MAPPING THE DIGITAL TRANSFORMATION OF HEALTHCARE ECOSYSTEMS: A BIBLIOMETRIC ANALYSIS

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Abstract: *Digital transformation represents one of the most important processes of change influencing healthcare ecosystems. The integration of digital technologies such as artificial intelligence, advanced data analytics, blockchain, digital twin and telemedicine platforms has generated significant changes in the way medical services are delivered and managed. These technologies contribute to the optimisation of medical processes, the improvement of clinical data management, and the increased accessibility of healthcare services. The aim of this paper is to analyse the role of digital transformation in the healthcare field through a conceptual and bibliometric approach. The literature analysis was conducted using the Scopus database, and the selection of articles followed the PRISMA protocol. The initial search generated 2,554 articles, which were reduced to 1,526 after applying filtering criteria. Following the screening and filtering process based on citation impact, 40 articles were selected for the final analysis. The results of the analysis highlight that digital transformation in healthcare has evolved from a necessity-driven response to COVID-19 to an opportunity-driven process. Research highlights both the benefits and risks of emerging technologies, the need for intelligent governance, and the growing role of patients as active value co-creators. However, the perspective of end beneficiaries, particularly their satisfaction with digitalized medical services in the most frequently cited papers, remains largely absent. Two key research directions emerge: understanding how private actors drive digital transformation in healthcare and examining how corporate beneficiaries adopt digital medical services to support employee well-being and organizational performance.*

Keywords: *digital transformation; digital health; healthcare innovation; artificial intelligence; digital maturity*

JEL Classification: *I11; O33; L86*

1. Introduction

Healthcare systems worldwide, faced with unprecedented structural challenges such as population aging, the rising incidence of chronic diseases, and shortages of medical personnel, increasingly view digital transformation as a viable solution to the limitations of the traditional care model (Davenport and Kalakota, 2019; De Benedictis et al., 2023). The literature highlights that digital transformation in healthcare is not limited to the adoption of digital technologies but involves a complex process of organizational, managerial, and institutional change (Dal Mas et al., 2023). By enabling the development of innovative models for delivering medical

services (Kraus et al., 2021), it becomes a key driver of efficiency and competitiveness in healthcare organizations. Although medical innovations may face resistance from end users (Iyanna et al., 2022), prior research shows that they have contributed to rethinking how care processes are structured, helping to overcome traditional barriers such as limited access to services and information fragmentation (Gopal et al., 2019). This progress is prompting developed countries, such as Germany, to accelerate their own digital transformation processes in healthcare (Kraft et al., 2024). Healthcare ecosystems are considered complex adaptive systems composed of interdependent actors such as healthcare providers, patients, institutions, technologies, digital infrastructures, applications, and regulations. Together, these elements form a dynamic network capable of delivering integrated and efficient healthcare services within a continuously evolving social and economic context (Meskó et al., 2017). The literature emphasizes that entities with a high level of digital maturity are better able to leverage the potential of emerging technologies and to create innovative models for delivering medical services (Santarsiero et al., 2023). This advantage manifests across all three essential stages of the healthcare process: prevention, treatment, and recovery—stages well established in public health and healthcare management (Dimitrov, 2016; Meskó et al., 2017). Nagarajan et al. (2024) highlight that trust is a central element in the functioning of healthcare ecosystems, as it underpins the safe and effective use of digital technologies. When trust is present, these technologies can expand access to healthcare services, including in rural or infrastructure-limited areas (Kruse et al., 2018), and significantly enhance the efficiency of healthcare systems (Kraus et al., 2021).In the literature, the performance of healthcare ecosystems is closely linked to the development of the digital health concept, defined as an integrative framework of digital technologies aimed at optimizing healthcare services, improving health management efficiency, and enhancing the patient experience (Stoumpos, Kitsios & Talias, 2023). Artificial intelligence emerges as a central component in this process due to its ability to process large volumes of data and identify relevant patterns for developing predictive models useful in resource planning, workflow optimisation, and managerial decision-making (Reddy et al., 2019). The literature also highlights the role of other emerging technologies, such as blockchain and advanced data analytics tools, in strengthening the digital infrastructure of healthcare systems. For example, Cerchione et al. (2023) emphasize the potential of blockchain technology to enhance the security and traceability of medical data—an essential element for the interoperability of information platforms and for improving interactions among providers, beneficiaries, and regulatory authorities. In this context, digital health is shaping into an integrative paradigm capable of bringing together and harmonizing various emerging technologies within the logic of healthcare digital transformation, assigning them the role of support tools that enhance decision-making and operational processes without replacing medical expertise and judgment (Davenport & Kalakota, 2019).Despite the rapid growth of the digital health literature, many studies point out that empirical research on the impact of digital transformation on healthcare organizations remains limited (Kraus et al., 2021). This gap is even more evident in the context of emerging economies, where a deeper understanding is needed of how digital technologies influence organizational performance and healthcare service delivery models.

Based on these considerations, the aim of this paper is to analyse the literature on digital transformation in healthcare through a conceptual and bibliometric approach.

The literature analysis was conducted using the Scopus database and the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) protocol for the selection of relevant articles (Page et al., 2021). In addition, the bibliometric analysis carried out using VOSviewer software enabled the identification of the main research directions and the conceptual relationships structuring the digital health literature.

2. Digital Health Transformation Literature: Current Stage and Key Research Gaps

The digital transformation of healthcare systems represents a rapidly evolving field of research. The literature highlights that the integration of digital technologies into healthcare systems contributes to improving organizational efficiency and optimizing clinical processes (Kraus et al., 2021).

One of the central concepts analysed in the literature is *digital health*, which refers to the use of digital technologies for the delivery and management of healthcare services. This concept encompasses a wide range of technologies, including electronic health records, telemedicine platforms, mobile health applications, and medical data analytics systems (Meskó et al., 2017).

Numerous studies show that the use of digital technologies can improve access to healthcare services and enhance the efficiency of healthcare systems. For instance, telemedicine platforms enable the remote delivery of medical services, thereby increasing accessibility, particularly in rural areas or regions with limited access to healthcare infrastructure (Kruse et al., 2018).

Moreover, the digitalization of healthcare systems contributes to improved management of medical data. Electronic health records allow rapid access to clinical information and facilitate information exchange between different healthcare institutions (Kouroubali & Katehakis, 2019).

In recent years, research on digital transformation in healthcare has increasingly focused on the use of emerging technologies. Artificial intelligence is one of the technologies with the greatest potential to transform healthcare systems, as it enables the analysis of large volumes of medical data and supports clinical decision-making processes (Reddy et al., 2019). However, the literature emphasizes that artificial intelligence should complement physicians' work and enhance medical decision-making without replacing professional expertise (Davenport & Kalakota, 2019). In addition to artificial intelligence, other emerging technologies such as blockchain and advanced medical data analytics are frequently discussed in the digital health literature. Blockchain technology can enhance the security of medical data and improve the interoperability of healthcare information systems (Cerchione et al., 2023).

Another important concept examined in the literature is the digital maturity of healthcare organizations. Digital maturity reflects the ability of organizations to integrate digital technologies into their organizational strategies and operational processes (Santarsiero et al., 2023). Organizations with a high level of digital maturity are better positioned to leverage the potential of emerging technologies and to develop innovative healthcare service delivery models.

Furthermore, the literature highlights that digital transformation can generate competitive advantages for healthcare organizations. The integration of digital

technologies can improve operational efficiency, optimize medical processes, and support the development of innovative service delivery models (Iyanna et al., 2022). In conclusion, the literature emphasizes that digital transformation is a key factor in modernizing healthcare systems and improving the quality of medical services. However, the analysis also reveals significant gaps in academic research. Most existing studies focus on digital technologies and healthcare systems in developed economies, while empirical research on the impact of digital transformation on healthcare organizations in emerging economies remains limited (Kraus et al., 2021).

3. Theoretical Perspectives on Healthcare Digitalization: Adoption Models, Capabilities, and Performance Links

Digital transformation in healthcare can be analysed through several theoretical frameworks commonly used in the management and information systems literature. These frameworks enable a better understanding of how organisations adopt and integrate digital technologies, as well as their impact on organisational performance. In the literature, the adoption of digital technologies is frequently examined through the Technology–Organization–Environment (TOE) framework, the Resource-Based View (RBV), the dynamic capabilities theory, and the diffusion of innovations theory (Tornatzky and Fleischer, 1990; Barney, 1991; Teece et al., 1997; Rogers, 2003).

The Technology–Organization–Environment (TOE) model, proposed by Tornatzky and Fleischer (1990), is one of the most widely used theoretical frameworks for analysing the adoption of digital technologies within organizations. According to this model, the adoption and implementation of digital technologies are influenced by three main categories of factors: technological, organizational, and environmental.

Technological factors refer to the characteristics of available digital technologies, such as their complexity, compatibility with existing systems, and relative advantages. In the healthcare sector, these technologies include electronic health records, telemedicine platforms, artificial intelligence, and medical data analytics tools.

Organizational factors relate to the internal characteristics of organizations, such as organizational structure, available resources, employees' digital competencies, and the level of digital maturity. Healthcare organizations with adequate technological resources and skilled personnel are better positioned to adopt and integrate digital technologies into their operational processes.

Environmental factors include external pressures such as government regulations, market competition, and technological developments. In healthcare, these factors encompass data protection regulations, public policies supporting digitalization, and patient demands for accessible digital healthcare services.

Recent studies highlight that the TOE model is frequently used to analyse digital transformation in healthcare, as it allows for the simultaneous evaluation of technological, organizational, and institutional factors influencing technology adoption (Dubey et al., 2021).

The Resource-Based View (RBV) is one of the most influential theoretical perspectives in strategic management literature. According to this theory, an organization's competitive advantage is determined by its resources and capabilities (Barney, 1991).

In the context of digital transformation, digital resources, technological infrastructure, and employees' digital skills can be considered strategic assets that contribute to building competitive advantage. Healthcare organizations that possess advanced digital resources are better able to develop innovative medical services and improve the quality of care provided to patients.

Recent studies suggest that digital resources can enhance organizational performance by facilitating decision-making, optimizing operational processes, and improving patient experience (Wang & Pan, 2022). In this context, digital transformation can be understood as a process of developing and leveraging strategic digital resources.

Dynamic capabilities theory extends the Resource-Based View by emphasizing the ability of organizations to integrate, build, and reconfigure internal and external resources in response to changing environments (Teece et al., 1997).

In the context of digital transformation, dynamic capabilities enable organizations to adapt their processes and integrate new digital technologies into their operations. Healthcare organizations must develop capabilities that support the effective integration of digital technologies into both clinical and administrative processes.

Recent research highlights that the development of dynamic capabilities is essential for the success of digital transformation initiatives, as it allows organizations to respond rapidly to technological changes and evolving external conditions (Aslam et al., 2025).

The diffusion of innovations theory, proposed by Rogers (2003), explains how new technologies and innovations are adopted and spread within organizations and societies. According to this theory, the adoption of innovations is influenced by the characteristics of the technology, users' perceptions of its benefits, and the social and organizational context.

In healthcare, the adoption of digital technologies is influenced by factors such as relative advantage, compatibility with existing systems, and the complexity of the implemented technologies. For example, the adoption of artificial intelligence in medical processes depends on healthcare professionals' perceptions of its benefits and its compatibility with existing clinical workflows.

This theory provides a useful framework for analysing how digital technologies are adopted in healthcare organizations and for understanding the factors influencing digital transformation processes.

The integration of these theoretical frameworks enables the development of a conceptual model that explains the relationship between digital transformation and organizational performance in healthcare. The proposed conceptual model highlights that the adoption of digital technologies and the development of digital capabilities contribute to increasing the digital maturity of healthcare organizations.

In turn, digital maturity can generate perceived functional benefits, such as improved operational efficiency, optimized decision-making processes, and enhanced quality of healthcare services. These benefits can contribute to the development of competitive advantage and to the overall improvement of organizational performance in the healthcare sector.

4. Methodology

4.1. Research Design for the Bibliometric Study

This study employs a methodological approach based on a systematic literature review and bibliometric analysis, with the aim of identifying the main research directions related to digital transformation in healthcare. The methodology combines the PRISMA protocol with bibliometric analysis techniques conducted using VOSviewer software.

This methodological approach enables the analysis of the conceptual structure of the literature and the identification of relationships among the key concepts used in research on healthcare digitalization.

The data used in this research were collected from the Scopus database, one of the most important bibliographic databases used in academic research. Scopus was selected due to its extensive coverage of scientific publications and its relevance for bibliometric studies.

The identification of relevant articles was carried out using a keyword-based search strategy related to digital transformation in healthcare. The search was conducted in the title, abstract, and keywords fields using the following query:

("digital transformation" OR "digital health" OR "healthcare digitalization") AND healthcare

The initial search in the Scopus database yielded 2,554 articles. To ensure the relevance of the studies included in the analysis, several filtering criteria were applied.

The following filters were used:

- publication period: 2018–2025
- document type: article and review
- language: English
- relevant subject areas: Business, Management, Economics, Decision Sciences, and Medicine
- sorting: most cited

After applying these filters, the number of articles was reduced to 1,526.

The final selection of articles included in the analysis was conducted in accordance with the PRISMA protocol.

The PRISMA protocol allows for transparent documentation of the article selection process and ensures the reproducibility of the research.

The article selection process included the following stages:

1. **Identification of articles**: At this stage, 2,554 articles were identified in the Scopus database.
2. **Application of filtering criteria**: After applying filters related to publication period, document type, and relevant subject areas, 1,526 articles remained.
3. **Screening of articles**: In this stage, the titles and abstracts of the articles were analysed to assess their relevance to the research objectives.
4. **Final selection**: Following the screening process, 40 articles were selected and included in the final bibliometric analysis.

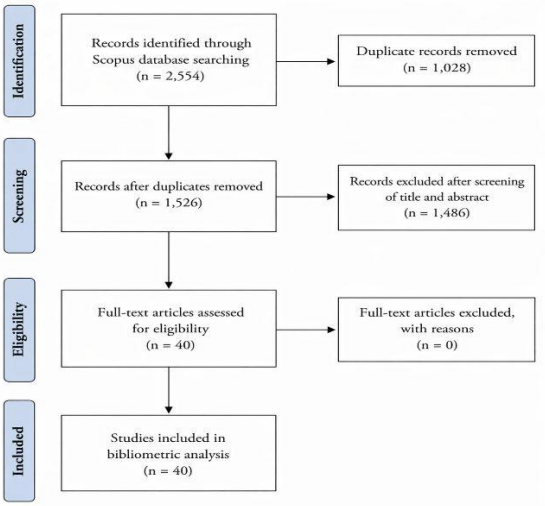

Figure 1: Article selection process according to the PRISMA protocol
Source: Author's own elaboration based on Scopus data and PRISMA protocol.

4.2. Procedure

To analyse the conceptual structure of the literature on digital transformation in healthcare, a bibliometric analysis was conducted using VOSviewer software. VOSviewer is a widely used tool in bibliometric studies for analysing relationships among publications, authors, and concepts within the scientific literature. The software enables the creation of visual maps that illustrate relationships between concepts through network analysis techniques. In this study, the *co-occurrence analysis of keywords* method was applied, allowing the identification of relationships among the keywords used in the selected articles.

The bibliometric analysis process included the following steps:

1. exporting bibliographic data from the Scopus database in CSV format;
2. importing the data into VOSviewer software;
3. selecting the *co-occurrence of keywords* analysis type;
4. setting a minimum threshold for keyword occurrence;
5. generating the conceptual map of relationships between key concepts.

The co-occurrence analysis enabled the identification of thematic clusters and the interpretation of conceptual relationships within the digital health literature.

The results of the bibliometric analysis are presented in Figure 2, which illustrates the co-occurrence network of keywords identified in the analysed articles.

4.3. Constraints of the Applied Procedure

Although the analysis provides a relevant perspective on the literature regarding digital transformation in healthcare, the study has several limitations. First, the literature analysis was conducted exclusively based on articles indexed in the Scopus database. While Scopus is one of the most comprehensive academic databases, relying on a single database may lead to the exclusion of relevant studies published elsewhere. Second, the selection of articles was based on specific filtering criteria, which may limit the number of studies included in the final analysis.

Nevertheless, the use of the PRISMA protocol and bibliometric analysis enhances the transparency and methodological rigor of the research.

5. Findings on Digital Transformation Research Trends

The bibliometric analysis conducted in this study aims to identify the main research directions related to digital transformation in healthcare. The analysis was carried out using VOSviewer software, applying the *co-occurrence analysis of keywords* method, which enables the identification of relationships among the concepts used in the scientific literature. The data used for the bibliometric analysis were extracted from the Scopus database and include a final set of 40 articles selected according to the PRISMA protocol. These articles were imported into VOSviewer to generate a conceptual map highlighting the relationships among the keywords used in the literature on digital transformation in healthcare. The results of the bibliometric analysis are presented in Figure 2, which illustrates the co-occurrence network of keywords identified in the analysed articles.

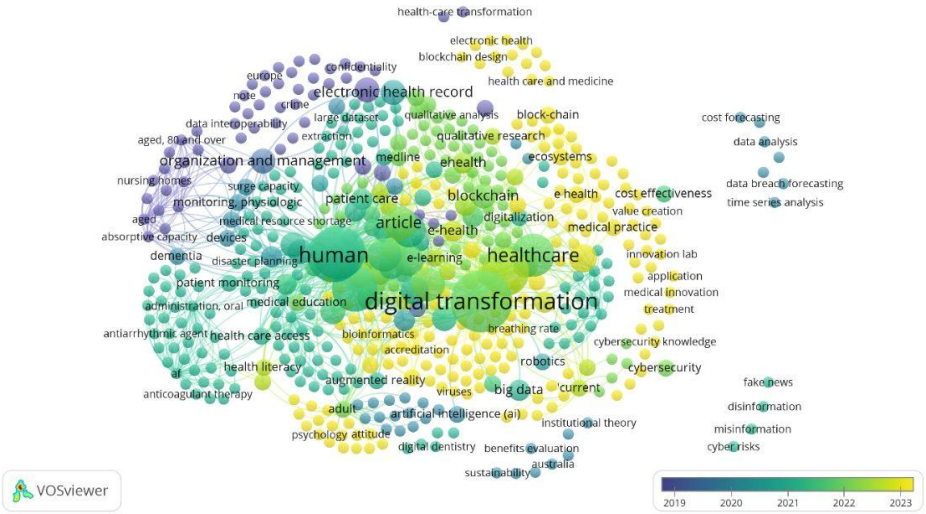

Figure 2: Co-occurrence network of keywords (VOSviewer)
Source: Author's own elaboration using VOSviewer, based on Scopus data.

The analysis highlights the existence of several thematic clusters reflecting the main research directions in the field of digital health.

The conceptual map generated using VOSviewer indicates that the literature on digital transformation in healthcare is structured around central concepts such as *digital transformation, healthcare, human, patient care, electronic health record,* and *artificial intelligence*.

The concept of *digital transformation* emerges as one of the most prominent nodes in the network, emphasizing the central role of digitalization in research on healthcare systems. At the same time, the concept of *healthcare* is associated with terms reflecting the application of digital technologies in the medical field, such as *patient care, medical practice,* and *health information systems*.

The frequent presence of the concept *electronic health record* highlights the importance of medical information systems in the digitalization of healthcare services. Electronic health records represent one of the most critical digital infrastructures used for managing medical information and facilitating data exchange between healthcare institutions.

The analysis also reveals a significant increase in interest in the use of artificial intelligence and data analytics technologies in healthcare. These technologies are applied in medical image analysis, clinical decision support, and the development of predictive models used in diagnosis and treatment.

The co-occurrence network of keywords allows the identification of several thematic clusters, each representing a distinct research direction in the field of digital transformation in healthcare.

The first cluster includes concepts such as *digital transformation, healthcare, patient care,* and *organization and management*. This cluster reflects research analysing the impact of digital transformation on healthcare management and service delivery. The prominence of this cluster highlights the increasing importance of organisational transformation and strategic management in healthcare digitalisation processes, suggesting that digital transformation extends beyond technology adoption and involves significant organisational change (Kraus et al., 2021; Iyanna et al., 2022).

Studies within this cluster focus on how digital technologies contribute to optimizing medical processes, improving coordination of healthcare services, and developing innovative models of service delivery.

The second cluster is associated with concepts such as *electronic health record, data interoperability, health information systems,* and *large datasets*. This cluster reflects research on the digitalization of medical information and the development of IT infrastructures within healthcare systems. This cluster underlines the critical role of data interoperability and information exchange in the development of integrated digital healthcare systems, emphasising the growing importance of medical information infrastructures (Kouroubali & Katehakis, 2019; Kruse et al., 2018).

Medical information systems enable the collection and management of clinical data and facilitate information exchange between institutions. In this context, interoperability is a key factor in the development of digital health ecosystems.

Another important cluster identified in the analysis includes concepts such as *artificial intelligence, blockchain, big data,* and *robotics*. This cluster reflects the growing interest in the use of emerging technologies in healthcare. The prominence of emerging technologies within this cluster suggests a shift in the literature from basic digitalisation towards predictive, data-driven, and intelligent healthcare systems, particularly through the increasing use of artificial intelligence and advanced analytics (Reddy et al., 2019; Davenport & Kalakota, 2019).

These technologies contribute to the development of more efficient and adaptive healthcare systems. For example, artificial intelligence supports medical decision-making through the analysis of large volumes of clinical data, while blockchain enhances the security of medical data.

The final cluster highlights research on the development of digital health ecosystems and the integration of digital technologies into organizational processes. This cluster highlights the growing relevance of collaboration, innovation, and value co-creation within digital health ecosystems, reflecting the need for stronger integration between healthcare providers, technological actors, and institutional stakeholders (Dal Mas et al., 2023; Stoumpos et al., 2023).

Studies in this area analyse how digital transformation supports the development of new collaboration models among healthcare stakeholders, including hospitals, private clinics, technology companies, and research institutions.

The analysis indicates that research on digital transformation in healthcare has evolved significantly in recent years. Initially, the literature focused primarily on the development of IT infrastructure and medical data management systems.

Currently, research is increasingly oriented toward the use of emerging technologies and the development of digital health ecosystems. In this context, digital transformation is analysed not only from the perspective of technology adoption but also in terms of its impact on organizational models and the overall performance of healthcare systems.

6. Discussions

The results of the bibliometric analysis highlight that the literature on digital transformation in healthcare is characterized by rapid development and increasing diversification of research directions. The co-occurrence network analysis of keywords identified four main research directions: the digital transformation of healthcare organizations, the development of medical information systems, the use of emerging technologies, and the development of digital health ecosystems. These findings are consistent with recent studies emphasizing the multidimensional nature of healthcare digitalization (Kraus et al., 2021; Iyanna et al., 2022).

The literature analysis indicates that digital transformation extends beyond the mere adoption of digital technologies, involving significant organizational and institutional changes. In this regard, the research findings can be interpreted through the Technology–Organization–Environment (TOE) framework, which highlights that the adoption of digital technologies is simultaneously influenced by technological, organizational, and environmental factors (Dubey et al., 2021).

At the same time, the results emphasize the important role of digital resources and technological infrastructure in the digital transformation of healthcare organizations. This finding aligns with the Resource-Based View perspective, according to which organizational performance depends on the resources and capabilities that organizations can strategically leverage (Wang & Pan, 2022). In the context of healthcare digitalization, IT infrastructure, medical information systems, and employees' digital competencies can be considered strategic resources that contribute to the development of competitive advantage.

The findings also underline the importance of developing dynamic capabilities within healthcare organizations. The integration of digital technologies requires organizations to adapt existing structures and develop new digital competencies. From this perspective, dynamic capabilities enable organizations to integrate and reconfigure existing resources in order to respond to technological changes and evolving environmental demands (Aslam et al., 2025).

Another important result of the bibliometric analysis is the growing interest in the use of emerging technologies such as artificial intelligence, blockchain, and advanced data analytics in healthcare. These technologies are discussed in the literature as tools that can enhance clinical decision-making and optimize operational processes within healthcare systems (Reddy et al., 2019; Davenport & Kalakota, 2019).

However, the literature also emphasizes that the implementation of these technologies must support healthcare professionals and contribute to improving the

quality of medical services. In this context, artificial intelligence is viewed as a decision-support tool that complements, rather than replaces, medical expertise (Topol, 2019).

The results further highlight the importance of developing digital health ecosystems, which involve collaboration among various stakeholders, including hospitals, private clinics, technology companies, and research institutions. Recent literature suggests that such ecosystems can facilitate innovation and information exchange within healthcare systems (Cerchione et al., 2023; Dal Mas et al., 2023).

From a managerial perspective, the findings suggest that healthcare organizations must adopt a strategic approach to digital transformation. The implementation of digital technologies should be supported by the development of employees' digital skills, investments in technological infrastructure, and the adaptation of existing organizational models (Santarsiero et al., 2023).

From a theoretical perspective, this study contributes to the digital health literature by integrating bibliometric analysis with established theoretical frameworks such as the Technology–Organization–Environment framework, the Resource-Based View, and dynamic capabilities theory. The study also contributes by structuring the fragmented literature on digital transformation in healthcare into four major thematic clusters, highlighting the multidimensional nature of digital health ecosystems and organisational transformation processes (Dubey et al., 2021; Wang & Pan, 2022; Aslam et al., 2025).

At the same time, the literature analysis reveals significant gaps in academic research. Most existing studies focus on the technological aspects of digital transformation and on healthcare systems in developed economies. Therefore, there is a growing need for empirical studies examining the impact of digital transformation on healthcare organizations in emerging economies (Kraus et al., 2021).

Consequently, future research could explore the relationship between the digital maturity of healthcare organizations, perceived functional benefits, and organizational performance. Such analyses could contribute to a better understanding of how digital transformation influences performance in healthcare organizations.

7.Conclusions and Future Research Directions

The results of the analysis of the most cited articles and reviews from the period 2018–2025 indicate a clear orientation toward technologies used in health ecosystems, viewed predominantly from the perspective of healthcare service providers. These aspects are addressed in numerous studies in the context of the COVID-19 pandemic, which leads us to the idea that we have witnessed *a necessity-driven digital transformation.* Another group of studies examines the technologies used in various branches of medicine, particularly in oral care, ophthalmology, and laboratory services, highlighting both the benefits and the risks of their implementation for providers and beneficiaries within health ecosystems, as well as the need for intelligent governance. We note the emergence of studies focused on the need to audit the digital capabilities of healthcare organizations, given that many hospitals accumulated high levels of *technical debt*, especially during the COVID-19 pandemic. The identification of this type of studies, along with more recent ones centered on the shift in the patient's role, from a passive actor to an active one, a co-creator of value within health ecosystems, leads us to the idea that

digital transformation is increasingly becoming an *opportunity-driven* process. In this regard, we can highlight the contribution of articles published in business journals, which focus primarily on the patient-centered approach and on the development of health business models oriented toward the co-creation of economic and social value. Nevertheless, our analysis reveals a notable absence of the perspective of end beneficiaries, for example regarding their satisfaction with the digital transformation of medical services.

As a result of the analysis conducted, at least two future research directions can be outlined. The first direction could focus on private economic actors within health ecosystems, known as promoters of digital transformation, supported by greater financial potential, increased decisional flexibility, and the ability to rapidly experiment with emerging technological models. Such research could examine how these organizations accelerate technology adoption, how they manage associated risks, and the extent to which they contribute to reducing digital gaps within health ecosystems. The second direction could consider the perspective of corporate beneficiaries, who are increasingly interested in digital medical services for their employees as part of organizational care for well-being and retention. In this context, a relevant research direction could explore the criteria used to select digital medical services, and the ways in which these solutions influence organizational culture, productivity, and employer-branding strategies.

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