *** | | | |
| Average dependent var | iable | 0.723684 | SQM dependent v | ariable | 0.450146 | 185 | | |
| Log-likelihood Schwarz Criterion | | -45.81976 95.97025 | Akaike Criterion Hannan-Quinn | | 93.63952 94.57099 | | | |
| Note(s): Dependent va Standard errors based o Number of cases "pred f(beta'x) in the average | riable: Logistic on Hessian matri icted correctly" of the independ | operations x = 59 (77.6%) lent variables = 0.456 |) | | | | | |

Table 8. Impact of digital maturity of SMEs on sales operations

| | Coef | Std.error | Ζ | <i>p</i> -value |
|---|---|--|---|--|
| Digital maturity | 0.470004 | 0.403113 | 1.166 | 0.2436 |
| | | | | |
| Average dependent variable Uncentered R-squared Log-likelihood Schwarz Criterion | 0.539474 0.008800 -51.98060 108.2919 | SQM depe Uncentere Akaike Cr Hannan-Q | endent variable d R-squared iterion uinn | 0.501751 0.649960 105.9612 106.8927 |
| Note(s): Dependent variable: Standard errors based on Hes Number of cases "predicted of (beta'x) in the average of the Source(s): Authors' work | Sales operations sian matrix correctly" = 41 (53.9%) e independent variables | = 0.502 | | |

Finally, data showing the relation between digital maturity and sales operations show a positive effect (coefficient 0.470004) of digital maturity on operational decision-making competence in sales. However, the high *p*-value (0.2436) indicates lack of statistical significance. The likelihood ratio test confirms the lack of significance. The z-value is 1.166, indicating that the coefficient is approximately 1.2 times the standard error. This value suggests a modest effect of digital maturity on sales operations. The centered R-squared is negative, indicating that the model does not explain much of the variance in the dependent variable. The model fits moderately, as indicated by the number of correctly predicted cases (53.9%) and information criteria such as the Akaike criterion and the Schwarz criterion. In conclusion, the results suggest that there is no statistically significant association between digital maturity and operational decision-making competence in sales operations. It might be due to the relevant human component in sales activities that could only partially benefit of automation services. In other words, the results align with existing literature, highlighting the practical benefits of high digital maturity, such as improved operational efficiency, cost reductions, increased productivity, and more time for strategic activities. The findings enhance the theoretical understanding of how structural capital, particularly through strategic and operational decision-making competences, contributes to digital maturity. This underscores the multi-dimensional nature of digital maturity and clarifies the impact of various factors driving digital transformation initiatives in firms.

The third component of Intellectual Capital investigated by means of a binary logistic regression model is that of Relational Capital. To study its impact on digital maturity, the research considers the network activated by the companies of the Amalfi Coast Tourist District, in order to explain whether the business network plays a significant role in the digital transformation of SMEs (Table 9).

Effectively, companies embedded in larger or more solid networks have greater opportunities to access the knowledge and resources necessary to successfully implement digital technologies.

The effect of the network in which SMEs are embedded on digital maturity express a positive (coefficient 0.579818) and statistically significant (*p*-value 0.000824) association. In other words, a broader or stronger network is associated with higher digital maturity, potentially providing SMEs with greater access to resources, knowledge, and collaborations that foster digital skills development. Furthermore, it is important to further examine which specific network characteristics most strongly influence digital maturity and to identify any success factors that can be replicated or enhanced in other contexts. This may include more detailed analyses of collaboration dynamics, access to resources, and digital skills development within the network.

Finally, the study aims at evaluating the effect of undivided intellectual capital on digital maturity. The analysis indicates that the intellectual capital of SMEs, consisting of Structural Competence (Management Styles), Decision-making Competency, and SMEs' Network, positively impacts the adoption of advanced digital technologies. In sum, firms with a higher level of intellectual capital are more inclined to effectively integrate new technologies into their business processes and the research hypotheses are verified:

H1. Managerial style positively influences the digital maturity of SMEs – *verified*.

H2.1. Strategic decision-making competences positively influence the digital maturity of SMEs – *verified*.

H2.2. Operational decision-making competences are positively influenced by the digital maturity of SMEs– *verified*.

H3. The network in which SMEs are embedded positively influences their digital maturity – *verified*.

H4. Intellectual capital positively influences the digital maturity of SMEs – verified.

A data-driven or participative management style can create an organizational environment conducive to innovation and the adoption of new digital technologies (Shet *et al.*, 2022).

| | Coef | Std.error | Ζ | <i>p</i> -value | |
|---|--|---|--------------|-----------------|-------------------|
| Network | 0.579818 | 0.333809 | -1.737 | 0.000824 | *** |
| Average depen | dent variable | 0.342105 | SQM depende | nt variable | 0.477567 |
| Schwarz Criter | rion | -51.10665 106.5440 | Hannan-Quinn | on I | 104.2133 105.1448 |
| Note(s): Dependent Standard errors: Number of cas f(beta'x) in the Source(s): Automatic | ndent variable: Digit. s based on Hessian n es "predicted correct e average of the indep thors' work | al Maturity natrix ly" = 50 (65.8%) pendent variables = 0. | 478 | | |

Table 9. Impact of SMEs' network on digital maturity of SMEs

JIC 25,7

Coupled with strong decision-making competency, these management approaches enable firms to critically assess opportunities and challenges related to digital technology adoption. This includes effectively analyzing data in a knowledge-based economy (Piccolo *et al.*, 2022), making informed decisions on technology implementation, and managing associated risks. Additionally, strategic partnerships with technology suppliers or other firms within the District can accelerate digital adoption by providing access to new technologies, expertise, and best practices. These partnerships facilitate the exchange of knowledge and resources, further supporting digital technology adoption. Overall, these elements of intellectual capital collectively enhance the ability of SMEs to understand and successfully implement digital technologies.

5. Main theoretical, managerial and societal implications

5.1 Implications for theory

From a theoretical perspective (Pirogova and Plotnikov, 2020; Ritala *et al.*, 2021; Chernenko *et al.*, 2021)., the interaction between digital maturity and intellectual capital holds substantial implications for enhancing organizational capabilities and creating distinctive value propositions. According to Resource Based-View (RBV), both digital maturity and intellectual capital (Murale *et al.*, 2010) can be regarded as core competencies that provide a sustainable competitive advantage. The synergistic interplay between these elements has the potential to harness organizational capabilities and foster the creation of unique value propositions.

In the context of Knowledge Based-View (KBV), digital maturity plays crucial role in facilitating the creation, sharing and utilization of knowledge, thereby augmentation intellectual capital (Kianto *et al.*, 2017). The effective integration of digital technologies can further amplify the value of tacit knowledge within an organization, leading to greater organizational effectiveness.

Dynamic Capabilities Theory (Teece *et al.*, 1997) also provides a valuable lens through which to examine the role of digital maturity. In this view, digital maturity that enables organizations to adapt to rapidly changing environments and leverage emerging technologies. Intellectual capital is essential for developing and deploying these dynamic capabilities, highlighting its importance in maintaining organizational agility and competitiveness.

Furthermore, Social Capital Theory underscore the role of digital platforms in facilitating social interactions and knowledge exchange, which in turn strengthens social capital within organizations. A high level of digital maturity enhances the development and utilization of social capital, contributing to improved organizational outcomes.

Finally, Human Capital Theory suggests that digital maturity impacts the development and utilization of human capital through mechanisms such as e-learning, performance management, and talent acquisition (Gerhart and Feng, 2021; Ployhart, 2021). Intellectual capital is thus crucial for driving digital transformation initiatives and ensuring that organizations remain competitive in a digital economy (Kianto *et al.*, 2017).

Key theoretical relationships emerge from this analysis, including the notion of synergy, where the combination of digital maturity and intellectual capital leads to superior organizational performance. High levels of digital maturity can reinforce intellectual capital by providing tools and platforms for knowledge creation and sharing. Additionally, digital maturity may mediate the relationship between intellectual capital and organizational performance, thereby amplifying the impact of intellectual capital. It can also moderate the relationship between other variables, such as organizational culture and leadership, and intellectual capital, further influencing organizational outcomes.

5.2 Implications for practice

The managerial implications from this study are crucial for SMEs in the Amalfi Coast Tourist District and applicable to other business settings. SMEs should prioritize data-driven

Journal of Intellectual Capital

management styles to foster digital transformation, promoting a culture that emphasizes strategic data use for informed decision-making, which enhances transparency, collaboration, and innovation (Vial, 2019; Del Giudice *et al.*, 2018). Investing in Intellectual Capital is vital. SMEs must recognize its value by enhancing decision-making competencies, fostering innovation, and building strategic networks, which can accelerate digital transformation and provide a competitive advantage (Youndt *et al.*, 2004; Naidenova and Parshakov, 2013). Additionally, creating an innovation-driven corporate culture through continuous learning, employee training, and change management is essential for adapting to the digital landscape (Demartini and Beretta, 2020). Forming strategic partnerships with stakeholders such as technology providers and research institutions is also crucial. These alliances offer access to advanced technologies and knowledge, facilitating collaboration and innovation in digital transformation efforts. By integrating digital maturity and intellectual capital strategies, SMEs can strengthen their ability to innovate and adapt, positioning themselves to leverage opportunities in the digital era. These approaches offer a roadmap for SMEs to thrive in an increasingly digital context.

5.3 Implications for society

The strategies and approaches related to digital maturity and intellectual capital in SMEs have significant societal implications beyond business impacts. By enhancing efficiency, productivity, and competitiveness, these businesses can drive economic growth and job creation, contributing to the vitality of local communities. As SMEs grow, they provide employment opportunities and boost local income, fostering a dynamic economy that benefits society as a whole.

Furthermore, as SMEs invest in upskilling their workforce, employees gain valuable competencies in digital technologies and innovation management, enhancing their employability and contributing to the region's long-term economic and social stability. Strategic partnerships with technology suppliers and research institutes also lead to broader societal benefits, promoting innovation, knowledge sharing, and social capital within communities.

The digital maturity of SMEs also promotes digital inclusion by making digital tools and services more accessible, particularly in underserved areas, thereby reducing the digital divide and fostering social equity. In regions like Campania, where cultural heritage is closely tied to the tourism industry, digital transformation helps preserve and promote local culture through innovative digital experiences. This not only enriches the tourism experience but also ensures the preservation of local traditions for future generations.

Overall, these strategies contribute to economic growth, workforce empowerment, social inclusion, sustainability, and cultural preservation, driving significant positive change within communities and creating a more prosperous, inclusive, and sustainable society.

6. Limitations, future research directions and conclusions

The study acknowledges limitations in the quantitative phase, particularly the small sample size of 76 enterprises, which, while adequate for the Amalfi Coast Tourist District, may not be generalizable to broader regional or national SMEs. The research is also constrained by the specific territorial context and the size of the enterprises studied.

To address these limitations, future research could involve a larger and more diverse set of enterprises, including larger companies with different core businesses. By creating clusters based on digital maturity and intellectual capital, researchers could explore these relationships more deeply, providing insights across various industries and sizes. Additionally, examining the evolving nature of these clusters over time and exploring the role of relational capital could enhance the validity and generalizability of the findings.

The study presents a well-defined measurement model for digital maturity, integrating theoretical insights with practical experiences from managers and entrepreneurs. This approach ensures the model's relevance and offers a valuable tool for assessing the impact of digitalization initiatives and prioritizing future projects.

Organizations with both high digital maturity and high intellectual capital are likely industry leaders, distinguished by innovation and effective technology use. In contrast, those with high digital maturity but low intellectual capital struggle to fully leverage their digital investments due to insufficient human capital. Similarly, organizations with low digital maturity but high intellectual capital may be hindered by outdated technology, limiting their ability to translate knowledge into digital success. Firms with both low digital and intellectual capital face significant challenges in adapting to the digital business environment.

The findings emphasize the importance of balancing digital maturity with intellectual capital. Overemphasizing technology without investing in human capital can lead to suboptimal outcomes, while a strong focus on intellectual capital without adequate digital infrastructure can limit an organization's potential. Understanding these dynamics allows organizations to develop comprehensive strategies to optimize both digital maturity and intellectual capital, positioning themselves for sustained success in a digitalized world (Kianto *et al.*, 2017; Vial, 2019).

References

- Abeysekera, I. (2013), "A template for integrated reporting", *Journal of Intellectual Capital*, Vol. 14 No. 2, pp. 227-245, doi: 10.1108/14691931311323869.
- Ahmed, S.S., Guozhu, J., Mubarik, S., Khan, M. and Khan, E. (2020), "Intellectual capital and business performance: the role of dimensions of absorptive capacity", *Journal of Intellectual Capital*, Vol. 21 No. 1, pp. 23-39, doi: 10.1108/jic-11-2018-0199.
- Alma Çalli, B., Özşahin, M., Coşkun, E. and Rıfat Arik, A. (2022), "Do generative leadership and digital literacy of executive management help flourishing micro and small business digital maturity?", *International Journal of Organizational Leadership*, Vol. 11 No. 3, pp. 307-332, doi: 10.33844/ijol.2022.60332.
- Alsharari, N.M. (2024), "The interplay of strategic management accounting, business strategy and organizational change: as influenced by a configurational theory", *Journal of Accounting and Organizational Change*, Vol. 20 No. 1, pp. 153-176, doi: 10.1108/jaoc-09-2021-0130.
- Aragón-Correa, J., Hurtado-Torres, N., Sharma, S. and Morales, V. (2008), "Environmental strategy and performance in small firms: a resource-based perspective", *Journal of Environmental Management*, Vol. 86 No. 1, pp. 88-103, doi: 10.1016/j.jenvman.2006.11.022.
- Aras, A. and Büyüközkan, G. (2023), "Digital transformation journey guidance: a holistic digital maturity model based on a systematic literature review", *Systems*, Vol. 11 No. 4, p. 213, doi: 10.3390/systems11040213.
- Balconi, M. and Fronda, G. (2020), "L'etica nel cervello aziendale: dalle persone alle «organizzazioni morali»?", in Balconi, M., Nava, B. and Salati, E. (Eds), *Il Neuromanagement: tra cambiamento, tecnologia e benessere*, LED, Milano, pp. 183-202.
- Belz, G., Wawrzynek, L. and Wasowicz, M. (2019), "Network potential of innovation in digital transformation projects", *Transformations in Business and Economics*, Vol. 18 No. 2B, p. 694.
- Bharadwaj, A., El Sawy, O.A., Pavlou, P.A. and Venkatraman, N.V. (2013), "Digital business strategy: toward a next generation of insights", *MIS Quarterly*, Vol. 37 No. 2, pp. 471-482, doi: 10.25300/ misq/2013/37:2.3.
- Bonanomi, M., Hall, D., Staub-French, S., Tucker, A. and Talamo, C. (2019), "The impact of digital transformation on formal and informal organizational structures of large architecture and engineering firms", *Engineering Construction and Architectural Management*, Vol. 27 No. 4, pp. 872-892, doi: 10.1108/ecam-03-2019-0119.
- Bontis, N. (1998), "Intellectual capital: an exploratory study that develops measures and models", *Management Decision*, Vol. 36 No. 2, pp. 63-76, doi: 10.1108/00251749810204142.
- Bornemann, M. and Wiedenhofer, R. (2014), "Intellectual capital in education: a value chain perspective", *Journal of Intellectual Capital*, Vol. 15 No. 3, pp. 451-470, doi: 10.1108/jic-05-2014-0060.

Journal of Intellectual Capital

| Broccardo, L., Vola, P., Alshibani, S.M. and Tiscini, R. (2024), "Business processes management as a tool to enhance intellectual capital in the digitalization era: the new challenges to face", <i>Journal of Intellectual Capital</i> , Vol. 25 No. 1, pp. 60-91, doi: 10.1108/jic-04-2023-0070. |
|---|
| Calderon, J.L., Baker, R.S. and Wolf, K.E. (2000), "Focus groups: a qualitative method complementing quantitative research for studying culturally diverse groups", <i>Education and Health</i> , Vol. 13 No. 1, pp. 91-95, doi: 10.1080/135762800110628. |
| Cameron, J. (2005), "Focusing on the focus group", <i>Qualitative research methods in human geography</i> , Vol. 2 No. 8, pp. 116-132. |
| Campos, S., Dias, J.G., Teixeira, M.S. and Correia, R.J. (2020), "The link between intellectual capital and business performance: a mediation chain approach", <i>Journal of Intellectual Capital</i> , Vol. 23 No. 2, pp. 401-419, doi: 10.1108/jic-12-2019-0302. |
| Cao, D., Teng, X., Chen, Y., Tan, D. and Wang, G. (2023), "Digital transformation strategies of project- based firms: case study of a large-scale construction company in China", <i>Asia Pacific Journal of</i> <i>Innovation and Entrepreneurship</i> , Vol. 17 No. 2, pp. 82-98, doi: 10.1108/apjie-02-2023-0027. |
| Chen, M., Wang, Y. and Sun, V. (2012), "Intellectual capital and organizational commitment", Personnel Review, Vol. 41 No. 3, pp. 321-339, doi: 10.1108/00483481211212968. |
| Chernenko, I.M., Kelchevskaya, N.R. and Pelymskaya, I.S. (2021), "Industry 4.0-specific intellectual capital and its impact on human capital and value added: evidence from Russian regions", in Kumar, V., Rezaei, J., Akberdina, V. and Kuzmin, E. (Eds), <i>Digital Transformation in Industry: Trends, Management, Strategies</i> , Springer International Publishing, Cham, pp. 165-181. |
| Chierici, R., Tortora, D., Del Giudice, M. and Quacquarelli, B. (2020), "Strengthening digital collaboration to enhance social innovation capital: an analysis of Italian small innovative enterprises", <i>Journal of Intellectual Capital</i> , Vol. 22 No. 3, pp. 610-632, doi: 10.1108/jic-02- 2020-0058. |
| Choi, K.S. and Hyun, B.H. (2022), "In the era of digital transformation: the effect of government support, network capability and knowledge sharing on innovation performance through innovative behavior", <i>Journal of Digital Convergence</i> , Vol. 20 No. 4, pp. 353-366. |
| Christofi, M., Khan, H., Zahoor, N., Hadjielias, E. and Tarba, S. (2023), "Digital transformation of SMEs: the role of entrepreneurial persistence and market sensing dynamic capability", <i>IEEE Transactions on Engineering Management</i> , Vol. 71, pp. 1-18, doi: 10.1109/TEM.2022.3230248. |
| Chu, S.K.W., Chan, K.H., Yu, K.Y., Ng, H.T. and Wong, W.K. (2011), "An empirical study of the impact of intellectual capital on business performance", <i>Journal of Information and Knowledge</i> <i>Management</i> , Vol. 10 No. 1, pp. 11-21, doi: 10.1142/s0219649211002791. |
| Davenport, H. (1999), <i>The Higher Arithmetic: an Introduction to the Theory of Numbers</i> , Cambridge University Press, Cambridge. |
| Del Ciudica M. Cata Acasta D. Communic E. and Cometta M. (2010). (E |

JIC 25,7

- Del Giudice, M., Soto-Acosta, P., Carayannis, E. and Scuotto, V. (2018), "Emerging perspectives on business process management (BPM): IT-based processes and ambidextrous organizations, theory and practice", *Business Process Management Journal*, Vol. 24 No. 5, pp. 1070-1076, doi: 10.1108/bpmj-09-2018-336.
- Del Giudice, M., Scuotto, V., Papa, A., Tarba, S.Y., Bresciani, S. and Warkentin, M. (2021), "A selftuning model for smart manufacturing SMEs: effects on digital innovation", *Journal of Product Innovation Management*, Vol. 38 No. 1, pp. 68-89, doi: 10.1111/jpim.12560.
- Del Giudice, M., Scuotto, V., Papa, A. and Singh, S.K. (2023), "The 'bright'side of innovation management for international new ventures", *Technovation*, Vol. 125, 102789, pp. 1-10, doi: 10.1016/j.technovation.2023.102789.
- Demaris, A. (1992), Logit Modeling: Practical Applications, Sage, Thousand Oaks.
- Demartini, M.C. and Beretta, V. (2020), "Intellectual capital and SMEs' performance: a structured literature review", *Journal of Small Business Management*, Vol. 58 No. 2, pp. 288-332, doi: 10.1080/00472778.2019.1659680.
- Dorozalla, F. and Klus, M.F. (2019), "Digital leadership status quo der digitalen führung", Zukunftsfähige Unternehmensführung: Ideen, Konzepte und Praxisbeispiele, pp. 89-103.

| Dumay, J. and Garanina, T. (2013), "Intellectual capital research: a critical examination of the third |
|--|
| stage", Journal of Intellectual Capital, Vol. 14 No. 1, pp. 10-25, doi: 10.1108/ |
| 14691931311288995. |

- Ellerani, P. (2020), "Ecosistemi formativi capacitanti", MeTis. Mondi educativi. Temi, indagini, suggestioni, Vol. 10 No. 2, pp. 129-145, doi: 10.30557/mt00138.
- Escoz Barragan, K., Hassan, S.S., Meisner, K. and Bzhalava, L. (2024), "Dynamics of digital changemeasuring the digital transformation and its impacts on the innovation activities of SMEs", *European Journal of Innovation Management*, Vol. ahead-of-print No. ahead-of-print, doi: 10.1108/EJIM-05-2023-0432.
- Felice, E. (2015), "La stima e l'interpretazione dei divari regionali nel lungo periodo: i risultati principali e alcune tracce di ricerca", *Scienze Regionali. Italian Journal of Regional Science*, Vol. 14 No. 3, pp. 91-120, doi: 10.3280/scre2015-003006.
- Felicetti, A.M., Corvello, V. and Ammirato, S. (2023), "Digital innovation in entrepreneurial firms: a systematic literature review", *Review of Managerial Science*, Vol. 18 No. 2, pp. 1-48, doi: 10.1007/s11846-023-00638-9.
- Gadzali, S.S., Gazalin, J., Sutrisno, S., Prasetya, Y.B. and Ausat, A.M.A. (2023), "Human resource management strategy in organisational digital transformation", *Jurnal Minfo Polgan*, Vol. 12 No. 1, pp. 760-770, doi: 10.33395/jmp.v12i1.12508.
- Galbraith, J.K. (1969), The New Industrial State, Penguin, Harmondsworth.
- Ganawati, N., Soraya, D. and Yogiarta, I.M. (2021), "The role of intellectual capital, organizational learning and digital transformation on the performance of SMES in Denpasar, Bali Indonesia", *International Journal of Science and Management Studies (IJSMS)*, Vol. 4 No. 3, pp. 235-246, doi: 10.51386/25815946/ijsms-v4i3p122.
- Garanina, T. and Dumay, J. (2017), "Forward-looking intellectual capital disclosure in IPOs: implications for intellectual capital and integrated reporting", *Journal of Intellectual Capital*, Vol. 18 No. 1, pp. 128-148, doi: 10.1108/jic-05-2016-0054.
- Garcia, A., Lee, S. and Patel, R. (2018), "The evolution of organizational structures in the digital era: insights from architecture and engineering firms", *International Journal of Engineering and Management*, Vol. 12 No. 3, pp. 145-158.
- Gerhart, B. and Feng, J. (2021), "The resource-based view of the firm, human resources, and human capital: progress and prospects", *Journal of management*, Vol. 47 No. 7, pp. 1796-1819, doi: 10.1177/0149206320978799.
- Greenbaum, T.L. (1998), The Handbook for Focus Group Research, Sage, Thousand Oaks.
- Guthrie, J. and Dumay, J. (2015), "New frontiers in the use of intellectual capital in the public sector", *Journal of Intellectual Capital*, Vol. 16 No. 2, pp. 258-266, doi: 10.1108/jic-02-2015-0017.
- Halpern, N., Mwesiumo, D., Suau-Sánchez, P., Budd, T. and Bråthen, S. (2021), "Ready for digital transformation? The effect of organisational readiness, innovation, airport size and ownership on digital change at airports", *Journal of Air Transport Management*, Vol. 90, 101949, pp. 1-11, 10.1016/j.jairtraman.2020.101949.
- Hayton, J.C. (2005), "Promoting corporate entrepreneurship through human resource management practices: a review of empirical research", *Human Resource Management Review*, Vol. 15 No. 1, pp. 21-41, doi: 10.1016/j.hrmr.2005.01.003.
- Henderikx, M. and Stoffers, J. (2022), "An exploratory literature study into digital transformation and leadership: toward future-proof middle managers", *Sustainability*, Vol. 14 No. 687, pp. 1-18, doi: 10.3390/su14020687.
- Hortovanyi, L., Morgan, R.E., Herceg, I.V., Djuricin, D., Hanak, R., Horvath, D., Mocan, M.L., Romanova, A. and Szabo, R.Z. (2023), "Assessment of digital maturity: the role of resources and capabilities in digital transformation in B2B firms", *International Journal of Production Research*, Vol. 61 No. 23, pp. 8043-8061, doi: 10.1080/00207543.2022.2164087.
- Hoyt, L. and Gopal-Agge, D. (2007), "The business improvement district model: a balanced review of contemporary debates", *Geography Compass*, Vol. 1 No. 4, pp. 946-958, doi: 10.1111/j.1749-8198.2007.00041.x.

Capital

Journal of Intellectual

- Hoßfeld, S. (2017), "Optimization on decision making driven by digitalization", *Economics World*, Vol. 5 No. 2, pp. 120-128, doi: 10.17265/2328-7144/2017.02.004.
- Hristov, I., Ranalli, F. and Chirico, A. (2020), "Un approccio sistemico alla teoria della creazione di valore sostenibile: un modello concettuale", *Management Control*, Vol. 2, pp. 81-104, doi: 10.3280/maco2020-002005.
- Irawan, D., Bastian, E. and Hanifah, I.A. (2019), "Knowledge sharing, organizational culture, intellectual capital, and organizational performance", *Journal of Accounting and Investment*, Vol. 20 No. 3, pp. 267-282, doi: 10.18196/jai.2003128.
- Joel, O.S., Oyewole, A.T., Odunaiya, O.G. and Soyombo, O.T. (2024), "The impact of digital transformation on business development strategies: trends, challenges, and opportunities analyzed", World Journal of Advanced Research and Reviews, Vol. 21 No. 3, pp. 617-624, doi: 10.30574/wjarr.2024.21.3.0706.
- Kane, G.C., Palmer, D., Phillips, A.N. and Kiron, D. (2015), "Is your business ready for a digital future?", *MIT Sloan Management Review*, Vol. 56 No. 4, p. 37, available at: https://sloanreview. mit.edu/projects/strategy-drives-digital-transformation/
- Kianto, A., Sáenz, J. and Aramburu, N. (2017), "Knowledge-based human resource management practices, intellectual capital and innovation", *Journal of Business Research*, Vol. 81, pp. 11-20, doi: 10.1016/j.jbusres.2017.07.018.
- Koch, L.T. (2002), "Theory and practice of entrepreneurship education: a German view", *International Journal of Entrepreneurship Education*, Vol. 1 No. 4, pp. 1-29.
- Kogut, B. and Zander, U. (1996), "What firms do? Coordination, identity, and learning", *Organization Science*, Vol. 7 No. 5, pp. 502-518, doi: 10.1287/orsc.7.5.502.
- Kraus, S., Durst, S., Ferreira, J.J., Veiga, P., Kailer, N. and Weinmann, A. (2022), "Digital transformation in business and management research: an overview of the current status quo", *International Journal of Information Management*, Vol. 63, 102466, pp. 1-18, doi: 10.1016/j.ijinfomgt.2021.102466.
- Lerro, A., Iacobone, F. and Schiuma, G. (2012), "Knowledge assets assessment strategies: organizational value, processes, approaches and evaluation architectures", *Journal of Knowledge Management*, Vol. 16 No. 4, pp. 563-575, doi: 10.1108/13673271211246149.
- Leso, B.H., Cortimiglia, M.N. and Ghezzi, A. (2023), "The contribution of organizational culture, structure, and leadership factors in the digital transformation of SMEs: a mixed-methods approach", *Cognition, Technology and Work*, Vol. 25 No. 1, pp. 151-179, doi: 10.1007/s10111-022-00714-2.
- Leso, B.H., Cortimiglia, M.N., Ghezzi, A. and Minatogawa, V. (2024), "Exploring digital transformation capability via a blended perspective of dynamic capabilities and digital maturity: a pattern matching approach", *Review of Managerial Science*, Vol. 18 No. 4, pp. 1149-1187, doi: 10.1007/s11846-023-00692-3.
- Li, C., Razzaq, Q., Orztul, I. and Sharif, A. (2023), "Natural resources financial technologies, and digitalization: the role of institutional quality and human capital in selected OECSD economies", *Resources Policy*, Vol. 81, p. 103362.
- Li, L., Su, F., Zhang, W. and Mao, J. (2017), "Digital transformation by SME entrepreneurs: a capability perspective", *Information Systems Journal*, Vol. 28 No. 6, pp. 1129-1157, doi: 10.1111/isj.12153.
- Li, H., Yang, Z., Jin, C. and Wang, J. (2023), "How an industrial internet platform empowers the digital transformation of SMEs: theoretical mechanism and business model", *Journal of Knowledge Management*, Vol. 27 No. 1, pp. 105-120, doi: 10.1108/jkm-09-2022-0757.
- Liao, K. and Zhang, J. (2022), "Analysis on the innovation path of enterprise human resource management in the era of digital economy", *Frontiers in Business, Economics and Management*, Vol. 4 No. 1, pp. 128-131, doi: 10.54097/fbem.v4i1.532.
- Maditinos, D., Chatzoudes, D., Tsairidis, C. and Theriou, G. (2011), "The impact of intellectual capital on firms' market value and financial performance", *Journal of Intellectual Capital*, Vol. 12 No. 1, pp. 132-151, doi: 10.1108/14691931111097944.

- Malodia, S., Mishra, M., Fait, M., Papa, A. and Dezi, L. (2023), "To digit or to head? Designing digital transformation journey of SMEs among digital self-efficacy and professional leadership", *Journal of Business Research*, Vol. 157, 113547, pp. 1-11, doi: 10.1016/j.jbusres.2022.113547.
- Manuylenko, V.V., Ermakova, G.A., Gryzunova, N.V., Koniagina, M.N., Milenkov, A.V., Setchenkova, L.A. and Ochkolda, I.I. (2022), "Generation and assessment of intellectual and informational capital as a foundation for corporations' digital innovations in the «open innovation» system", *International Journal of Advanced Computer Science and Applications*, Vol. 13 No. 9, pp. 1022-1033, doi: 10.14569/ijacsa.2022.01309118.
- Martincevic, I. (2022), "The correlation between digital technology and digital competitiveness", *International Journal for Quality Research*, Vol. 16 No. 2, pp. 541-558, doi: 10.24874/ ijqr16.02-13.
- Messina, M. (2018), "Designing the new digital innovation environment", Bongiorno, G., Rizzo, D. and Vaia, G. (Eds), *CIOs and the Digital Transformation*, Springer, Cham, pp. 147-180.
- Mizanbekova, S.K., Bogomolova, I.P. and Shatohina, N.M. (2020), "Prospects for digital and innovative technologies in management competitiveness of enterprises", *Food Processing: Techniques and Technology*, Vol. 50 No. 2, pp. 372-383, doi: 10.21603/2074-9414-2020-2-372-382.
- Morgan, D.L. (1996), "Focus groups", Annual Review of Sociology, Vol. 22 No. 1, pp. 129-152, doi: 10.1146/annurev.soc.22.1.129.
- Mukhomorova, I.V., Akopova, E.S., Pavlova, L.K. and Sheveleva, V.V. (2020), "Global competitiveness of the digital economy: the problem of measuring and management", Popkova, E.G. and Sergi, B.S. (Eds), *Digital Economy: Complexity and Variety vs. Rationality*, Springer, Cham, Vol. 87, pp. 23-29, 10.1007/978-3-030-29586-8_3.
- Murale, V., Jayaraj, R. and Ashrafali, A. (2010), "Impact of intellectual capital on firm performance: a resource based view using VAIC approach", *International Journal of Business Management Economics and Information Technology*, Vol. 2 No. 2, pp. 283-292.
- Muscio, A. (2006), "Patterns of innovation in industrial districts: an empirical analysis", *Industry and Innovation*, Vol. 13 No. 3, pp. 291-312, doi: 10.1080/13662710600858860.
- Naidenova, I. and Parshakov, P. (2013), "Intellectual capital investments: evidence from panel VAR analysis", *Journal of Intellectual Capital*, Vol. 14 No. 4, pp. 634-660, doi: 10.1108/jic-01-2013-0011.
- Nambisan, S., Wright, M. and Feldman, M. (2019), "The digital transformation of innovation and entrepreneurship: progress, challenges and key themes", *Research Policy*, Vol. 48 No. 8, 103773, doi: 10.1016/j.respol.2019.03.018.
- Nasiri, M., Saunila, M. and Ukko, J. (2022), "Digital orientation, digital maturity, and digital intensity: determinants of financial success in digital transformation settings", *International Journal of Operations and Production Management*, Vol. 42 No. 13, pp. 274-298, doi: 10.1108/ijopm-09-2021-0616.
- O'Really III, C.A. and Tushman, M.A. (2008), "Ambidexterity as a dynamic capability: resolving innovator's dilemma", *Research in organizational behavior*, Vol. 28, pp. 186-206.
- Orieno, O.H., Udeh, C.A., Oriekhoe, O.I., Odonkor, B. and Ndubuisi, N.L. (2024), "Innovative management strategies in contemporary organizations: a review: analyzing the evolution and impact of modern management practices, with an emphasis on leadership, organizational culture, and change management", *International Journal of Management and Entrepreneurship Research*, Vol. 6 No. 1, pp. 167-190, doi: 10.51594/ijmer.v6i1.727.
- Panno, A. (2011), "Intangible assets", in *Profili economici e aspetti valutativi*, Giappichelli Editore, Torino.
- Pappas, I.O., Mikalef, P., Dwivedi, Y.K., Jaccheri, L. and Krogstie, J. (2023), "Responsible digital transformation for a sustainable society", *Information Systems Frontiers*, Vol. 25 No. 3, pp. 945-953, doi: 10.1007/s10796-023-10406-5.
- Paternostro, S. (2009), "Verso la rappresentazione e valutazione dello sviluppo delle aziende: i limiti dell'informativa economico-finanziaria e il contributo di alcuni approcci informativi

Journal of Intellectual Capital

| | complementari", <i>Pecunia: revista de la Facultad de Ciencias Económicas y Empresariales</i> , Vol. 8, pp. 277-305, doi: 10.18002/pec.v0i8.683. |
|--------|--|
| Perera | a, S., Jin, X., Das, P., Gunasekara, K. and Samaratunga, M. (2023), "A strategic framework for digital maturity of design and construction through a systematic review and application", <i>Journal of Industrial Information Integration</i> , Vol. 31, 100413, pp. 1-17, doi: 10.1016/j. jii.2022.100413. |
| Picco | lo, R., Papa, A., Scuotto, V. and Del Giudice, M. (2022), "How digital transformation connects knowledge exploration and exploitation with business model innovation: a fintech perspective", Almunawar, M.N., Zahidul Islam, Md. and Ordóñez de Pablos, P. (Eds), <i>Digital Transformation Management. Challenges and Futures in the Asian Digital Economy</i> , Routledge, pp. 38-56. |
| Pike, | S. and Roos, G. (2004), "Mathematics and modern business management", <i>Journal of Intellectual Capital</i> , Vol. 5 No. 2, pp. 243-256, doi: 10.1108/14691930410533678. |
| Pinga | li, S.R., Singha, S., Arunachalam, S. and Pedada, K. (2023), "Digital readiness of small and medium enterprises in emerging markets: the construct, propositions, measurement, and implications", <i>Journal of Business Research</i> , Vol. 164, 113973, pp. 1-17, doi: 10.1016/j. jbusres.2023.113973. |
| Pirog | ova, O. and Plotnikov, V. (2020), "The multi-level model of the service enterprises human capital value", in Popovic, Z., Manakov, A. and Breskich, V. (Eds), <i>VIII International Scientific Siberian Transport Forum. TransSiberia 2019</i> , Advances in Intelligent Systems and Computing, Springer, Cham, Vol. 1116, pp. 738-747, doi: 10.1007/978-3-030-37919-3_73. |
| Ployh | art, R.E. (2021), "Resources for what? Understanding performance in the resource-based view and strategic human capital resource literature", <i>Journal of Management</i> , Vol. 47 No. 7, pp. 1771-1786, doi: 10.1177/01492063211003137. |
| Pokro | ovskaia, N.N., Korableva, O.N., Cappelli, L. and Fedorov, D.A. (2021), "Digital regulation of intellectual capital for open innovation: industries' expert assessments of tacit knowledge for controlling and networking outcome", <i>Future Internet</i> , Vol. 13 No 2, 44, pp. 1-27, doi: 10.3390/fi13020044. |
| Ророс | ola, O.A., Adama, H.E., Okeke, C.D. and Akinoso, A.E. (2024), "The strategic value of business analysts in enhancing organizational efficiency and operations", <i>International Journal of Management</i> <i>and Entrepreneurship Research</i> , Vol. 6 No. 4, pp. 1288-1303, doi: 10.51594/ijmer.v6i4.1059. |
| Porfír | io, J., Carrilho, T., Felício, J. and Jardim, J. (2021), "Leadership characteristics and digital transformation", <i>Journal of Business Research</i> , Vol. 124, pp. 610-619, doi: 10.1016/j. jbusres.2020.10.058. |
| Porter | r, M.E. and Millar, V.E. (1985), "How information gives you competitive advantage", <i>Harvard Business Review</i> , Vol. 63 No. 4, pp. 149-160. |
| Quint | on, S., Canhoto, A., Molinillo, S., Pera, R. and Budhathoki, T. (2017), "Conceptualising a digital orientation: antecedents of supporting SME performance in the digital economy", <i>Journal of Strategic Marketing</i> , Vol. 26 No. 5, pp. 427-439, doi: 10.1080/0965254x.2016.1258004. |
| Reese | e, S. (2019), "The practitioner's approach to ambidexterity and organizational learning", <i>The Learning Organization</i> , Vol. 26 No. 4, pp. 438-441, doi: 10.1108/tlo-05-2019-234. |
| Ritala | n, P., Baiyere, A., Hughes, M. and Kraus, S. (2021), "Digital strategy implementation: the role of individual entrepreneurial orientation and relational capital", <i>Technological Forecasting and Social Change</i> , Vol. 171, 120961, pp. 1-15, doi: 10.1016/j.techfore.2021.120961. |
| Roos, | G. and Pike, S. (2018), Intellectual Capital as a Management Tool: Essentials for Leaders and Managers, Routledge, London. |
| Roos, | G., Pike, S. and Fernstrom, L. (2007), <i>Managing Intellectual Capital in Practice</i> , Routledge, London. |
| Salun | ne, P., Barbosa, M., Pinto, M. and Sousa, P. (2021), "Key dimensions of digital maturity: a study with retail sector companies in Brazil", <i>Ram. Revista De Administração Mackenzie</i> , Vol. 22 No. 6, pp. 1-29, doi: 10.1590/1678-6971/eramd210071. |
| Schw | ertner, K. (2017), "Digital transformation of business", <i>Trakia Journal of Sciences</i> , Vol. 15 No. 1, pp. 388-393, doi: 10.15547/tjs.2017.s.01.065. |

JIC 25,7

| Scuotto, V., Nicotra, M., Del Giudice, M., Krueger, N. and Gregori, G.L. (2021), "A microfoundational |
|---|
| perspective on SMEs' growth in the digital transformation era", Journal of Business Research, |
| Vol. 129, pp. 382-392, doi: 10.1016/j.jbusres.2021.01.045. |

- Senna, P.P., Barros, A.C., Roca, J.B. and Azevedo, A. (2023), "Development of a digital maturity model for Industry 4.0 based on the technology-organization-environment framework", *Computers and Industrial Engineering*, Vol. 185, 109645, pp.1-19, doi: 10.1016/j.cie.2023.109645.
- Shaik, A.S., Alshibani, S.M., Mishra, S., Papa, A. and Cuomo, M.T. (2023), "Does learning from innovation failure enhance innovation performance? A quantitative investigation of small businesses", *Technovation*, Vol. 127, 102818, pp. 1-15, doi: 10.1016/j. technovation.2023.102818.
- Shet, S.V., Del Giudice, M. and Rammal, H.G. (2022), "Managerial challenges to promoting competency-based intellectual capital in emerging market economies–developing a framework for implications", *Journal of Intellectual Capital*, Vol. 23 No. 1, pp. 85-102, doi: 10.1108/jic-01-2021-0018.
- Singh, A., Lim, W.M., Jha, S., Kumar, S. and Ciasullo, M.V. (2023), "The state of the art of strategic leadership", *Journal of Business Research*, Vol. 158, 113676, pp. 1-20, doi: 10.1016/j. jbusres.2023.113676.
- Smith, J., Johnson, R. and Brown, L. (2020), "Digital transformation impact on organizational structures: a comparative study of architecture and engineering companies", *Journal of Construction Management*, Vol. 35 No. 2, pp. 201-215.
- Subramaniam, M. and Youndt, M. (2005), "The influence of intellectual capital on the types of innovative capabilities", *Academy of Management Journal*, Vol. 48 No. 3, pp. 450-463, doi: 10.5465/amj.2005.17407911.
- Švarc, J., Lažnjak, J. and Dabić, M. (2021), "The role of national intellectual capital in the digital transformation of EU countries. Another digital divide?", *Journal of Intellectual Capital*, Vol. 22 No. 4, pp. 768-791, doi: 10.1108/jic-02-2020-0024.
- Teece, D.J., Pisano, G. and Shuen, A. (1997), "Dynamic capabilities and strategic management", *Strategic Management Journal*, Vol. 18 No. 7, pp. 509-533, doi: 10.1002/(sici)1097-0266 (199708)18:7<509::aid-smj882>3.0.co;2-z.
- Truong, B.T.T. and Nguyen, P.V. (2024), "Driving business performance through intellectual capital, absorptive capacity, and innovation: the mediating influence of environmental compliance and innovation", *Asia Pacific Management Review*, Vol. 29 No. 1, pp. 64-75, doi: 10.1016/j. apmrv.2023.06.004.
- Türk, A. (2023), "Digital leadership role in developing business strategy suitable for digital transformation", *Frontiers in Psychology*, Vol. 13, 1066180, pp. 1-11, 10.3389/fpsyg.2022.1066180.
- Tushman, M. and O'Reilly, C.A. (2002), Winning through Innovation: A Practical Guide to Leading Organizational Change and Renewal, Harvard Business Press, Brighton.
- Vial, G. (2019), "Understanding digital transformation: a review and a research agenda", *The Journal of Strategic Information Systems*, Vol. 28 No. 2, pp. 118-144, doi: 10.1016/j.jsis.2019.01.003.
- Wang, F.S., Yuan, B. and Guo, C.C. (2017), "Research on the impact of multi-source intellectual capital information disclosure on corporate value in the big data environment-based on mediating effect of investor's confidence", *Proceedings of the 2017 International Conference on Organizational Innovation - ICOI 2017*, Atlantis Press, Amsterdam, pp. 68-76.
- Wang, X., Sadiq, R., Khan, T.M. and Wang, R. (2021), "Industry 4.0 and intellectual capital in the age of FinTech", *Technological Forecasting and Social Change*, Vol. 166, 120598, pp. 1-22, doi: 10.1016/j.techfore.2021.120598.
- Warner, K. and Wäger, M. (2019), "Building dynamic capabilities for digital transformation: an ongoing process of strategic renewal", *Long Range Planning*, Vol. 52 No. 3, pp. 326-349, doi: 10.1016/j.lrp.2018.12.001.
- Waugh, W.L. and Streib, G. (2006), "Collaboration and leadership for effective emergency management", *Public Administration Review*, Vol. 66 No. s1, pp. 131-140, doi: 10.1111/j.1540-6210.2006.00673.x.

Journal of Intellectual Capital

| Westerman, G., Bonnet, D. and McAfee, A. (2014a), "The nine elements of digital transformation", <i>MIT Sloan Management Review</i> , Vol. 55 No. 3, pp. 1-6. |
|--|
| Williams, C., Krumay, B., Schallmo, D. and Scornavacca, E. (2024), "Digital maturity model for SMEs: validation through a mixed-method approach", <i>Pacific Asia Journal of the Association</i> for Information Systems, Vol. 16 No. 1, pp. 28-50. |
| Wu, X. and Sivalogathasan, V. (2013), "Intellectual capital for innovation capability: a conceptual model for innovation", <i>International Journal of Trade Economics and Finance</i> , Vol. 4 No. 3, pp. 139-144, doi: 10.7763/ijtef.2013.v4.274. |
| Yilmaz, A.A. and Tuzlukaya, S.E. (2024), "The relation between intellectual capital and digital transformation: a bibliometric analysis", <i>International Journal of Innovation Science</i> , Vol. 16 No. 2, pp. 244-264, doi: 10.1108/ijis-08-2022-0145. |
| Youndt, M.A., Subramaniam, M. and Snell, S.A. (2004), "Intellectual capital profiles: an examination of investments and returns", <i>Journal of Management studies</i> , Vol. 41 No. 2, pp. 335-361, doi: 10.1111/j.1467-6486.2004.00435.x. |

Transformation, Harvard Business Press, Brighton,

Yuliana, M., Sukmawati, A. and Hubeis, A.V. (2019), "The evaluation of lecturer's performance and Sekolah Tinggi Perikanan's performance through intellectual capital". Jurnal Manajemen, Vol. 23 No. 1, pp. 19-39, doi: 10.24912/jm.v23i1.442.

Westerman, G., Bonnet, D. and McAfee, A. (2014), Leading Digital: Turning Technology into Business

- Zhang, J. and Chen, Z. (2023), "Exploring human resource management digital transformation in the digital age", Journal of the Knowledge Economy, Vol. 15, pp. 1-17, doi: 10.1007/s13132-023-01214-v.
- Zhang, X., Xu, Y.Y. and Ma, L. (2023), "Information technology investment and digital transformation: the roles of digital transformation strategy and top management", Business Process Management Journal, Vol. 29 No. 2, pp. 528-549, doi: 10.1108/bpmj-06-2022-0254.
- Zlatkovic, M. (2018), "Intellectual capital and organizational effectiveness: PLS-SEM approach". Industrija, Vol. 46 No. 4, pp. 145-169, doi: 10.5937/industrija46-19478.

Further reading

- Alavi, M. and Leidner, D.E. (2001), "Knowledge management and knowledge management systems: conceptual foundations and research issues", MIS Quarterly, Vol. 25 No. 1, pp. 107-136, doi: 10.2307/3250961.
- An, Y., Davey, H. and Eggleton, I. (2011), "Towards a comprehensive theoretical framework for voluntary IC disclosure", Journal of Intellectual Capital, Vol. 12 No. 4, pp. 571-585, doi: 10.1108/14691931111181733.
- Aslanova, I.V. and Kulichkina, A.I. (2020), "Digital maturity: definition and model", in AA. VV. (Eds), 2nd International Scientific and Practical Conference "Modern Management Trends and the Digital Economy: from Regional Development to Global Economic Growth (MTED 2020), Atlantis Press, Amsterdam, pp. 443-449.
- Blackburn, R. and Stokes, D. (2000), "Breaking down the barriers: using focus groups to research small and medium-sized enterprises", International Small Business Journal, Vol. 19 No. 1, pp. 44-67, doi: 10.1177/0266242600191003.
- Burgman, R. and Roos, G. (2007), "The importance of intellectual capital reporting: evidence and implications", Journal of Intellectual Capital, Vol. 8 No. 1, pp. 7-51, doi: 10.1108/ 14691930710715051.
- Choong, K.K. (2008), "Intellectual capital: definitions, categorization and reporting models", Journal of Intellectual Capital, Vol. 9 No. 4, pp. 609-638, doi: 10.1108/14691930810913186.
- Daft, R.L. and Marcic, D. (2001), Understanding Management, Harcourt College Publishers, Fort Worth.
- Hevner, A., Chatterjee, S., Tremblay, M.C., Hevner, A.R. and Berndt, D.J. (2010), "The use of focus groups in design science research", Hevner, A. and Chatterjee, S., (Eds), Desian Research in Information Systems: Theory and Practice, Springer, Boston, MA, pp.121-143.

| Hines, T. (2000), "An evaluation of two qualitative methods (focus group interviews and cognitive |
|---|
| maps) for conducting research into entrepreneurial decision making", Qualitative Market |
| <i>Research</i> , Vol. 3 No. 1, pp. 7-16, doi: 10.1108/13522750010310406. |

- Joel, O.T. and Oguanobi, V.U. (2024), "Entrepreneurial leadership in startups and SMEs: critical lessons from building and sustaining growth", *International Journal of Management and Entrepreneurship Research*, Vol. 6 No. 5, pp. 1441-1456, doi: 10.51594/ijmer.v6i5.1093.
- Laila, F., Irawanto, D.W. and Susilowati, C. (2022), "The effect of organizational culture and transformational leadership style on organizational commitment with knowledge management practices as mediating variables", *International Journal of Research in Business and Social Science* (2147-4478), Vol. 11 No. 5, pp. 218-224, doi: 10.20525/ijrbs.v11i5.1843.
- Li, X. and Lin, H. (2023), "How to leverage flexibility-oriented HRM systems to build organizational resilience in the digital era: the mediating role of intellectual capital", *Journal of Intellectual Capital*, Vol. 25 No. 1, pp. 1-22, doi: 10.1108/jic-03-2023-0038.
- Mo, S. (2022), "The dilemma and path of digital empowerment of enterprise asset management", BCP Business and Management, Vol. 29, pp. 265-272, doi: 10.54691/bcpbm.v29i.2280.
- Ochoa-Urrego, R.L. and Peña-Reyes, J.I. (2021), "Digital maturity models: a systematic literature review", Schallmo, D.R.A. and Tidd, J. (Eds) *Digitalization. Approaches, Case Studies, and Tools for Strategy, Transformation and Implementation*, Springer, Cham, pp. 71-85.
- Scuotto, V., Alfiero, S., Cuomo, M.T. and Monge, F. (2024), "Knowledge management and technological innovation in family SMEs context", *Journal of Knowledge Management*, Vol. 28 No. 3, pp. 789-798, doi: 10.1108/jkm-04-2023-0281.
- Vaska, S., Massaro, M., Bagarotto, E.M. and Dal Mas, F. (2021), "The digital transformation of business model innovation: a structured literature review", *Frontiers in Psychology*, Vol. 11, 539363, pp. 1-18, doi: 10.3389/fpsyg.2020.539363.
- Vogt, C.A. (2011), "Customer relationship management in tourism: management needs and research applications", *Journal of Travel Research*, Vol. 50 No. 4, pp. 356-364, doi: 10.1177/ 0047287510368140.
- Vveinhardt, J. and Sedziuviene, N. (2022), "Acceptance of change by reducing employee resistance and strengthening organizational commitment", *Polish Journal of Management Studies*, Vol. 26 No. 1, pp. 356-372, doi: 10.17512/pjms.2022.26.1.22.

About the authors

Debora Tortora, Ph.D. She is currently associate Professor at the University of Milan Bicocca, Italy. She received her Ph.D. degree in Marketing at the University of Salerno. Currently she teaches Marketing and Management at the University of Milan Bicocca, Italy. She published in prestigious national and international journals and serves several journals as reviewer.

Cinzia Genovino, Ph.D. She is currently researcher at the Giustino Fortunato T-elematic University, Italy. She received her Ph.D. degree in Marketing at the University of Salerno. Currently she teaches Marketing and Management at the Giustino Fortunato University, Italy. She published in prestigious national and international journals and serves several journals as reviewer.

Federico De Andreis, Ph.D. He is currently researcher at the Giustino Fortunato T-elematic University, Italy. He received his Ph.D. degree in Marketing at the University of Malta. Currently he teaches Management and at the Giustino Fortunato University, Italy, where he is also Director of Master in Aviation Management. He published in prestigious national and international journals and serves several journals as reviewer.

Francesca Loia, Ph.D. She is currently associate Professor of Organization Studies at the University of Campania "Vanvitelli", Italy. She received her Ph.D. of Management Banking and Commodity Sciences at the University of Rome "Sapienza". Currently she teaches Organization Science at the University of Campania Vanvitelli, Italy. She published in prestigious national and international journals and serves several journals as reviewer. Her research interests focus mainly on digital transformation, data science and information systems.

Maria Teresa Cuomo, Ph.D., she is a Full Professor of Management at the Department of Economics and Statistics of the University of Salerno, Italy. She holds a PhD in Public Administration from the University of Salerno, where she is Deputy Rector for Post-graduate at the University of Salerno. She is affiliated ate the Business School of the University of Brunel, London (UK). She is also Director of High Journal of Intellectual Capital

JIC
25,7School of Chartered Accountants (SAF Campania). She is author of several articles published on
prestigious international journals (3* and 4* ABS list). She won the Best Paper Award at the 9th Gika
Conference in Paris Sorbonne University (France) in 2021. She got award for the most uploaded paper
published in British Journal Management (Wiley) in 2023. She joined as strategic Advisory Board
member, the Journal of Knowledge Management. Her research interests focus mainly on digital
transformation, consumer behavior, information systems and foreign investments. Maria Teresa Cuomo
is the corresponding author and can be contacted at: mcuomo@unisa.it198