

Review

Transforming Strategy and Value Creation Through Digitalization?

Sónia Gouveia ^{1,2,*} , Daniel H. de la Iglesia ³ , José Luís Abrantes ^{1,2}  and Alfonso J. López Rivero ⁴ 

¹ Superior School of Technology and Management, Polytechnic Institute of Viseu, 3504-510 Viseu, Portugal; jlabrantes@estgv.ipv.pt

² CISEd—Research Centre in Digital Services, Instituto Politécnico de Viseu, 3504-510 Viseu, Portugal

³ Faculty of Science, University of Salamanca, 37008 Salamanca, Spain; danihiglesias@usal.es

⁴ Computer Science Faculty, Universidad Pontificia de Salamanca, 37002 Salamanca, Spain; ajlopezri@upsa.es

* Correspondence: sgouveia@estgv.ipv.pt

Abstract: Digital transformation (DT) directly influences organizational competitiveness, reshaping value creation and necessitating adaptation across industries. This study investigates how DT redefines strategic imperatives and the mechanisms of value creation within organizations, synthesizing findings from five thematic clusters: “Strategic Management in Digital Transformation of Organizations”, “Emerging Trends in Digital Entrepreneurship and Sustainability”, “Digital Capabilities and Business Model Innovation”, “Digitalization and Transformation of SMEs”, and “Value Creation through Innovation and Digital Transformation”. The analysis uncovers crucial insights, including the shift towards business-to-business (B2B) value-oriented sales, the role of big data analytics in collaborative innovation, and the integration of AI-driven business models across retail, logistics, and healthcare. Strategic alignment between technological advances and organizational goals emerges as essential, especially for SMEs facing resources, regulatory compliance, and skills development challenges. Despite these insights, significant gaps remain. Future research should delve into the underexplored area of cross-industry best practices, particularly how SMEs can leverage digital tools to enhance resilience and adaptability in market volatility. Further investigation into the long-term impacts of digital entrepreneurship on sustainability is recommended, including metrics for measuring social and environmental value creation. Additionally, digital leadership roles, such as Chief Digital Officers, warrant more in-depth examinations to identify how these leaders can navigate the complexities of DT and maximize value co-creation. This systematic literature review and bibliometric analysis aim to consolidate current knowledge, address critical gaps, and lay the groundwork for future studies that support resilient and sustainable growth in an increasingly digital economy.

Keywords: strategic management; digital transformation; value creation



Citation: Gouveia, Sónia, Daniel H. de la Iglesia, José Luís Abrantes, and Alfonso J. López Rivero. 2024.

Transforming Strategy and Value Creation Through Digitalization?

Administrative Sciences 14: 307.

<https://doi.org/10.3390/admsci14110307>

Received: 13 October 2024

Revised: 7 November 2024

Accepted: 11 November 2024

Published: 20 November 2024



Copyright: © 2024 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

Digital transformation (DT) is reshaping organizational thinking by using technologies that expand capabilities, increase efficiency, expand market presence, and drive global technological advances that benefit society. Now considered an essential practice, DT, integrated with information systems (IS), promotes organizational innovation and facilitates the creation of value (Urbinati et al. 2022). The digital technologies implemented by DT provide competitive advantages, such as artificial intelligence (AI), Internet of Things (IoT), and big data, which allow the digitalization of information systems, facilitating the capture, management, processing, and distribution of data within organizations (Ciampi et al. 2021). DT also promotes more effective knowledge management by providing access to relevant data, enabling the recognition of patterns and trends and improving strategic decision-making (Das and Dey 2021). Thus, when integrated with IS, TD improves knowledge management, an essential component for generating value and strategic management in organizations (Ghezzi 2022).

Digital transformation strongly influences strategic management by providing updated and relevant information, essential for decision-making at different levels—planning, implementation, and control—and challenging organizations to adapt to ensure their digital transformation (Rao and Shukla 2023). In this context, Rêgo et al. (2022) examine the impact of DT on business strategies, suggesting that organizations need to adopt new strategic responses, such as formulating new strategies, organizational transformation, and innovative implementation methods, in response to the dynamic environment generated by digitalization.

Incorporating DT also boosts innovation, favouring the development of new operational practices, products, and services. Zaki (2019) explores this phenomenon through four DT trajectories: digital technology, digital strategy, customer experience, and data-driven business models. However, the author notes that many organizations face difficulties adapting to digital transformation, highlighting the need for strategic adaptation. This process involves identifying opportunities for innovation in digital services and exploring how organizations can effectively create and capture value.

Value creation is one of the main benefits provided by digital transformation (DT). Holopainen et al. (2023) analyzed several organizations with DT initiatives. They identified common factors influencing value creation processes, including developing digital products and services, technological leadership promoting the digital transition, and cooperation with customers to develop solutions and effective technologies. The implementation of DT also requires a change in organizational culture, with crucial investments in different areas, such as employee training, security, and data protection. Leso et al. (2023) address this issue in the context of small- and medium-sized companies (SMEs), investigating how organizational culture, structure, and leadership impact digital transformation in these environments.

Furthermore, Gaurav and Kongar (2021) propose a value creation model based on case studies, identifying critical factors to accelerate digital transformation efforts. The authors highlight the importance of collaboration between data analysts and decision-makers to minimize errors, ensuring that strategic decisions are based on accurate and relevant data.

Digital Transformation also has a direct and significant connection with sustainable development, as both promote innovation and organizational adaptation to face contemporary global challenges. DT redefines business processes and practices by integrating technologies such as AI, IoT, and big data, which allows for more efficient resource management and favours a sustainable approach (Akter et al. 2023). Real-time data and the optimization of the value chain provided by DT encourage resource savings and reduce waste and energy consumption, which are fundamental aspects of environmental sustainability. Additionally, TD leads to greater operational efficiency by enabling instant access to information that can be shared across teams or departments regardless of location, resulting in process optimization, reduced errors, cost savings, and, ultimately, analysis and value creation (Akarsu 2023).

Contemporary challenges include, among others, the urgency of promoting an ecological economy and establishing objectives for sustainable progress. In this context, technology is essential in developing sustainable development, answering environmental problems, and promoting economic growth while maintaining ecological balance (Klarin 2018). By restructuring business models and strengthening dynamic capabilities, the digital transition facilitates the implementation of sustainable practices essential for creating lasting and responsible value (Ciampi et al. 2021; Leso et al. 2023). Furthermore, DT promotes inclusion and accessibility in traditionally underserved sectors, enabling more equitable development aligned with sustainable development goals (SDGs). Consequently, TD boosts organizational competitiveness and is essential in building a resilient and sustainable economy (Gonzalez and Quadros 2022). This perspective aligns with classical political economic theories, which emphasize the need for interdisciplinary approaches and a historical context in studies on sustainable development (Manioudis and Meramveliotakis 2022).

Digital Transformation (DT) is evident in various areas, including the circular economy (Akarsu 2023); workforce management (Akter et al. 2023); industrial processes (Das and Dey 2021); business models (Ciasullo et al. 2022; Pascarelli et al. 2023); urban mobility (Gonzalez and Quadros 2022); services (Zaki 2019; Kumar et al. 2024); health (Pascarelli et al. 2023); tourism (Gutierriz et al. 2023); and even sports (Caldas et al. 2020).

The connection between DT, value creation, and strategy is crucial for the success and longevity of every business. A well-managed strategy, innovation, and value creation can drive an organisation's growth and competitive advantage in the market (Stanislavsky and Zamlynskyi 2023).

Due to the importance of digitalisation in creating value and its impact on the management of organisations, the main objective of this study is to improve the understanding of DT in creating value and strategy in organisations. In this scenario, it becomes necessary to understand how DT has influenced the creation of value and management strategies in organisations. A Systematic Literature Review (SLR) was conducted to achieve this objective. The SLR is essential in consolidating scientific knowledge, providing a consolidated and critical view of existing research in a particular field. By following a systematic approach in selecting, evaluating, and synthesising studies, such reviews provide a robust and reliable overview of existing knowledge in a particular area of research. Furthermore, the ability to replicate plays a crucial role in validating the results, allowing other researchers to reproduce the process and obtain similar conclusions (Higgins and Green 2008) (Page et al. 2021). As outlined in the SLR (Kraus et al. 2020), the present study considers distinct stages: specifying the research objective, outlining the research protocol, and reporting the results. This study provides an SLR and a bibliometric analysis focusing on digital transformation, value creation, and its impact on organisational management strategies.

Considering the objectives of this study, the following Research Questions (RQ) are presented, inspired by the "agenda for future research" by Appio et al. (2021):

RQ1: What has the literature advanced to date regarding digital transformation in terms of value creation and management strategy?

RQ2: What are the main research topics concerning digital transformation regarding organisations' value creation and management strategies?

The research questions will be addressed once we implement the protocol described in the next section. In answer to RQ1, we collected statistical data from peer-reviewed research articles. Content analysis will identify the main themes discussed in the papers during RQ2. The structure of this paper is organized as follows. Section 2 outlines the research methodology. Section 3 presents the results obtained. Section 4 discusses the findings, while Section 5 explores the research implications and future trends. Finally, Section 6 provides the conclusion of the paper.

2. Research Methodology

After defining the main objective and the RQs in the introduction section, we established the dataset to be analysed. The Web of Science (WoS) database was chosen to establish the data set to be analysed, recognised for its multidisciplinary coverage and high indexing quality (Vera-Baceta et al. 2019). Choosing a single database avoids duplication of records and simplifies the systematic analysis process, maintaining consistency and accuracy in the data collected. We used PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) as the systematic review protocol, describing the review's rationale and planning methods (Page et al. 2021).

Data processing helps identify two types of findings: first, the descriptive statistics that relate to DT and different themes related to creating value and strategy for organisations—publications by year and obligations, contribution by journals, contribution by research areas, and analysis by country, among others. Second, for bibliometric analysis, we used VOSviewer software 1.6.20 (Van Eck and Waltman 2010). This tool was chosen because it simultaneously provides graphical representations and tables of authors, institutions,

countries, and sources. This software also offers functionality to construct and visualise co-occurrence networks of main keywords extracted from the scientific literature.

2.1. Prisma Protocol

The SLR aimed to understand the relevant trend of studies in strategy and value creation for organisations through DT, adopting a consolidated approach, the PRISMA protocol (Mishra and Mishra 2023). The PRISMA protocol provides a flow diagram that assists in the steps of the SLR process: identification, screening, eligibility, and inclusion.

2.1.1. Identification Step

In this phase of the systematic review, relevant outputs were identified through a comprehensive and systematic search in the literature. According to (Kraus et al. 2020), selecting keywords and precise search strings are fundamental tasks during the literature-analysis phase. The search took place in the Web of Science database in February 2024, considering the following search terms: “Digital Transformation”, “Value Creation”, AND “Strategy”. These word combinations were entered in the TOPIC section of WoS, yielding 190 papers.

2.1.2. Screening Step

In the previous phase, we scanned 190 papers. During the screening phase, the identified papers undergo an initial screening process based on inclusion and exclusion criteria. Inclusion criteria considered were document type (article) and language (English). As a consequence, 68 papers were excluded. As an exclusion criterion, research areas with lower representativeness concerning the study objective are removed. Research areas “Business Economics”, “Computer Science”, and “Engineering and Operations” are considered and kept eligible. The selected research areas are directly relevant to the search terms “Digital Transformation”, “Value Creation”, and “Strategy”, as identified in the literature (Qiao et al. 2023). These areas are fundamental to understanding how organisations implement technological changes, compete in markets, and review their strategies for creating value. Applying inclusion and exclusion criteria resulted in 72 eligible papers for analysis.

2.1.3. Inclusion Step

In this phase, the studies considered eligible, precisely 72 documents, are available and included in the systematic review. In order to answer the research questions, specific questions were also defined, as well as how the content analysis would be conducted, as is exposed in Table 1.

Table 1. RQ Summary. Source: Authors’ own creation.

Questions (RQ)	Specific Questions	Content Analysis
What has literature advanced to date regarding digital transformation concerning value creation and management strategy?	What are the main articles, countries, and production levels involving strategy and value creation in a digital transformation environment?	Calculating publications, citations, ranks, bibliometric analysis, and cluster analysis
What are the main research topics concerning digital transition regarding organisations’ value creation and management strategies?	What are the most significant research subjects about digital transformation involving value creation and strategy in organisations?	Co-occurrence analysis and cluster analysis

All of these processes can be seen in Figure 1.

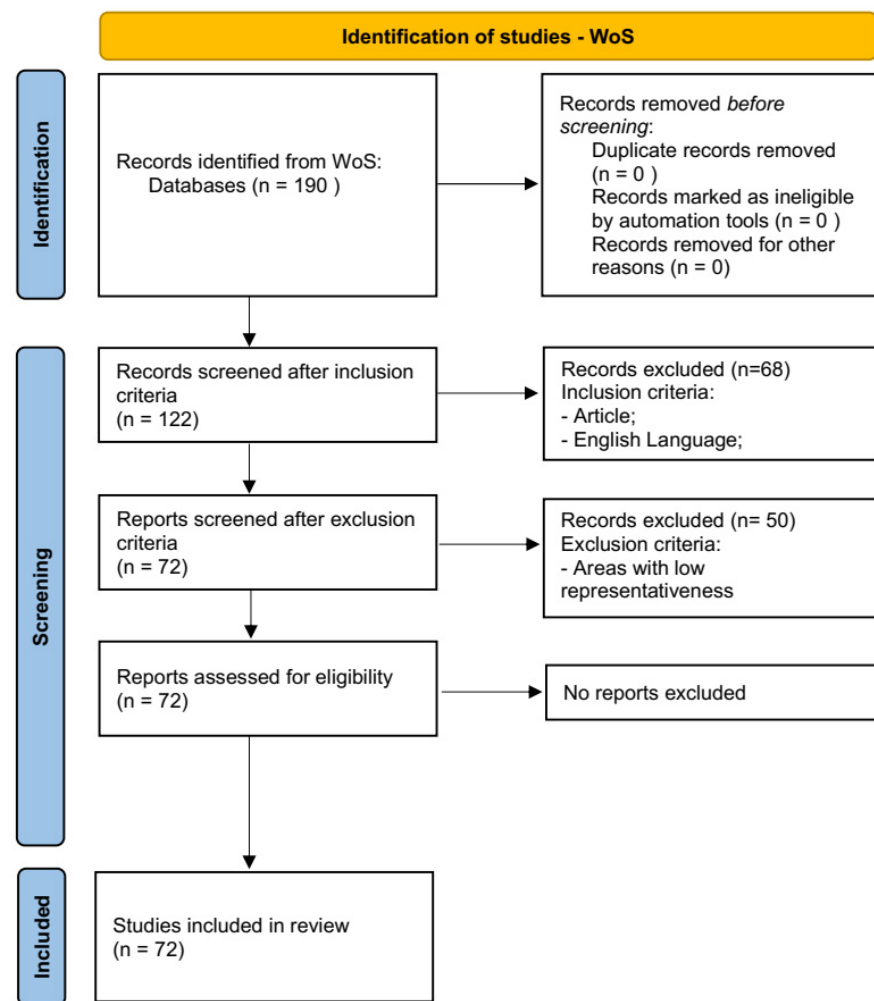


Figure 1. Prisma protocol adapted for the current research (adapted from [Mishra and Mishra 2023](#)).

3. Results

3.1. Publication and Citations Trends

This section begins by exploring the annual distribution of articles. Analysing the yearly publication trends in our research field provides insights into current and emerging research directions. The distribution of papers published on an annual basis in the study's research field provides an overview of research trends and can offer insights into potential future trends. The aim is to understand how DT in organisations related to strategies and value creation has gained importance over time. Considering the PRISMA protocol indicated in Section 2 (Figure 1), 72 papers were obtained, as shown in Figure 2. An analysis of the study periods shows that only 8% of the articles analysed were conducted until 2019, demonstrating the reduced interest in research under study.

The substantial increase in publications since 2020 underscores the growing recognition of DT as a critical area of research in strategic management and value creation. The sharp rise in citations highlights the relevance and impact of this topic on contemporary academic discourse. The growth of publications has been very significant, which will be related to the increase in business and academic awareness about the potential of digital technologies.

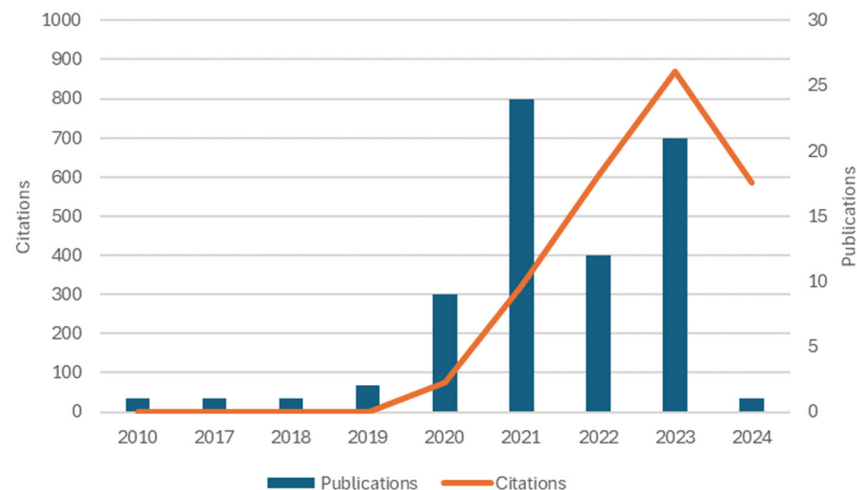


Figure 2. Number of papers by year. Source: Adapted from WoS Database, available at: <https://www.webofscience.com/> (accessed on 28 February 2024).

3.2. Analysis by Countries

An interesting analysis performed using VOSviewer is bibliographic coupling by countries. This analysis allows us to identify which countries share standard bibliographic references in their publications. A minimum of two papers per country and at least 15 citations were selected to ensure strong relationships in the response. Out of a total of 39 countries, 17 meet this requirement.

Bibliographic coupling by country is exposed in Table 2, revealing five clusters in Figure 3 for the 17 countries: 12 European, 1 African, 2 Asian, 1 North American, and 1 Oceanian. Italy had the highest number of documents, 18, with 675 citations, whereas South Africa recorded the lowest number of citations, 19, with only two articles.

Table 2. Bibliographic coupling by country details. Source: Authors' own creation.

Country	Articles	Citations	Total Link Strenght	Cluster	Average Total Link Strenght per Cluster
Finland	6	155	2310	1	1836.5
Denmark	3	123	2107		
Australia	3	78	1505		
Portugal	2	57	1424		
Germany	18	659	3854	2	1509.8
Sweden	5	310	964		
Poland	4	152	776		
Austria	2	171	445		
Italy	12	675	3582	3	1377.0
France	2	39	294		
South Africa	2	19	255		
United Kingdom	7	251	2812	4	1457.3
India	3	52	874		
China	5	88	686		
United States	6	359	2289	5	1013.3
Russian Federation	4	192	543		
Netherlands	2	37	208		

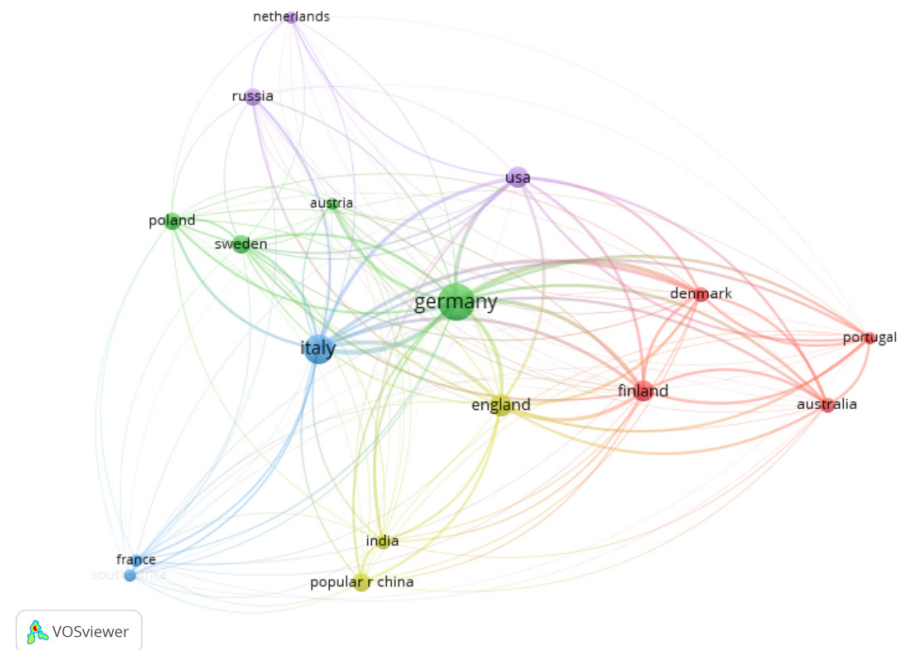


Figure 3. Bibliographic coupling by countries. Source: Authors' own creation.

The bibliographic coupling analysis by countries reveals a strong European presence, particularly in Italy, Germany, and the United Kingdom, which dominate the research landscape in this area. The clustering of these countries suggests robust research networks and collaborations that may be driving innovation and thought leadership in DT.

The cluster composed of the United Kingdom, India, and China seems to be related to historical connections between these countries and the presence of UK universities in Asia.

The limited contributions from regions like South America and Africa highlight a significant geographical gap in the research (Figure 4). This underrepresentation may indicate that the challenges and opportunities of DT in these regions are not being fully explored, potentially limiting the global applicability of current research findings.

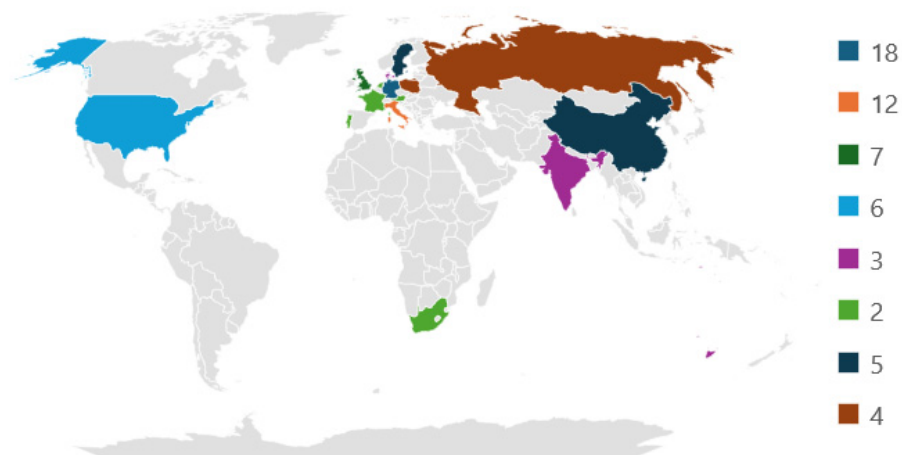


Figure 4. Bibliographic coupling by countries. Source: Authors' own creation.

3.3. Analysis by Sources

Fifty-seven sources present publications in this study area. Again, using VOSviewer and performing bibliographic coupling by sources, the minimum number of sources was set to 1, and the minimum number of citations considered was 3. Of 57 sources, only 33 reach this threshold, as shown in Figure 5. Four clusters were found (Table 3).

Table 3. Bibliographic coupling by sources. Source: Authors' own creation.

Source	Articles	Citations	Total Link Strenght	Cluster
Benchmarking-An International Journal	1	39	186	1
Information Systems Frontiers	1	56	36	
International Journal Of Electronic Commerce	1	34	18	
International Journal Of Innovation And Technology Management	4	64	356	
International Journal Of Logistics Management	1	118	40	
Journal Of Entrepreneurship Management And Innovation	1	20	8	
Journal Of Manufacturing Technology Management	1	10	52	
Knowledge And Process Management	1	4	76	
Management Decision	2	107	169	
Management Research Review	1	5	67	
Economies	1	3	7	2
Entrepreneurship And Sustainability Issues	1	3	28	
European Management Journal	1	170	78	
Ieee Transactions On Engineering Management	5	76	411	
International Entrepreneurship And Management Journal	2	32	22	
Journal Of Asian Finance Economics And Business	1	6	41	
Journal Of Business Research	3	356	289	
Polish Journal Of Management Studies	1	5	11	
R & D Management	1	54	99	
Review Of Managerial Science	1	11	75	3
Academy Of Management Discoveries	1	9	58	
Baltic Journal Of Management	1	10	27	
California Management Review	1	167	52	
International Journal Of Innovation Management	3	4	181	
International Journal Of Research In Marketing	1	173	28	
International Journal Of Retail & Distribution Management	1	21	29	
Journal Of Enterprising Communities-People And Places In The Global Economy	1	7	74	
Journal Of Software-Evolution And Process	1	9	23	
Electronic Commerce Research And Applications	1	42	114	4
European Journal Of Innovation Management	3	54	240	
Foresight And Sti Governance	1	3	37	
Journal Of Engineering And Technology Management	1	27	74	
Journal Of Management Studies	1	134	112	
AVERAGE		55.5	94.5	

The analysis of sources indicates that journals with the highest total link strength, such as the International Journal of Innovation and Technology Management (356) and IEEE Transactions on Engineering Management (411), International Journal of Innovation Management (181), and European Journal of Innovation Management (240), well above the average score of 94.5, play a pivotal role in shaping the discourse on DT. Interestingly, the most influential sources are not necessarily the most cited, suggesting that newer or

more specialized journals contribute significantly to the field, even if their overall citation counts are lower. In each cluster, the paper with the highest total link strength is in the area of “management”, one of the main areas of this study.

The diversity of sources across the four identified clusters further emphasizes the interdisciplinary nature of DT research, which spans management, technology, and innovation domains.

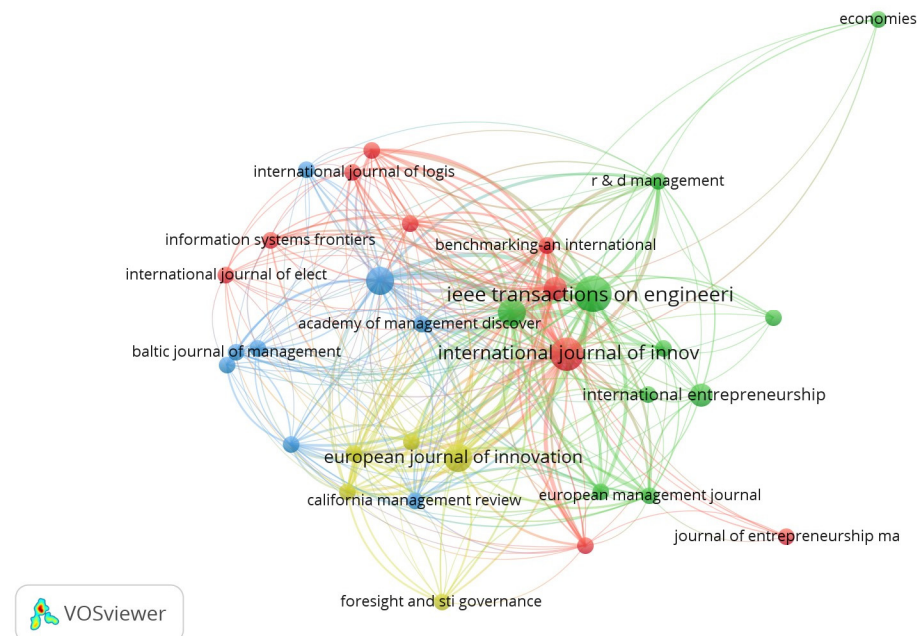


Figure 5. Bibliographic coupling by sources. Source: Authors' own creation.

3.4. Analysis by Authors

The bibliographic coupling by authors shows the existence of three clusters, as it is possible to observe in Table 4 and Figure 6. In the analysis using the VOSviewer software 1.6.20, one document per author was considered, and only those with more than 100 citations. Of 222 authors, 22 meet the thresholds. The central cluster is the one that curiously has the smallest number of authors and the most significant number of citations and is made up of Francesco Ciampi, Stefano Demi, Alessandro Magrini, Giacomo Marzi, and Armando Papa. The cluster is also the only one to present an average total link strength above the average value 272.7. Clusters 1 and 2 present very similar values, 185.5 and 185.0 of average total link strength below the average total value. Total link strength reflects the intensity of bibliographic coupling links between a specific researcher and other researchers.

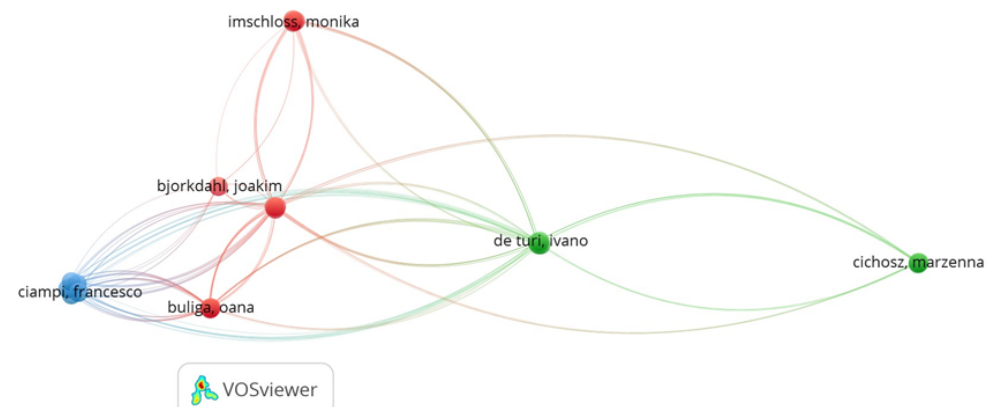


Figure 6. Bibliographic coupling by authors. Source: Authors' own creation.

Table 4. Bibliographic coupling by authors. Source: Authors’ own creation.

Researcher	Citations	Total Link Strenght	Cluster
Monika Imschloss	173	237	1
Werner Reinartz	173	237	
Nico Weigand	173	237	
Alessio Cozzolino	134	218	
Frank T. Rothaermel	134	218	
Gianmario Verona	134	218	
Oana Buliga	170	156	
Julian M. Mueller	170	156	
Kai-ingo Voight	170	156	
Joakim Bjorkdahl	167	22	
Ivano De Turi	107	191	2
Pasquale Del Vecchio	107	191	
Antonello Garzoni	107	191	
Giustina Secundo	107	191	
Marzenna Cichosz	118	177	
A. Michael Knemeyer	118	177	
Carl Marcus Wallenburg	118	177	
Francesco Ciampi	186	570	3
Stefano Demi	186	570	
Alessandro Magrini	186	570	
Giacomo Marzi	186	570	
Armando Papa	186	570	
AVERAGE		272.7	

3.5. Topics and Common Keywords

Keywords are crucial for describing the content and topics of documents. This analysis assesses the degree of co-occurrence of the keywords and the related concepts within the research domain (Callon et al. 1991). A co-occurrence analysis was conducted to address RQ2 and establish the main research topics concerning DT, focusing on organisations’ value creation and management strategies. The analysis was based on keywords, titles, and abstracts. VOSviewer software was used for this analysis, setting the minimum number of keyword co-occurrences at five. Out of the total 469 words, 29 met our threshold.

Figure 7 shows the co-occurrence map. The map identifies four clusters (Table 5): the first cluster, in red, contains eight keywords, including “capabilities, information, internet, platforms, servitisation, technology, and transformation”, with the most common keyword being “innovation” (27 occurrences); a second cluster, in green, had seven keywords, including “business models, competitive advantage, digital transformation, dynamic capabilities, exploration, and firm performance”, with the most common keyword being “digital transformation” (51 occurrences); the third cluster, in blue, contains seven keywords with keywords “ecosystem, entrepreneurship, firms, future, SMEs, systems, and value capture”, with the most common keyword being “firms” (seven occurrences); and, finally a fourth cluster, in yellow, that includes seven keywords, including “big data, impact, information technology, management, performance, strategy, and sustainability”, with the most common keyword being “strategy” (24 occurrences).

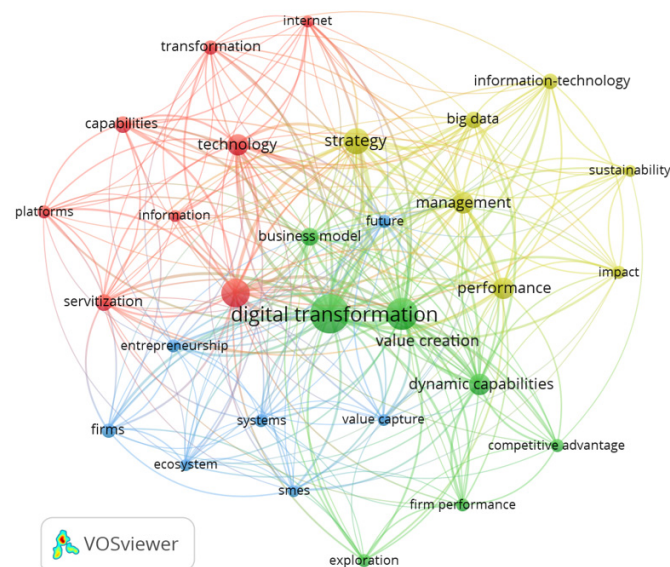


Figure 7. Co-occurrence analysis. Source: Authors' own creation.

Table 5. Co-occurrence analysis. Source: Authors' own creation.

Keywords	Occurrences	Total Link Strength	Cluster	Average Total Link Strength per Cluster
Innovation	27	114	1	52
Technology	15	89		
Servitisation	9	53		
Capabilities	9	43		
Transformation	7	37		
Internet	5	33		
Platforms	6	28		
Information	5	21		
Digital transformation	51	244	2	94
Value creation	35	173		
Dynamic capabilities	16	96		
Business model	11	60		
Firm performance	6	32		
Competitive advantage	6	28		
Exploration	6	27		
Entrepreneurship	6	41	3	34
Firms	7	34		
Value capture	5	34		
Future	6	40		
Ecosystem	5	30		
SMEs	5	31		
Systems	6	30		
Big data	10	53	4	61
Impact	6	32		
Information technology	8	40		
Management	16	82		
Performance	15	73		
Strategy	24	125		
Sustainability	5	23		
AVERAGE	11.7	60.2		

3.6. Cluster Analysis: Bibliographic Coupling

This section conducted a bibliographic coupling analysis of documents using VOSviewer 1.9 (Van Eck and Waltman 2010). It was considered that at least two shared citations

are necessary to establish strong connections between different areas. The strength of bibliographic coupling between two articles is measured by the number of references they share in their reference lists (Rousseau et al. 2018). This analysis identified 47 strong connections, resulting in 5 clusters (Figure 8). In Figure 8, clusters are formed based on the keywords defined by the authors of the articles. This analysis highlights the articles that made significant intellectual contributions to the areas addressed by the research questions (RQ).

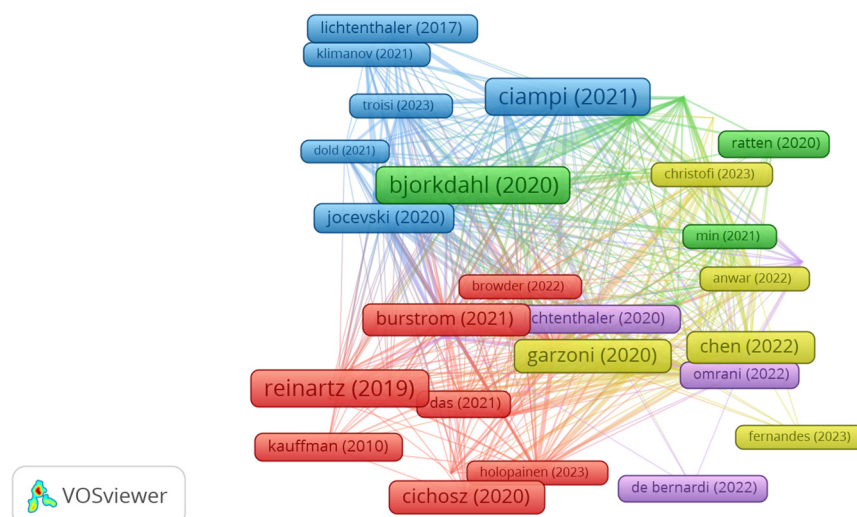


Figure 8. Bibliographic coupling by documents (Anwar et al. 2022, Björkdahl 2020, Browder et al. 2022, Burström et al. 2021, Chen and Tian 2022, Christofi et al. 2023, Ciampi et al. 2021, Cichosz et al. 2020, Das and Dey 2021, De Bernardi et al. 2022, Dold and Speck 2021, Fernandes et al. 2023, Garzoni et al. 2020, Holopainen et al. 2023, Jucevski et al. 2020, Kauffman et al. 2010, Klimanov et al. 2021, Lichtenthaler 2017, Lichtenthaler 2020, Min and Kim 2021, Omrani et al. 2022, Ratten and Jones 2020, Reinartz et al. 2019, Troisi et al. 2023). Source: Authors' own creation.

4. Discussion and Findings

In order to fulfil RQ1, we utilized information from the SCOPUS database on publications across different years and topics and conducted several bibliometric studies. For RQ2, we utilized co-occurrence and cluster analysis, specifically bibliographic coupling.

4.1. What Has the Literature Advanced to Date Regarding Digital Transformation in Terms of Value Creation and Management Strategy (RQ1)?

This subsection synthesizes the findings from the results to address RQ1: What has the literature advanced to date regarding digital transformation in terms of value creation and management strategy? The discussion integrates insights from the trends, geographic distribution, sources, and authorship analysis, revealing key patterns and implications for strategic management in digital transformation.

4.1.1. Publication and Citation Trends

The substantial increase in publications since 2020 underscores the growing recognition of digital transformation as a critical area of research in strategic management and value creation. The sharp rise in citations highlights the relevance and impact of this topic on contemporary academic discourse. The concentration of academic publications in a set of reference journals reiterates these channels' assumed central and critical role in disseminating cutting-edge research on digital transformation. The growth of publications has been very significant, which will be related to the increase in business and academic awareness about the potential of digital technologies.

4.1.2. Geographic Distribution and Collaboration

The bibliographic coupling analysis by countries reveals a solid European presence, particularly in Italy, Germany, and the United Kingdom, which dominate the research landscape in this area. The clustering of these countries suggests robust research networks and collaborations that may be driving innovation and thought leadership in digital transformation. The limited contributions from regions like South America and Africa highlight a significant geographical gap in the research. This underrepresentation may indicate that the challenges and opportunities of digital transformation in these regions are not being fully explored, potentially limiting the global applicability of current research findings.

4.1.3. Analysis by Sources

The analysis of sources indicates that journals with the highest total link strength, such as the International Journal of Innovation and Technology Management and IEEE Transactions on Engineering Management, play a pivotal role in shaping the discourse on digital transformation. Interestingly, the most influential sources are not necessarily the most cited, suggesting that newer or more specialized journals contribute significantly to the field, even if their overall citation counts are lower. The diversity of sources across the four identified clusters further emphasizes the interdisciplinary nature of digital transformation research, which spans management, technology, and innovation domains.

4.1.4. Analysis by Authors

The author analysis reveals a concentrated cluster of influential researchers, including Francesco Ciampi, Stefano Demi, Alessandro Magrini, Giacomo Marzi, and Armando Papa, who have significantly contributed to the digital transformation literature. The strong bibliographic coupling among these authors suggests a cohesive body of work likely to shape future research in this area. The relatively smaller size of this central cluster, coupled with its high citation count and link strength, indicates that a few key scholars are leading the discourse, potentially driving the research agenda and influencing the strategic management field.

4.2. What Are the Main Research Topics Concerning Digital Transformation Regarding Organisations' Value Creation and Management Strategies (RQ2)?

4.2.1. Topics and Common Keywords

Analyzing the co-occurrence of keywords (Table 3) in the context of DT, value creation, and strategy highlights several significant findings. Table 5 shows the four clusters obtained. It is interesting to note that the search terms stated in this study, "Digital Transformation" AND "Value Creation" AND "Strategy*", appear associated with the clusters with the highest average total link (cluster 2–94, cluster 4–61) above the average value of total link strength, which is 60.2. Also, the keyword "management" appears in cluster 4 as the keyword "strategies", with the cluster's second highest total link strength, allowing the association of the terms "management" and "strategy".

Table 5 and Figure 7 identify the keywords and clusters representing the main research topics concerning digital transition regarding organizations' value creation and management strategies. Figures 9–11 show the details of the connections between the main words of this study used in WoS and the other keywords determined from the co-occurrence study.

Value Creation: This term is closely linked with keywords like "innovation" (27 occurrences, total link strength of 114) and "technology" (15 occurrences, total link strength of 89), underlining the idea that, in today's digital perspective, value creation heavily relies on the point of innovation and the integration of emerging technologies. Another fundamental concept is the "dynamic capabilities" (16 occurrences, total link strength of 96), which also plays a crucial role, indicating that organizations should develop and adapt capabilities in a digital world.

Strategy: The keyword "strategy" (24 articles, total correlation strength 125) is closely related to "management" (16 articles, total correlation strength 82) and "performance"

(15 articles, total correlation strength 73). This suggests that strategic approaches in the DT process involve rethinking and realigning business models and management practices. The linkage with “competitive advantage” (6 occurrences, total link strength of 28) and “firm performance” (6 occurrences, total link strength of 32) further indicates that effective strategies are those that enhance a firm’s competitive positioning and performance through digital initiatives.

Digital Transformation: The term that ranked highest in the volume of occurrences was “digital transformation” (51, total link strength of 244), which is embedded with value creation (35 occurrences, total link strength of 173) and “strategy” (24 occurrences, total link strength of 125). This connection underscores that DT is a technological shift and a strategic imperative that drives new ways of creating value within organizations. The presence of terms like “business model” and “dynamic capabilities” about DT in the context of DT implies that firms should reinvent their business models and reconfigure their dynamic capabilities to survive/recap future challenges within a digitally transformed reflectance.

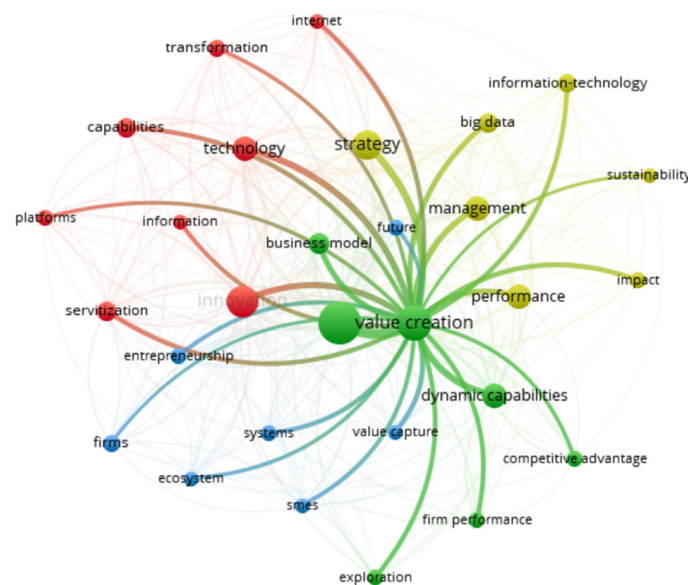


Figure 9. Co-occurrence analysis by search term “Value Creation”. Source: Authors’ own creation.

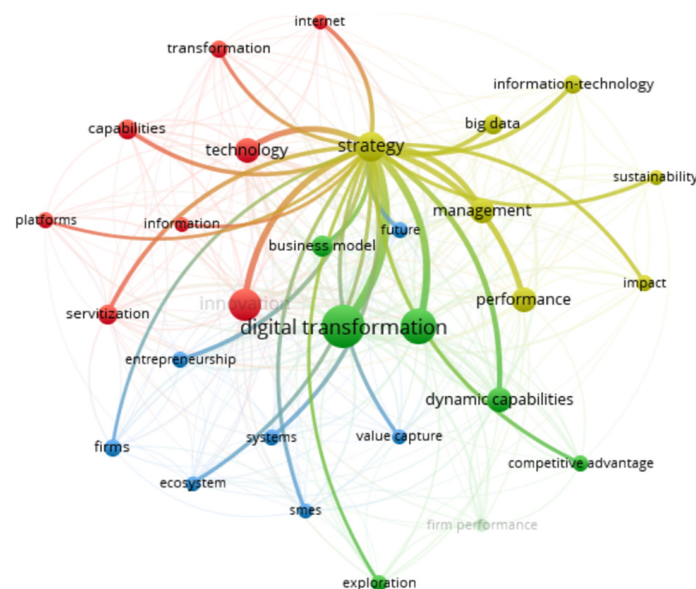


Figure 10. Co-occurrence analysis by search term “Strategy”. Source: Authors’ own creation.

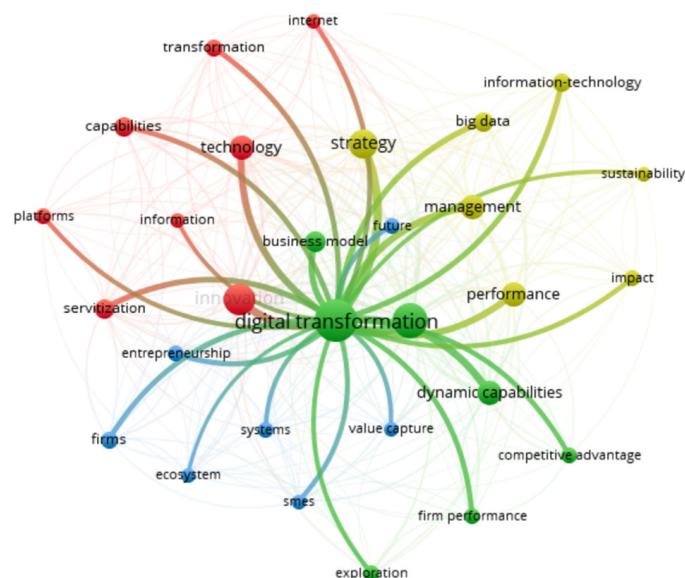


Figure 11. Co-occurrence analysis by search term “Digital Transformation”. Source: Authors’ own creation.

4.2.2. Cluster Analysis: Bibliographic Coupling

A content analysis was wrought to better perceive central research themes concerning DT regarding organisations’ value creation and management strategies. Each author independently reviewed the full text of the papers to identify the research focus within each cluster, which had been defined through bibliographic coupling analysis using VOSviewer. The final cluster configuration for these research areas was determined after a brainstorming session and a collaborative content analysis:

- Strategic Management in Digital Transformation of Organizations;
- Emerging Trends in Digital Entrepreneurship and Sustainability;
- Digital Capabilities and Business Model Innovation;
- Digitalization and Transformation of SMEs;
- Value Creation through Innovation and Digital Transformation.

Cluster 1—Strategic Management in Digital Transformation of Organizations

In the Strategic Management in Digital Transformation of Organizations cluster, a scenario is sketched where organisations face significant challenges in the digital transformation era. The key contributions provide a comprehensive overview of strategic management in the digital transformation of organisations and are described as follows.

[Alamäki and Korpela \(2021\)](#) highlight the shift of business-to-business (B2B) sales to a value-oriented sales approach, focusing on digital co-creation to meet buyer needs and enhance the sales environment. [Browder et al. \(2022\)](#) emphasise the importance of embracing collective learning and experimentation approaches when utilising big data analytics (BDA) for innovation, advocating for an emphasis on collaboration and inter-organisational processes to drive value creation in strategy. The authors believe that the ambiguity of BDA innovation leads to a mindset of learning through collaborative experimentation to generate value. [Burström et al. \(2021\)](#) emphasise the significance of incorporating AI-driven business model innovation into organisational strategy, highlighting the integration of AI capabilities in areas like forecasting and monitoring control within business applications. They discuss the need for AI business-model innovation to be aligned with ecosystem innovation, and that incumbents may use an ecosystem reconfiguration strategy in the short term. [Cao \(2021\)](#) argues about data-management techniques and AI implementation in the retail sector. The author lists five main AI-driven data-management strategies—customer service, physical and virtual store management, supply chain management, marketing management,

and cybersecurity and risk management—and recommends adjusting business procedures for better strategic decision-making and implementation. [Das and Dey \(2021\)](#) suggest a strategic framework for incorporating digitalisation into multinational businesses. Their study provides insights into strategic decision-making concerning technology adoption, partner selection, and business process reengineering in the context of Industry 4.0.

[Cichosz et al. \(2020\)](#) identify barriers to digital transformation in logistics companies, precisely the intricate nature of the logistics system and inadequate resources. They emphasise the importance of technology in achieving successful DT and suggest that logistics providers concentrate on choosing suitable technology and ensuring that technological choices align with the organisation's overall strategy. [Holopainen et al. \(2023\)](#) collected empirical data on value c, determining that alterations in the competitive landscape greatly influence organisational strategies and methods for creating value. The authors make the case that the transformation's strategic focus must surpass a specific threshold in order to function effectively as a mechanism for creating value; shifts in the competitive landscape influence the trajectories of digital transformation; and customer demand influences how value is created in digital transformation, contingent on the essential value creation path. Balancing traditional business practices with digital transformation dictates the value created in this process.

[Kauffman et al. \(2010\)](#) examine the strategic significance of adaptability in manufacturing and distribution within the e-commerce and hospitality sectors to cater to various consumer requirements and improve value generation within commercial networks. The authors use economic principles to describe when business networks form and can maintain their ability to create value. Additionally, they explore the strategic advantages linked to creating value through business networks and fair distribution of value to enhance the long-term viability of business networks. Formulate a series of hypotheses and use various case studies from the travel and hospitality sector to confirm their theoretical ideas on creating value through strategic business networks. [Klos et al. \(2023\)](#) argue that having effective leadership, such as a Chief Digital Officer, is essential for improving the success of business model transformation by directing the digital strategy. They introduce a framework for transforming digital business models, focusing on value proposition, creation, and capture. Their research shows that changing how a company operates is most successful when overseen by one individual, specifically the Chief Digital Officer. [Margherita and Braccini \(2023\)](#) examine sustainability in Industry 4.0, suggesting that organisations should prioritise a model centred on workers to utilise technologies sustainably and effectively.

[Olsson and Bosch \(2020\)](#) conduct qualitative research on the transition of companies in the embedded systems industry from a focus on products to a focus on software, data, and AI. They offer a decision framework that assists embedded systems companies in the software industry in successfully navigating digital transformation. To achieve this objective, the authors introduce three models that offer the technical details of the strategic decision framework. Additionally, they summarise the strategic options that current players and newcomers can utilise when old technologies become commoditised and new technologies emerge. [Reinartz et al. \(2019\)](#) study how digital technologies affect the retail value chain, showing that they undermine traditional retail roles and find new ways to value creation, like automating marketing processes, personalising marketing using customer data, and incorporating products and communications into customer habits with digital tools.

Finally, [Tawaststjerna and Olander \(2021\)](#) analyse the essential elements for success in emerging digital business ecosystems. They identify standard rules—practices, principles, guidelines, tools, agreements, and boundaries—as facilitators for work within an ecosystem. From a strategic perspective, they suggest that managers use this study to enhance their understanding of digital business ecosystem management.

Considering the previous information, the key discoveries of this cluster are outlined. The present cluster emphasises the strategic management aspects of DT within organisations. Key research contributions highlight the challenges and strategic imperatives

companies face as they undergo digital transitions. Several studies focus on integrating digital technologies into traditional business models, where AI-based innovations, BDA, and digital co-creation activities drive value creation. Strategic alignment between technological advancements and organisational goals is crucial, as explored in various industries, including retail, B2B sales, logistics, and the broader e-commerce landscape. The literature also points to the importance of leadership roles, such as Chief Digital Officers, in guiding these transformations and ensuring that digital strategies enhance overall organisational performance.

Cluster 2—Emerging Trends in Digital Entrepreneurship and Sustainability

The Emerging Trends in Digital Entrepreneurship and Sustainability cluster examines the convergence of virtual entrepreneurship and sustainability, highlighting the emergence of the latest organisations and digital technologies to deal with urgent social and environmental demands. The papers in this cluster explore the evolving dynamics of social entrepreneurship, the impact of digital systems in promoting sustainable practices, and the capability of those solutions to enhance financial inclusion and environmental responsibility. The key contributions are related as follows.

[Abiodun et al. \(2023\)](#) present a theoretical model outlining the essential technological and organisational characteristics needed to create organisational value. This research emphasises the importance of intelligence, simulation, and data-management capabilities for enterprises to navigate the digital transformation landscape successfully. By developing these capabilities, businesses can enhance their operational efficiency and sustainability, aligning with the cluster's theme of integrating digital innovation and sustainable practices. Examining digitalisation strategies in manufacturing companies ([Björkdahl 2020](#)) and the significance of digital advisors ([Cozmiuc and Pettinger 2021](#)) highlight the tangible impacts of DT in practical situations. In the meantime, examining top digital consulting firms such as PWC, Siemens, and Oracle showcases the methods and instruments employed to assist companies in navigating DT, guaranteeing value creation and customer satisfaction. These researches emphasise the importance of strategic management and digital technologies in promoting sustainable business practices, supporting the cluster's attention to emerging digital entrepreneurship and sustainability trends.

The study on the effects of dynamic managerial capabilities on digital firms' innovativeness ([Heubeck and Meckl 2022](#)) provides empirical evidence on how managers' dynamic capabilities, encompassing human capital, social capital, and cognition, are critical for driving innovation in the digital economy. This research highlights the necessity of a comprehensive portfolio of managerial capabilities to foster innovativeness, contrasting with findings from non-digital industries and expanding the theoretical framework of dynamic managerial capabilities to digital firms. Additionally, the meta-analysis on factors influencing companies' positive financial performance in the digital age ([Kasperovica and Lace 2021](#)) underscores the importance of both financial and non-financial factors in developing sustainable, profitable businesses. By applying the universal business model to assess these factors, the study emphasises the need for holistic business model transformation to achieve financial success, particularly for small- and medium-sized enterprises (SMEs). This issue aligns with the study on SMEs' DT competencies in South Korea ([Min and Kim 2021](#)), demonstrating how digital competencies and platform strategies contribute to platform empowerment and business success.

The research by [Müller et al. \(2021\)](#) highlights how technological advancements require established companies to redesign their business models, emphasising the importance of absorptive capacity and innovation strategy in designing Industry 4.0 business models. By analysing data from German industrial enterprises, the study reveals that the acquisition and assimilation of external knowledge are essential for engaging in exploratory innovation strategies, influencing business model designs that are either efficiency-centred or novelty-centred. The authors also differentiate the impacts on SMEs and large enterprises, providing valuable managerial insights for adapting business models to the demands of Industry

4.0. Furthermore, delving into sports entrepreneurship in the DT context highlights the increasing overlap of digital technologies and value-creation endeavours in sports, as noted by [Ratten and Jones \(2020\)](#). The study suggests future research paths and managerial implications that highlight the interplay between innovation in sports entrepreneurship and the integration of digital technologies. Additionally, the research by [Rusly et al. \(2021\)](#) thoroughly analyses the internal factors that influence digital transformation in small and medium enterprises as they adapt to Industry 4.0. The authors explore DT's impact on sports entrepreneurship by encouraging innovation and value creation. The research uses qualitative case studies from Malaysia to pinpoint four essential aspects that influence the digital adaptation strategies of SMEs: business strategy, value creation, digital leadership, and digital talent.

Considering the previous discussion, the main findings are now summarised. The present cluster explores the interface of digital entrepreneurship with sustainability, emphasising how digital technologies reshape business in light of rising social and environmental demands. The cluster includes research areas on the development of smart capabilities, ways digital platforms foster financial inclusion, and options that balance efficiency with industrial growth in the light of digitisation. The cluster also emphasises the critical role of dynamic managerial capabilities in driving innovation, particularly in SMEs, where digital adaptation and sustainability practices are increasingly seen as key to long-term success. The findings suggest that digital transformation efforts in entrepreneurship are increasingly aligned with broader sustainability goals, leading to new business models and practices that prioritise environmental and social outcomes alongside financial performance. These studies collectively contribute to understanding how digital entrepreneurship and sustainability are evolving, highlighting the significance of absorptive capacity, innovation strategy, and digital adaptation in creating value in the digital era.

Cluster 3—Digital Capabilities and Business Model Innovation

The Digital Capabilities and Business Model Innovation cluster explores digital capabilities and their role in driving business model innovation. The articles in this cluster investigate how organisations leverage big data analytics, dynamic management capabilities, and digital platforms to transform their business models and create value in an increasingly digital world. The main contributions are outlined as follows.

Research conducted by [Ciampi et al. \(2021\)](#) suggests that big data analytics capabilities (BDAC) not only directly influence business model innovation (BMI) but also indirectly impact entrepreneurial orientation (EO). BDAC influences a company's strategic logic and objectives, significantly creating value for companies and their stakeholders. [Cozzolino et al. \(2018\)](#) highlight how traditional media companies change their business strategies to deal with digital disruptions. It examines the drivers and barriers of business model adaptation and the shift from closed to open, platform-based business models, thereby contributing to the literature on disruption and business models. Furthermore, exploring the productivity paradox in digitalised production by [Dold and Speck \(2021\)](#) provides insights into the complexities of value creation and delivery within digital ecosystems. This study presents a grounded theory model, as well as a toolbox to address organisational uncertainty and leadership disconnects that hinder the holistic adoption of digital production technologies. [Jocovski et al. \(2020\)](#) examine mobile payment platforms from a business model viewpoint and highlight key tactics like revising retailer relationships, establishing partnerships within the payment ecosystem, and incorporating mobile technology at the front end for platform expansion. This study emphasises the need for mutual adaptation of business models among platform-associated actors to enhance the diffusion and adoption of new technologies. [Klimanov et al. \(2021\)](#) highlight the importance of digital elements in improving business strategies amid crises such as COVID-19 within the pharmaceutical sector. They introduce a model for business model innovation (BMI) and illustrate its use in different sectors, illustrating the added value of DT in the healthcare industry. [Lichtenthaler \(2022\)](#) discusses how shared value innovation connects competition with

societal objectives in the digital age. It presents a process model for enacting shared value innovations in various categories, focusing on economic and societal advantages. Moreover, research conducted by [Lichtenthaler \(2017\)](#) emphasises the opportunity for creating shared value innovation by enhancing data-management efficiency. It addresses the importance of efficiency in digital transformation, especially post-pandemic, and outlines a process for implementing these innovations to enhance firm performance and create new market opportunities. [Rohn et al. \(2021\)](#) investigate the critical factors for success in platform-based business models, emphasising their network connectivity and ability to value creation within digital ecosystems. Through qualitative analysis in the metal and steel industry, six critical success factors are identified, expanding upon existing literature on business model design. [Tavoletti et al. \(2022\)](#) examine the impact of BMI on global management consulting firms (MCFs) as they go through digital transformation. They outline how MCFs alter their business models to offer complete digital solutions, focusing on creating value, developing ideas, and embracing new technologies. [Troisi et al. \(2023\)](#) discover that digitalisation is causing a movement towards data-driven business models (DDBMs) to enhance value creation and innovation within the hospitality sector. Through empirical research with hospitality managers, critical dimensions of data-driven redefinition of business models are revealed, emphasising the centrality of strategy in driving data-driven innovation.

Considering the previous discussion, the main findings are resumed. This cluster centres on the role of digital capabilities in driving business model innovation. The research underlines how an organisation utilises BDA, digital platforms, and dynamic management capabilities to innovate and alter the business model. This cluster outlines the consequence of digital disruption on conventional industries, the movement toward platform-based business models, and the centrality of strategic alignment within digital ecosystems. The literature also addresses the challenges of implementing digital innovations, particularly regarding organisational uncertainty and the need for leadership to navigate these complexities. The cluster underscores the importance of shared value innovation, where competitiveness is linked to societal goals. It highlights how digital transformation can enhance value creation across various sectors, including healthcare, media, and manufacturing.

These studies collectively illustrate the critical role of strategic management and digital technologies in fostering sustainable business practices and driving innovation in business models. They highlight the significance of dynamic capabilities, strategic resource allocation, and comprehensive business model transformation in navigating the digital economy, justifying the cluster's focus on emerging digital entrepreneurship and sustainability trends.

Cluster 4—Digitalization and Transformation of SMEs

Research conducted by [Ciampi et al. \(2021\)](#) suggests that big data analytics capabilities (BDAC) not only directly influence business model innovation (BMI) but also indirectly impact entrepreneurial orientation (EO). BDAC influences a company's strategic logic and objectives, significantly creating value for companies and their stakeholders. [Cozzolino et al. \(2018\)](#) highlight how traditional media companies change their business strategies to deal with digital disruptions. It examines the drivers and barriers of business model adaptation and the shift from closed to open platform-based business models, thereby contributing to the literature on disruption and business models. Furthermore, exploring the productivity paradox in digitalised production by [Dold and Speck \(2021\)](#) provides insights into the complexities of value creation and delivery within digital ecosystems. This study presents a grounded theory model and a toolbox to address organisational uncertainty and leadership disconnects that hinder the holistic adoption of digital production technologies. [Jocovski et al. \(2020\)](#) examine mobile payment platforms from a business model viewpoint and highlight key tactics like revising retailer relationships, establishing partnerships within the payment ecosystem, and incorporating mobile technology at the front end for platform expansion. This study emphasises the need for mutual adaptation of business models among platform-associated actors to enhance the diffusion and adoption

of new technologies. [Klimanov et al. \(2021\)](#) highlight the importance of digital elements in improving business strategies amid crises such as COVID-19 within the pharmaceutical sector. They introduce a model for business model innovation (BMI) and illustrate its use in different sectors, illustrating the added value of DT in the healthcare industry. [Lichtenthaler \(2022\)](#) discusses how shared value innovation connects competition with societal objectives in the digital age. It presents a process model for enacting shared value innovations in various categories, focusing on economic and societal advantages.

Moreover, research conducted by [Lichtenthaler \(2017\)](#) emphasises the opportunity for creating shared value innovation by enhancing data-management efficiency. It addresses the importance of efficiency in digital transformation, especially post-pandemic, and outlines a process for implementing these innovations to enhance firm performance and create new market opportunities. [Rohn et al. \(2021\)](#) investigate the critical factors for success in platform-based business models, emphasising their network connectivity and ability to value creation within digital ecosystems. Through qualitative analysis in the metal and steel industry, six critical success factors are identified, expanding upon existing literature on business model design. [Tavoletti et al. \(2022\)](#) examine the impact of BMI on global management consulting firms (MCFs) as they go through digital transformation. They outline how MCFs alter their business models to offer complete digital solutions, focusing on creating value, developing ideas, and embracing new technologies. [Troisi et al. \(2023\)](#) discover that digitalisation is causing a movement towards data-driven business models (DDBMs) to enhance value creation and innovation within the hospitality sector. Through empirical research with hospitality managers, critical dimensions of data-driven redefinition of business models are revealed, emphasising the centrality of strategy in driving The Digitalization and Transformation of SME cluster focuses on small- and medium-sized enterprises as it explores the distinct challenges and opportunities related to digitalisation and transformation. The articles inside this cluster observe elements influencing SMEs' adoption of digital technologies, the role of entrepreneurial persistence in using digital transformation, and the potential profits of digital platforms for increasing market competitiveness. By addressing issues such as resource constraints, regulatory compliance, and skill development, this cluster offers practical guidance for SMEs navigating the complexities of digitalisation and leveraging technology for sustainable growth. The main contributions are sketched as follows.

The research by [Anwar et al. \(2022\)](#) sheds light on the transformative potential of digital capabilities in driving internationalisation and business model innovativeness within SMEs. By scrutinising the mediating role of business model innovativeness, this author underscores the indirect yet profound impact of digital knowledge-sharing capability, digital business capability (DBC), and digital platform capability on SMEs' internationalisation efforts, offering valuable insights for managers navigating the complexities of global markets. Similarly, the bibliometric analysis conducted by [Chawla and Goyal \(2022\)](#) illuminates the evolving landscape of DT literature, unravelling emergent research streams and intellectual structures that underscore the paradigmatic shift towards digitally transformed business models. The study conducted by [Chen and Tian \(2022\)](#) employs a configurational framework to explore the complexity of successful DT initiatives, highlighting the interplay between environmental uncertainty, resource orchestration, and DT strategies. This research contributes to the literature on digital transformation, providing practical implications for companies grappling with the challenges of digitisation. [Christofi et al. \(2023\)](#) explore how entrepreneurial persistence and market-sensing dynamic capability are crucial in promoting DT and BMI in SMEs. This study demonstrates how strategic leadership attributes and market understanding can assist SMEs in embracing digital tools and revolutionising their business strategies, offering valuable advice for owners and managers navigating the digital landscape. In their study, [Dąbrowska et al. \(2022\)](#) propose an in-depth research plan to explore digital technology's social and economic effects on individuals, organisations, ecosystems, and societies. Presenting a nuanced framework that accounts for both the high quality and negative factors of digital transformation provides

valuable perspectives for researchers, managers, and policymakers navigating the intricate digitalisation landscape.

Furthermore, [Fernandes et al. \(2023\)](#) explore the intersection of virtual entrepreneurship and sustainability, revealing crucial topics and potential research directions in this changing field. This research delivers a structured literature overview through a meticulous bibliometric analysis, emphasising the importance of innovation, digital transformation strategies, and sustainability objectives in shaping entrepreneurial ventures. [Florek-Paszkowska et al. \(2021\)](#) explore the key factors that lead to success in business innovation during the difficulties of digital transformation and volatile environments. By amalgamating research findings from diverse countries and industries, the authors underscore the significance of adaptive approaches and the interplay between human-centric and technology-driven factors in fostering business resilience and stability. [Garzoni et al. \(2020\)](#) emphasise promoting DT within SMEs, emphasising Southern Italy. Through a four-level approach, the authors identify essential catalysts for digitisation. On the other hand, practical insights are identified for SMEs seeking to strengthen their digital capabilities.

Considering the previous discussion, the main finding has now resumed. This cluster addresses identifying specific challenges and opportunities related to the digital transformation issue facing SMEs. It covers the potential factors influencing the adoption of digital technologies, the role of entrepreneurial persistence, and how digital platforms shape market competitiveness. The studies under this cluster highlight strategic leadership, digital knowledge-sharing, and developing digital capabilities as critical factors in supporting internationalisation and business model innovation.

The findings suggest that SMEs must navigate resource constraints, regulatory compliance, and skill-development challenges to fully leverage digital technologies for sustainable growth. The cluster also highlights practical strategies for SMEs to enhance their digital capabilities and adapt to the rapidly changing digital landscape. Together, these studies broaden the central theme of the cluster by highlighting various aspects of digitalisation and transformation within SMEs, providing valuable perspectives for academics and professionals.

Cluster 5—Value Creation Through Innovation and Digital Transformation

The Value Creation through Innovation and Digital Transformation cluster focuses on value generation through innovation and digital evolution across diverse sectors and industries. Within this cluster, articles delve into practices like omnichannel strategies to enrich customer value, the emergence of social entrepreneurship in the digital era, and the factors contributing to practical digital transformation endeavours. By emphasising the interplay between technology, strategy, and societal influence, this cluster underscores the significance of embracing innovation and digitalisation as catalysts for value generation and competitive edge in today's swiftly evolving business environment. The key contributions are identified as follows.

[Climent et al. \(2022\)](#) explore how businesses can utilise an evolutionary perspective to handle the complexities of omnichannel practices to create value. Through a literature review on multichannel and omnichannel practices, the study identifies four sources of value creation based on the business model concept, a multi-actor customer conception, and an evolutionary notion of these practices, offering a conceptual map for future research and an audit tool to help managers assess their firm's omnichannel situation. [De Bernardi et al. 2022](#) advocate for comparing academic and non-academic information on social entrepreneurship, emphasising how social entrepreneurship can address societal issues by utilising entrepreneurial methods to create social and economic value. Using bibliometric analysis and web crawling techniques, the study maps the conceptual structure of social entrepreneurship at academic and non-academic levels, identifying four different thematic clusters. This analysis provides a foundation for future studies at the intersection of social entrepreneurship, digital transformation, performance measurement, entrepreneurial ecosystems, and ethics, broadening the discussion on social innovation and value creation in a digital context. [Lichtenthaler \(2020\)](#) addresses the building blocks of successful DT,

complementing technology issues with market-related issues. Based on the innovation-based view and a conceptual framework of technology-push and market-pull effects, the study presents critical components for strategic digital transformation. By highlighting the limitations of current approaches and suggesting implementation steps, the study contributes to research on digital transformation and artificial intelligence, as well as managing strategic renewal in light of technological change, promoting a more holistic understanding of value creation through digital innovation. Furthermore, [Omrani et al. \(2022\)](#) examine the drivers of DT in SMEs using the technology–organisation–environment framework. The empirical analysis of data collected from SMEs within and outside the European Union reveals that the technology context, IT infrastructure, digital tools, and existing levels of innovation are the main drivers of digital technology adoption. This study provides practical guidance for managers on assessing their firm’s technological readiness and developing an integrated strategic approach before adopting new digital technologies, emphasising the importance of organisational factors in value creation. Lastly, [Taneja et al. \(2023\)](#) explore FinTech implementation as a strategic step for sustainability in today’s changing landscape, analysing the linkages between process-related indicators and sustainable performance outcomes resulting from FinTech implementation. Using a structural model based on the technology–organisation–environment framework, the research evaluates a wide range of survey data, emphasising the importance of sustainable technology focus, effectiveness, and eco-friendly performance in creating value within organisations, utilising a framework grounded in technology, organisation, and environment.

Considering the previous discussion, the main findings are resumed. The present cluster focuses on organisations creating value through innovation and DT across various sectors. The research delves into practices such as omnichannel strategies, social entrepreneurship, and the factors contributing to successful DT efforts. The studies emphasise integrating technology with strategic management to create competitive advantages and meet societal needs. The research underscores the integration of technological innovation into strategic management for sustainable competitive advantage and fulfilment of societal needs. The literature focuses on how digital innovation, especially in FinTech and SMEs, delivers value through improved efficiency, sustainability, and customer engagement. The study also considers how organisational elements, like IT infrastructure settings or innovation rates, can enable the spread of digital technology. Finally, it argues that business leaders should ensure that these efforts to hasten technological convergence are consistent with broader corporate and strategic goals.

5. Research Implications, Limitations, and Future Research Trends

The results of this research offer important insights into research questions relating to the intersection between digital transformation (DT), value creation, and management strategy. Bibliometric analysis reveals a significant growth in academic and practical interest in these topics in recent years, indicating that DT is recognised not only as a technological change but as a critical factor that reshapes contemporary management practices ([Cichosz et al. 2020](#); [Climent et al. 2022](#)). This reconfiguration suggests that organisations that integrate digitalisation into their strategies can improve operational efficiency and innovate in creating value, responding to new consumer expectations and market demands ([De Bernardi et al. 2022](#)).

So far, the literature has advanced in understanding how TD impacts value creation and strategic management. Previous studies emphasise the need to align digital capabilities and organisational objectives, highlighting the importance of strategic leadership that can guide companies during the digital transition ([Lichtenthaler 2020](#)). This approach is fundamental, as organisations that need to adapt to changes driven by digitalisation risk losing relevance in the market. However, research gaps still need to be addressed, especially about sectoral and regional particularities in applying DT ([Omrani et al. 2022](#)).

The five thematic clusters identified in this study contribute significantly to answering the RQ around DT, value creation, and strategy. Each cluster addresses a crucial dimension

that connects these three concepts; for example, the cluster investigating “Value Creation through Innovation and Digital Transformation” analyses practices such as omnichannel strategies and social entrepreneurship, which are fundamental to understanding how digitalisation can enhance value creation in different organisational contexts (Taneja et al. 2023). These studies provide a basis for exploring synergies between digitalisation, innovation, and organisational performance.

The transformation of strategy and value creation due to digitalisation is a complex phenomenon that deserves attention. Digitalisation requires organisations to rethink their traditional strategies and develop new business models that are agile and responsive to changing customer preferences (Burström et al. 2021). With this, value creation is reconfigured. Companies that adopt innovative digital practices tend to optimise their operations, engage more deeply with their customers, and adopt sustainable approaches that can result in competitive advantage (Abiodun et al. 2023).

The ongoing process of digitalisation results in constant changes in strategy and value creation. Organisations that adopt TD are more likely to adapt their management strategies, enabling them to excel in a dynamic business environment (Min and Kim 2021). This development is crucial for companies to stay afloat and succeed in a landscape where digital advancement is becoming increasingly necessary.

The managerial implications of this research are significant. Understanding the interconnection between digital transformation, value creation, and strategy allows organisational leaders to adopt more integrated approaches to managing their operations. Research suggests that companies should align their digital initiatives with strategic and social objectives, promoting innovation and adaptation to market demands (Lichtenthaler 2020; Taneja et al. 2023). Furthermore, organisations can improve their competitiveness and sustainability by recognising the importance of developing digital capabilities and innovative business models, especially in contexts such as SMEs (Min and Kim 2021; Omrani et al. 2022).

Studies also emphasise fostering strategic leadership and change management as crucial for digital transformation success (Cichosz et al. 2020). By implementing value co-creation strategies and collaborative learning approaches, companies can meet customer expectations and respond more effectively to the complexities of the digital marketplace (Alamäki and Korpela 2021; Browder et al. 2022). Therefore, managers must be aware of emerging trends and consider digital transformation a technical issue and a central factor for creating value and strategic success.

While this research provides insights into the intersection between digital transformation, value creation, and management strategy, it also has some limitations that must be recognised. The bibliometric analysis was predominantly based on journal publications in English, which may have excluded relevant research from non-English-speaking regions, such as South America and Africa, limiting the scope of the results and the generalizability of the conclusions.

The search focused on articles published in the last 3 years, which, although capturing recent trends, may have yet to fully reflect the historical evolution of these concepts and their interrelationships. Another limitation concerns the heterogeneity of definitions and approaches around digital transformation, which can vary significantly between sectors and organisational contexts. This can make comparing studies and applying findings in practical scenarios difficult.

The research should have explored the barriers and challenges organisations face when implementing digital transformation strategies, which could offer a more comprehensive understanding of the factors that affect value creation in a digital environment.

Future research should analyze how DT can influence strategic management so that organizations can take advantage of technological opportunities to gain competitive and sustainable advantages in the market. Understanding how strategic management can evolve to incorporate digital technologies will be crucial for developing resilient and innovative business models. Thus, future research should analyze and research the impact of digital transformation on operational processes and strategic management, mainly in

SMEs, and assess how digital transformation strategies, such as operational performance, innovation, and client experience, can contribute to value creation and identify the main challenges and possibilities of implementing digital transformation initiatives and suggest mechanisms to conquer those demanding situations. This includes analyzing the difficulties within organizations, including burdens related to information systems, the time required for implementation, and user acceptance. Finally, it will be essential to explore the role of leadership and change management in effectively driving digital transformation and maximizing value creation.

Considering the five clusters identified in the previous section and the SLR conducted, Tables 6–10 present insights into implications for research and future trends, suggesting concrete activities to guide future investigations.

Table 6. Future Research, Strategic Management in DT of Organizations.

Topic	Focus	Description	Suggested Activities
Value-Based Sales Model	Strategy	Investigate how transforming B2B sales into value-based models, focusing on digital co-creation activities, can enhance alignment with buyer expectations and strengthen the sales ecosystem (Alamäki and Korpela 2021).	Develop case studies on companies that have successfully implemented value-based sales models. Conduct workshops on digital co-creation strategies.
Collaborative Learning with Big Data Analytics (BDA)	Strategy, DT	Explore how fostering collective learning and experimentation in BDA can drive value creation through collaborative and inter-organizational processes (Browder et al. 2022).	Organize webinars on BDA tools and their impact on strategic planning. Create a toolkit for integrating BDA into innovation processes.
AI-Based Business Model Innovation	Strategy, DT	Study how integrating AI functionalities into business models for forecasting and monitoring can influence organizational strategy and reshape business processes (Burström et al. 2021).	Facilitate training sessions on AI applications in business. Develop guidelines for integrating AI into existing business processes.
Strategic Framework for Digitalization in Multinational Businesses	Strategy, DT	Discuss decision-making processes involved in adopting the technology, partner selection, and business process reengineering associated with Industry 4.0 (Margherita and Braccini 2023).	Conduct surveys to assess current technology adoption strategies. Host panel discussions on best practices for Industry 4.0 implementation.
Barriers to DT in Logistics	DT	Identify and address the barriers DT logistics service providers face, focusing on how technology can align with and support organizational strategy (Cichosz et al. 2020).	Perform case studies on logistics companies overcoming DT barriers. Create a checklist for technology alignment in logistics.

Table 7. Future Research, Emerging Trends in Digital Entrepreneurship and Sustainability.

Topic	Focus	Description	Suggested Activities
Technological and Organizational Features for Value Creation	Value Creation	Develop and refine frameworks that identify key features for creating organizational value through smart capabilities, including intelligence, simulation, and data management (Abiodun et al. 2023).	Host workshops on implementing smart technologies in various business functions. Publish a report on smart capabilities in different industries.
Digitalization Strategies in Manufacturing Firms	Strategy, DT	Investigate strategies to overcome challenges in balancing efficiency and growth through digitalization, focusing on long-term DT in manufacturing (Björkdahl 2020).	Create case studies on successful DT in manufacturing. Organize industry-specific conferences on digitalization strategies.

Table 7. Cont.

Topic	Focus	Description	Suggested Activities
Role of Digital Consultants in Transformation	Strategy, DT	Explore and evaluate the frameworks and tools used by leading digital consultants to facilitate DT, ensuring value creation and customer satisfaction (Cozmiuc and Pettinger 2021).	Develop a guide for selecting digital consulting services. Conduct interviews with leading digital consultants to understand their frameworks.
Dynamic Managerial Capabilities and Innovation	Value Creation, Strategy	Examine the role of managerial capabilities in driving innovation within the digital economy and expand the theoretical framework of dynamic managerial capabilities specifically for digital firms (Heubeck and Meckl 2022).	Host webinars on developing managerial capabilities for digital innovation. Create a managerial skills assessment tool for digital firms.
SMEs' DT Competencies	Strategy, DT	Analyze how digital competencies and platform strategies enhance business success and platform empowerment, particularly for SMEs (Min and Kim 2021).	Conduct workshops for SMEs on developing digital competencies. Publish a best practices guide for SMEs in adopting digital platforms.

Table 8. Future Research, Digital Capabilities, and Business Model Innovation.

Table 2021	Focus	Description	Suggested Activities
Big Data Analytics Capabilities (BDAC)	Value Creation	Study how BDAC has a direct and indirect influence on Business Model (BMI) Innovation and Entrepreneurial Orientation (EO) in light of their significant role in value creation (Ciampi et al. 2021).	Conduct a survey to assess the impact of BDAC on business strategies. Develop a case study series on companies leveraging BDAC for innovation.
Adaptation of Business Models in the Media Industry	Strategy, DT	Examine how incumbents in the media industry are transitioning from closed to open platform-based business models in response to digital disruptions (Cuzzolino et al. 2018).	Organize industry workshops on adapting business models in the media sector. Create a white paper on the impact of digital disruptions on media business models.
Productivity Paradox in Digitalized Production	Value Creation	Provide insights into the challenges of value creation and delivery within digital ecosystems, focusing on overcoming organizational uncertainty and leadership disconnects (Dold and Speck 2021).	Develop a framework for overcoming value creation challenges in digital ecosystems. Host a conference on digital ecosystem management.
Mobile Payment Platforms and Business Model Innovation	Strategy	Identify and evaluate critical strategies for achieving growth in digital platforms, including innovative approaches to relationship management and forming strategic partnerships within the payment ecosystem (Jocovski et al. 2020).	Create a guide for building and managing strategic partnerships in digital ecosystems. Conduct a research project on successful digital platform strategies.
Data-Driven Business Models in Hospitality	Strategy, DT	Study how data-driven business models can further value creation and innovation in the hospitality sector, identifying implications of strategic approaches in driving data-driven initiatives forward (Troisi et al. 2023).	Organize seminars on data-driven strategies in hospitality. Develop case studies showcasing successful data-driven innovations in the industry.

Table 9. Future Research, Digitalization, and Transformation of SMEs.

Topic	Focus	Description	Suggested Activities
Digital Capabilities and Internationalisation	Value Creation	Explore how digital capabilities can drive internationalization and BMI within SMEs (Anwar et al. 2022).	Develop a toolkit for SMEs aiming to internationalize using digital technologies. Host a workshop on digital capabilities for global market expansion.
Evolving Landscape of DT Literature	Strategy, DT	Investigate emerging research streams and intellectual structures in DT literature to highlight the evolution towards digitally transformed business models (Chawla and Goyal 2022).	Conduct a survey to identify common digitalization challenges. Publish a guide on balancing efficiency and growth for SMEs.
Complexity of Successful DT	Strategy, DT	Develop and apply a configurational framework to analyze the interplay between environmental uncertainty, resource orchestration, and DT strategies (Chen and Tian 2022).	Develop a best-practices guide for SMEs working with digital consultants. Host webinars on selecting and working with DT consultants.
Role of Entrepreneurial Persistence in SMEs	Value Creation	Examine how entrepreneurial persistence and market-sensing dynamic capabilities can be leveraged to drive DT and BMI in SMEs (Christofi et al. 2023).	Create case studies on successful DTs driven by entrepreneurial persistence. Host seminars on developing market-sensing capabilities.
Digital Adaptation Strategies for SMEs	Strategy, DT	Analyze the internal forces influencing DT in SMEs, with a focus on optimizing business strategy, value creation, digital leadership, and talent management (Florek-Paszkowska et al. 2021).	Develop a comprehensive guide for SMEs on digital adaptation strategies. Conduct workshops on strategic leadership and digital talent management.

Table 10. Future Research, Value Creation Through Innovation, and DT.

Topic	Focus	Description	Suggested Activities
Omnichannel Strategies	Value Creation, Strategy	Investigate how omnichannel strategies can enhance value creation and effectively manage the complexities of customer interactions (Climent et al. 2022).	Host workshops on developing and implementing omnichannel strategies. Create a toolkit for assessing and enhancing omnichannel value creation.
Social Entrepreneurship in the Digital Era	Value Creation	Analyze the impact of social entrepreneurship in tackling societal challenges and generating value through digital innovation (De Bernardi et al. 2022).	Conduct a comparative analysis of social entrepreneurship models. Develop a guide for integrating digital strategies into social entrepreneurship.
Building Blocks of DT	Strategy, DT	Identify and address the critical components necessary for successful DT, focusing on both technology and market-related factors (Lichtenthaler 2020).	Develop a framework for implementing DT strategies. Organize a series of webinars on the building blocks of DT.
Drivers of DT in SMEs	Strategy, DT	Explore the key drivers of DT in SMEs, emphasizing technology adoption, organizational readiness, and innovation capabilities (Omrani et al. 2022).	Conduct a survey to identify DT drivers. Create a guide for SMEs on assessing and leveraging DT drivers.
FinTech Implementation for Sustainability	Value Creation, Strategy	Examine the contribution of FinTech solutions to sustainability and value creation within organizations (Taneja et al. 2023).	Develop case studies on successful FinTech implementations for sustainable outcomes.

6. Conclusions

The bibliometric analysis conducted in this study highlights a significant surge in research activity related to “Digital Transformation”, “Value Creation”, and “Strategy” over

the past 3 years, with a noticeable increase since 2020. This trend underscores the growing academic and practical focus on how DT reshapes strategic management in contemporary organizations. The findings show a concentration of research in top-tier journals and the influence of leading scholars, which further solidifies DT's critical role in modern strategic management. However, the study also uncovers a strong European dominance in research, while regions such as South America and Africa remain underrepresented. This regional discrepancy emphasizes the necessity of more inclusive international research initiatives to address the diverse opportunities and problems that the DT brings in various contexts. One of the results of the analysis is that the analysis of the co-occurrence of keywords reveals a close interconnection between terms such as “digital transformation”, “value creation”, and “strategy”. This indicates that these concepts are increasingly being discussed in tandem, highlighting their collective importance in driving innovation, dynamic capabilities, and strategic rethinking in the digital age, particularly in enhancing organizational performance and competitive advantage.

The literature review identified five key research clusters, each reflecting distinct yet interconnected focus areas within the broader discourse on DT. The review focuses on how digital technologies must align with organizational objectives for which strategic leadership has to be provided to manage the transition in times of digitization. It also highlights how perspectives are changing toward the role of digital capabilities and innovative business models, especially for SMEs.

The study further points out that all aspects of sustainability continue to integrate with the DT agenda, consequently opening ways toward developing new business models focused on both economic outcomes and environmental and social impacts.

Overall, this research systematically consolidates existing knowledge on the intersection of digital transformation, strategic management, and value creation, addressing a significant gap in the literature. The insights derived from this study will enhance our understanding of current research trends and provide a consistent foundation for future investigations, particularly by identifying key research clusters that will guide ongoing and future studies in this dynamic field.

Funding: The research was funded by FCT—Foundation for Science and Technology by I.P., within the scope of the project Ref. UIDB/05583/2020 through Research Centre in Digital Services (CISeD) and the Instituto Politécnico de Viseu.

Data Availability Statement: The raw data supporting the conclusions of this article will be made available by the authors on request.

Acknowledgments: Regarding authors identified by number 2, this work is funded by National Funds through the FCT—Foundation for Science and Technology, I.P., within the scope of the project Ref. UIDB/05583/2020. Furthermore, we would like to thank the Research Centre in Digital Services (CISeD) and the Instituto Politécnico de Viseu for their support.

Conflicts of Interest: The authors declare no conflicts of interest.

References

- Abiodun, Temitayo, Giselle Rampersad, and Russell Brinkworth. 2023. Driving Industrial Digital Transformation. *Journal of Computer Information Systems* 63: 1345–61. [\[CrossRef\]](#)
- Akarsu, Tugra Nazli. 2023. Digital transformation towards a sustainable circular economy: Can it be the way forward? *Journal of Information Technology Teaching Cases* 14: 204388692311780. [\[CrossRef\]](#)
- Akter, Shahriar, Kumar Biswas, Demetris Vrontis, Sir Cary L. Cooper, and Shlomo Y. Tarba. 2023. Mastering digital transformation in workforce management. *Production Planning & Control* 35: 1525–32. [\[CrossRef\]](#)
- Alamäki, Ari, and Pentti Korpela. 2021. Digital transformation and value-based selling activities: Seller and buyer perspectives. *Baltic Journal of Management* 16: 298–317. [\[CrossRef\]](#)
- Anwar, Muhammad, Marc André Scheffler, and Thomas Clauss. 2022. Digital Capabilities, Their Role in Business Model Innovativeness, and the Internationalization of SMEs. *IEEE Transactions on Engineering Management* 71: 4131–43. [\[CrossRef\]](#)
- Appio, Francesco Paolo, Federico Frattini, Antonio Messeni Petruzzelli, and Paolo Neirotti. 2021. Digital Transformation and Innovation Management: A Synthesis of Existing Research and an Agenda for Future Studies. *Journal of Product Innovation Management* 38: 4–20. [\[CrossRef\]](#)

- Björkdahl, Joakim. 2020. Strategies for Digitalization in Manufacturing Firms. *California Management Review* 62: 17–36. [\[CrossRef\]](#)
- Browder, Russell E., Hope Koch, Anna Long, and James M. Hernandez. 2022. Learning to Innovate with Big Data Analytics in Interorganizational Relationships. *Academy of Management Discoveries* 8: 139–66. [\[CrossRef\]](#)
- Burström, Thommie, Vinit Parida, Tom Lahti, and Joakim Wincent. 2021. AI-enabled business-model innovation and transformation in industrial ecosystems: A framework, model and outline for further research. *Journal of Business Research* 127: 85–95. [\[CrossRef\]](#)
- Caldas, Dinis, Estrela Ferreira Cruz, and António Miguel Rosado da Cruz. 2020. Time2Play—Multi-Sided Platform for Sports Facilities: A Disruptive Digital Platform. *International Conference on Enterprise Information Systems* 2: 269–77. [\[CrossRef\]](#)
- Callon, M., J. P. Courtial, and F. Laville. 1991. Co-word analysis as a tool for describing the network of interactions between basic and technological research: The case of polymer chemistry. *Scientometrics* 22: 155–205. [\[CrossRef\]](#)
- Cao, Lanlan. 2021. Artificial intelligence in retail: Applications and value creation logics. *International Journal of Retail & Distribution Management* 49: 958–76. [\[CrossRef\]](#)
- Chawla, Raghu Nandan, and Praveen Goyal. 2022. Emerging trends in digital transformation: A bibliometric analysis. *Benchmarking: An International Journal* 29: 1069–112. [\[CrossRef\]](#)
- Chen, Hansong, and Zhen Tian. 2022. Environmental uncertainty, resource orchestration and digital transformation: A fuzzy-set QCA approach. *Journal of Business Research* 139: 184–93. [\[CrossRef\]](#)
- Christofi, Michael, Huda Khan, Nadia Zahoor, Elias Hadjielias, and Shlomo Tarba. 2023. Digital Transformation of SMEs: The Role of Entrepreneurial Persistence and Market Sensing Dynamic Capability. *IEEE Transactions on Engineering Management* 71: 13598–615. [\[CrossRef\]](#)
- Ciampi, Francesco, Stefano Demi, Alessandro Magrini, Giacomo Marzi, and Armando Papa. 2021. Exploring the impact of big data analytics capabilities on business model innovation: The mediating role of entrepreneurial orientation. *Journal of Business Research* 123: 1–13. [\[CrossRef\]](#)
- Ciasullo, Maria Vincenza, Raffaella Montera, Francesco Mercuri, and Shame Mugova. 2022. When Digitalization Meets Omnichannel in International Markets: A Case Study from the Agri-Food Industry. *Administrative Sciences* 12: 68. [\[CrossRef\]](#)
- Cichosz, Marzenna, Carl Marcus Wallenburg, and A. Michael Knemeyer. 2020. Digital transformation at logistics service providers: Barriers, success factors and leading practices. *The International Journal of Logistics Management* 31: 209–38. [\[CrossRef\]](#)
- Climent, Ricardo Costa, Darek M. Haftor, and Soumitra Chowdhury. 2022. Value creation through omnichannel practices for multi-actor customers: An evolutionary view. *Journal of Enterprising Communities: People and Places in the Global Economy* 16: 93–118. [\[CrossRef\]](#)
- Cozmiuc, Diana Claudia, and Richard Pettinger. 2021. Consultants' Tools to Manage Digital Transformation: The Case of PWC, Siemens, and Oracle. *Journal of Cases on Information Technology (JCIT)* 23: 1–29. [\[CrossRef\]](#)
- Cozzolino, Alessio, Gianmario Verona, and Frank T. Rothaermel. 2018. Unpacking the Disruption Process: New Technology, Business Models, and Incumbent Adaptation. *Journal of Management Studies* 55: 1166–202. [\[CrossRef\]](#)
- Das, Arindam, and Sourav Dey. 2021. Global manufacturing value networks: Assessing the critical roles of platform ecosystems and Industry 4.0. *Journal of Manufacturing Technology Management* 32: 1290–311. [\[CrossRef\]](#)
- Dąbrowska, Justyna, Argyro Almpnanopoulou, Alexander Brem, Henry Chesbrough, Valentina Cucino, Alberto Di Minin, Ferran Giones, Henri Hakala, Cristina Marullo, Anne-Laure Mention, and et al. 2022. Digital transformation, for better or worse: A critical multi-level research agenda. *R&D Management* 52: 930–54. [\[CrossRef\]](#)
- De Bernardi, Paola, Canio Forliano Alberto Bertello, and Ludovico Bullini Orlandi. 2022. Beyond the “ivory tower”. Comparing academic and non-academic knowledge on social entrepreneurship. *International Entrepreneurship and Management Journal* 18: 999–1032. [\[CrossRef\]](#)
- Dold, Luzian, and Christian Speck. 2021. Resolving the productivity paradox of digitalised production. *International Journal of Production Management and Engineering* 9: 65–80. [\[CrossRef\]](#)
- Fernandes, catarina, Rui Pires, and Maria-Ceu Gaspar Alves. 2023. Digital Entrepreneurship and Sustainability: The State of the Art and Research Agenda. *Economies* 11: 3. [\[CrossRef\]](#)
- Florek-Paszkowska, Anna, Anna Ujwary-Gil, and Bianka Godlewska-Dzioboń. 2021. Business innovation and critical success factors in the era of digital transformation and turbulent times. *Journal of Entrepreneurship, Management, and Innovation* 17: 7–28. [\[CrossRef\]](#)
- Garzoni, Antonello, Ivano De Turi, Giustina Secundo, and Pasquale Del Vecchio. 2020. Fostering digital transformation of SMEs: A four levels approach. *Management Decision* 58: 1543–62. [\[CrossRef\]](#)
- Gaurav, Jas, and Elif Kongar. 2021. Value Creation via Accelerated Digital Transformation. *IEEE Engineering Management Review* 49: 63–72. [\[CrossRef\]](#)
- Ghezzi, Antonio. 2022. Competitive empathy: Sharing values and strategies with rivals. *Journal of Business Strategy* 43: 357–64. [\[CrossRef\]](#)
- Gonzalez, Pietro Pizao, and Ruy Quadros. 2022. Digital Transformation and New Business Models in Urban Mobility: The Case of Carsharing in Brazil. Paper presented at the 2022 Portland International Conference on Management of Engineering and Technology (PICMET), Portland, OR, USA, August 7–11; pp. 1–12. [\[CrossRef\]](#)
- Gutiérrez, Ives, João Ferreira, and Paula O. Fernandes. 2023. Digital transformation and the new combinations in tourism: A systematic literature review. *Tourism and Hospitality Research* 14673584231198414. [\[CrossRef\]](#)
- Heubeck, Tim, and Reinhard Meckl. 2022. More capable, more innovative? An empirical inquiry into the effects of dynamic managerial capabilities on digital firms' innovativeness. *European Journal of Innovation Management* 25: 892–915. [\[CrossRef\]](#)

- Higgins, Julian P. T., and Sally Green. 2008. *Cochrane Handbook for Systematic Reviews of Interventions*. Cochrane Book Series; Melbourne: The Cochrane Collaboration. [\[CrossRef\]](#)
- Holopainen, Mira, Minna Saunila, and Juhani Ukko. 2023. Value creation paths of organizations undergoing digital transformation. *Knowledge and Process Management* 30: 125–36. [\[CrossRef\]](#)
- Jocevski, Milan, Antonio Ghezzi, and Niklas Arvidsson. 2020. Exploring the growth challenge of mobile payment platforms: A business model perspective. *Electronic Commerce Research and Applications* 40: 100908. [\[CrossRef\]](#)
- Kasperovica, Ludmila, and Natalja Lace. 2021. Factors influencing companies' positive financial performance in digital age: A meta-analysis. *Entrepreneurship and Sustainability Issues* 9: 312–32. [\[CrossRef\]](#)
- Kauffman, Robert J., Ting Li, and Eric van Heck. 2010. Business Network-Based Value Creation in Electronic Commerce. *International Journal of Electronic Commerce* 15: 113–44. [\[CrossRef\]](#)
- Klarin, Tomislav. 2018. The Concept of Sustainable Development: From Its Beginning to the Contemporary Issues. *Zagreb International Review of Economics and Business Sciendo* 21: 67–94. [\[CrossRef\]](#)
- Klimanov, Denis, Olga Tretyak, Uri Goren, and Timothy White. 2021. Transformation of Value in Innovative Business Models: The Case of Pharmaceutical Market. *Foresight and STI Governance* 15: 52–65. [\[CrossRef\]](#)
- Klos, Christoph, Patrick Spieth, Thomas Clauss, and Christian Klusmann. 2023. Digital Transformation of Incumbent Firms: A Business Model Innovation Perspective. *IEEE Transactions on Engineering Management* 70: 2017–33. [\[CrossRef\]](#)
- Kraus, Sascha, Matthias Breier, and Sonia Dasí-Rodríguez. 2020. The art of crafting a systematic literature review in entrepreneurship research. *International Entrepreneurship Manage Journal* 16: 1023–42. [\[CrossRef\]](#)
- Kumar, Abhishek, Saroj Kumar Mishra, and Akanksha Saini. 2024. Predicting NFC-based mobile payments usage intention with perceived usefulness as mediator: A dual-stage PLS-SEM and NCA analysis. *Journal of Advances in Management Research ahead-of-print*. [\[CrossRef\]](#)
- Leso, Bernardo Henrique, Marcelo Nogueira Cortimiglia, and Antonio Ghezzi. 2023. The contribution of organizational culture, structure, and leadership factors in the digital transformation of SMEs: A mixed-methods approach. *Cognition, Technology & Work* 25: 151–79. [\[CrossRef\]](#)
- Lichtenthaler, Ulrich. 2017. Shared Value Innovation: Linking Competitiveness and Societal Goals in the Context of Digital Transformation. *International Journal of Innovation and Technology Management* 14: 1750018. [\[CrossRef\]](#)
- Lichtenthaler, Ulrich. 2020. Building Blocks of Successful Digital Transformation: Complementing Technology and Market Issues. *International Journal of Innovation and Technology Management* 17: 2050004. [\[CrossRef\]](#)
- Lichtenthaler, Ulrich. 2022. Data management efficiency: Major opportunities for shared value innovation. *Management Research Review* 45: 156–72. [\[CrossRef\]](#)
- Manioudis, Manolis, and Giorgos Meramveliotakis. 2022. Broad strokes towards a grand theory in the analysis of sustainable development: A return to the classical political economy. *New Political Economy* 27: 866–78. [\[CrossRef\]](#)
- Margherita, Emanuele Gabriel, and Alessio Maria Braccini. 2023. Industry 4.0 Technologies in Flexible Manufacturing for Sustainable Organizational Value: Reflections from a Multiple Case Study of Italian Manufacturers. *Information Systems Frontiers* 25: 995–1016. [\[CrossRef\]](#)
- Min, Sun A., and Bo Young Kim. 2021. SMEs' Digital Transformation Competencies on Platform Empowerment: A Case Study in South Korea. *The Journal of Asian Finance, Economics and Business* 8: 897–907. [\[CrossRef\]](#)
- Mishra, Vinaytosh, and Monu Pandey Mishra. 2023. PRISMA for Review of Management Literature—Method, Merits, and Limitations—An Academic Review. In *Advancing Methodologies of Conducting Literature Review in Management Domain*. Leeds: Emerald Publishing Limited, pp. 125–36. [\[CrossRef\]](#)
- Müller, Julian M., Oana Buliga, and Kai-Ingo Voigt. 2021. The role of absorptive capacity and innovation strategy in the design of industry 4.0 business models—A comparison between SMEs and large enterprises. *European Management Journal* 39: 333–43. [\[CrossRef\]](#)
- Olsson, Helena Holmström, and Jan Bosch. 2020. Going digital: Disruption and transformation in software-intensive embedded systems ecosystems. *Journal of Software: Evolution and Process* 32: e2249. [\[CrossRef\]](#)
- Omrani, Nessrine, Nada Rejeb, Adnane Maalaoui, Marina Dabić, and Sascha Kraus. 2022. Drivers of Digital Transformation in SMEs. *IEEE Transactions on Engineering Management* 71: 5030–43. [\[CrossRef\]](#)
- Page, Matthew J., Joanne E. McKenzie, Patrick M. Bossuyt, Isabelle Boutron, Tammy C. Hoffmann, Cynthia D. Mulrow, Larissa Shamseer, Jennifer M. Tetzlaff, Elie A. Akl, Sue E. Brennan, and et al. 2021. The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *Systematic Reviews* 10: 89. [\[CrossRef\]](#)
- Pascarelli, Claudio, Chiara Colucci, Gianvito Mitrano, and Angelo Corallo. 2023. Business Models in Digital Health: Bibliometric Analysis and Systematic Literature Review. Paper presented at the 2023 IEEE Symposium on Computers and Communications (ISCC), Gammarth, Tunisia, July 9–12; pp. 1–4. [\[CrossRef\]](#)
- Qiao, Wanzhen, Yanbing Ju, Peiwu Dong, and Robert Tiong. 2023. How to realize value creation of digital transformation? A system dynamics model. *Expert Systems with Applications* 244: 122667. [\[CrossRef\]](#)
- Rao, P. Kritee, and Akanksha Shukla. 2023. Sustainable strategic management: A bibliometric analysis. *Business Strategy and the Environment* 32: 3902–14. [\[CrossRef\]](#)
- Ratten, Vanessa, and Paul Jones. 2020. New challenges in sport entrepreneurship for value creation. *International Entrepreneurship and Management Journal* 16: 961–80. [\[CrossRef\]](#)

- Reinartz, Werner, Nico Wiegand, and Monika Imschloss. 2019. The impact of digital transformation on the retailing value chain. *International Journal of Research in Marketing* 36: 350–66. [\[CrossRef\]](#)
- Rêgo, Bruno Siano, Shital Jayantilal, João J. Ferreira, and Elias G. Carayannis. 2022. Digital Transformation and Strategic Management: A Systematic Review of the Literature. *Journal of the Knowledge Economy* 13: 3195–222. [\[CrossRef\]](#)
- Rohn, Daniel, Peter M. Bican, Alexander Brem, Sascha Kraus, and Thomas Clauss. 2021. Digital platform-based business models—An exploration of critical success factors. *Journal of Engineering and Technology Management* 60: 101625. [\[CrossRef\]](#)
- Rousseau, Ronald, Leo Egghe, and Raf Guns. 2018. Chapter 5—Publication and Citation Analysis. In *Becoming Metric-Wise*. Chandos Information Professional Series; Cambridge: Chandos Publishing, pp. 99–153, ISBN 9780081024744. [\[CrossRef\]](#)
- Rusly, Fariza Hanim, Muhammad Rosni Amir Hussin, Yurita Yakimin Abdul Talib, and Hafizah Abd Mutalib. 2021. Modelling the internal forces of SMEs digital adaptation strategy towards Industry Revolution 4.0. *Polish Journal of Management Studies* 24: 306–21. [\[CrossRef\]](#)
- Stanislavyk, Olena, and Victor Zamlynskyi. 2023. Sustainability of business development in strategic management. *Modeling the Development of the Economic Systems* 1: 37–44. [\[CrossRef\]](#)
- Taneja, Shilpa, Ahsan Siraj, Liaqat Ali, Anil Kumar, Sunil Luthra, and Yongming Zhu. 2023. Is FinTech Implementation a Strategic Step for Sustainability in Today's Changing Landscape? An Empirical Investigation. *IEEE Transactions on Engineering Management* 71: 7553–65. [\[CrossRef\]](#)
- Tavoletti, Ernesto, Niloofar Kazemargi, Corrado Cerruti, Cecilia Grieco, and Andrea Appolloni. 2022. Business model innovation and digital transformation in global management consulting firms. *European Journal of Innovation Management* 25: 612–36. [\[CrossRef\]](#)
- Tawaststjerna, Tinna, and Heidi Olander. 2021. Managing Digital Transformation in Digital Business Ecosystems. *International Journal of Innovation Management* 25: 2140003. [\[CrossRef\]](#)
- Troisi, Orlando, Anna Visvizi, and Mara Grimaldi. 2023. Digitalizing business models in hospitality ecosystems: Toward data-driven innovation. *European Journal of Innovation Management* 26: 242–77. [\[CrossRef\]](#)
- Urbinati, Andrea, Luca Manelli, Federico Frattini, and Marcel L. A. M. Bogers. 2022. The digital transformation of the innovation process: Orchestration mechanisms and future research directions. *Innovation* 24: 65–85. [\[CrossRef\]](#)
- Van Eck, Nees Jan, and Ludo Waltman. 2010. Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics* 84: 523–38. [\[CrossRef\]](#)
- Vera-Baceta, Miguel-Angel, Michael Thelwall, and Kayvan Kousha. 2019. Web of Science and Scopus language coverage. *Scientometrics* 121: 1803–13. [\[CrossRef\]](#)
- Zaki, Mohamed. 2019. Digital transformation: Harnessing digital technologies for the next generation of services. *Journal of Services Marketing* 33: 429–35. [\[CrossRef\]](#)

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.