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Digital dynamic capabilities as a tool for digital transformation in accounting firms

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Abstract

Research Question: Which conceptual elements of the digital dynamic capabilities support digital transformation in accounting firms?
Motivation: Previous studies have analyzed digital dynamic capabilities in various sectors such as banking, supply chains, industry, maritime transportation, yet investigations in accounting firms remain scarce.
Idea: This paper examines the conceptual elements of digital dynamic capabilities to support the digital transformation process in accounting firms.
Data: The data were collected from 47 articles.
Tools: The collection of publications that compose the sample of this Systematic Literature Review was carried out in the Web of Science and Scopus databases, using the PRISMA protocol.
Findings: Three main capabilities were identified (digital sensing, digital seizing, and digital transforming), along with nine associated sub-capabilities. It was found that internal factors, such as organizational culture, leadership, and adaptability, play a central role in digital transformation. Likewise, resistance to change and technological limitations were also observed as significant barriers.
Contribution: This study contributes to the literature on dynamic capabilities and digital transformation by shifting the focus to accounting firms, a context that remains underexplored. In addition, the proposed framework offers a conceptual and practical tool to support managers and consultants in assessing digital capabilities, identifying gaps, and guiding digital transformation initiatives.

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1. Introduction

Accounting has been influenced by the adoption and advancement of digital technologies, especially artificial intelligence, which has been transforming how accounting services are delivered, as well as how accounting firms operate, organize their processes, and interact with clients (Afiqah Zamain *et al.*, 2024). Artificial intelligence has been associated with the automation of repetitive tasks, the reduction of operational errors, support for data analysis, and increased efficiency in the production of accounting information, without eliminating the relevance of human judgment and the professional competencies of accountants (Roos *et al.*, 2025; Afiqah Zamain *et al.*, 2024).

Despite these advances, the digitalization of accounting firms also involves financial, regulatory, security, and resistance-to-change risks, which affect the development of digital strategies and the configuration of digital structures (Hentati *et al.*, 2025). Still, when successfully implemented, digital transformation can generate substantial benefits and offer relevant guidance for accounting firms facing the complexities of digital adaptation (Hsiung & Lin, 2025). Thus, digital transformation in the accounting sector requires not only the adoption of technologies but also the development of organizational capabilities to anticipate risks, manage resistance, and align strategy, structure, and digital governance.

In this context, dynamic capabilities can support accounting firms in digital transformation processes, as they enable these organizations to anticipate risks and opportunities, manage resistance, align digital strategies, redesign structures, and strengthen digital governance. In addition, these capabilities foster adaptation to business ecosystems and their shaping through innovation and collaboration with other institutions, thereby driving organizational transformation itself (Kowalski *et al.*, 2025; Ellström *et al.*, 2022; Ghosh *et al.*, 2022; Matarazzo *et al.*, 2021).

To understand this phenomenon more specifically, recent studies have addressed digital dynamic capabilities, also referred to as dynamic capabilities for digital transformation, as an extension of the dynamic capabilities originally proposed by Teece *et al.* (1997) and adapted to the digital context (Albannai *et al.*, 2024; Zia *et al.*, 2023; Warner & Wäger, 2019). These capabilities make it possible to analyze how organizations sense technological and market changes, seize digital opportunities, and reconfigure resources, processes, and structures to sustain digital transformation.

However, although prior literature has advanced discussion on digital transformation and digital dynamic capabilities (Kowalski *et al.*, 2025; de Paula Pereira *et al.*, 2024), it remains unclear how these capabilities manifest in accounting service firms. Much of the research addresses dynamic capabilities for digital transformation in broader organizational, industrial, or technology-intensive contexts (Dobrovnik *et al.*, 2025; Ghosh *et al.*, 2022), leaving the specificities of accounting firms in the background, even though they operate in an environment marked by strong regulation, recurring client demands, dependence on digital systems, the need for professional trust, and different levels of digital maturity.

Against this backdrop, this study aims to identify the conceptual elements of digital dynamic capabilities to support the digital transformation process in accounting firms, based on a systematic literature review (Massaro *et al.*, 2016). Therefore, this research contributes to the literature on dynamic capabilities (Teece, 2018; 2007) by reinforcing the role of digital dynamic capabilities as mechanisms of sensing, seizing, and transforming in digital contexts. In addition, it advances the contributions of Warner and Wäger (2019) and Kowalski *et al.* (2025) by directing this discussion toward accounting firms, a context that remains underexplored.

Although previous studies have analyzed these capabilities in sectors such as banking (de Paula Pereira *et al.*, 2024), supply chains (Dobrovnik *et al.*, 2025), industry (Ghosh *et al.*, 2022), maritime transportation (Wohlleber *et al.*, 2024) but also in the case of small and medium-sized enterprises (Saeedikiya *et al.*, 2024; Soluk & Kammerlander, 2021), investigations in accounting firms remain scarce. From a practical standpoint, the proposed framework can support managers and consultants in assessing existing digital capabilities, identifying gaps, and guiding actions aimed at strengthening digital maturity, innovation, and organizational adaptation.

The remainder of this paper is organized as follows. Section 2 presents the literature review and Section 3 explains the methodology. The results and discussion are presented in Section 4. Section 5 concludes the paper.

2. Literature review

2.1 Digital transformation in accounting and accounting firms

Digital transformation has changed accounting by expanding the use of technologies such as cloud computing, big data, blockchain, robotic process automation, and artificial intelligence in professional routines (Pargmann *et al.*, 2023; Moll & Yigitbasioglu, 2019). In addition, these technologies change how data are collected, processed, analyzed, and used to support decisions, shifting part of accounting work from operational tasks to more analytical and advisory activities (Knudsen, 2020;

Moll & Yigitbasioglu, 2019). In this sense, digital transformation is not limited to the adoption of digital tools, as it involves changes in processes, professional competencies, and the way value is generated in accounting services (Knudsen, 2020; Pargmann *et al.*, 2023).

In the context of accounting firms, this process becomes especially relevant as many traditional activities, such as entries, reconciliations, reviews, report issuance, and documents' management, can be automated or supported by digital systems (Afiqah Zamain & Subramanian, 2024; Pargmann *et al.*, 2023;). From this perspective, digitalization in accounting involves different levels of change, ranging from the replacement of analog tasks to innovation in processes and services (Pargmann *et al.*, 2023). As a result, technology is no longer merely a resource for operational efficiency and begins to influence work reorganization, client interaction, and the ability of accounting firms to respond to new market demands (Pargmann *et al.*, 2023; Knudsen, 2020; Moll & Yigitbasioglu, 2019).

More recently, the rapid development of artificial intelligence has transformed several fields, including accounting (Roos *et al.*, 2025; Afiqah Zamain & Subramanian, 2024). In this scenario, the adoption of AI in accounting can support applications such as invoice processing, anomaly detection, financial forecasting, and tax compliance (Roos *et al.*, 2025). In addition, AI adoption depends on prerequisites such as adequate technological infrastructure, data quality, regulatory compliance, and professional qualification (Roos *et al.*, 2025). Likewise, the literature also discusses the impacts, benefits, risks, and challenges of AI in the accounting profession, reinforcing that its incorporation requires careful assessment of its effects on firms and professionals (Afiqah Zamain & Subramanian, 2024).

Although these technologies can reduce repetitive tasks, they do not eliminate the importance of accounting professionals, as they tend to reinforce the need for judgment, critical interpretation, client communication, and the strategic use of information (Moll & Yigitbasioglu, 2019; Pargmann *et al.*, 2023). Thus, digital transformation requires accountants to develop digital and analytical competencies to operate in environments driven by data, integrated systems, and intelligent technologies (Januszewski *et al.*, 2025; Pargmann *et al.*, 2023). Furthermore, this shift accelerates the need for professional adaptation, as digitalization reshapes the day-to-day activities, core competencies, and overall expectations within the accounting profession (Januszewski et al., 2025; Pargmann et al., 2023; AfiqahZamain & Subramanian, 2024).

Overall, recent evidence indicates that accounting professionals recognize both the opportunities and the challenges of digital transformation (Hsiung & Lin, 2025; Januszewski *et al.*, 2025). In the case of accounting firms, digitalization is perceived mostly positively by the employees of accounting firms, although professionals also recognize challenges associated with digital transformation and artificial intelligence

in the accounting profession (Januszewski *et al.*, 2025). From a similar perspective, although digital transformation presents inherent challenges, its successful implementation can bring substantial benefits to accounting firms (Hsiung & Lin, 2025).

Among these benefits, digital transformation can contribute to improving quality and efficiency, reducing workload, and relieving stress in accounting firms (Hsiung & Lin, 2025). However, these benefits depend on how accounting firms mobilize their internal resources and intellectual capital to sustain digital adaptation (Hsiung & Lin, 2025). Thus, digital transformation depends not only on the availability of technologies but also on the ability of managers and teams to understand, accept, and incorporate these tools into organizational routines (Hsiung & Lin, 2025; Januszewski *et al.*, 2025; Pargmann *et al.*, 2023).

Despite these benefits, the digital transformation also involves organizational risks and tensions (Hentati *et al.*, 2025; Hsiung & Lin, 2025). In this sense, the digitalization of accounting firms should consider pre- and post-implementation risks associated with digital technologies (Hentati *et al.*, 2025). These risks include financial, regulatory, security, and resistance-to-change risks, which affect the development of digital strategies and the configuration of digital structures (Hentati *et al.*, 2025). As a result, digital transformation in the accounting sector requires not only technology adoption but also organizational capabilities to anticipate risks, manage resistance, and align digital strategy and structure (Hentati *et al.*, 2025).

Thus, digital transformation in accounting can be understood as a multidimensional change that integrates technology, processes, competencies, risks, and strategy (Pargmann *et al.*, 2023; Knudsen, 2020; Moll & Yigitbasioglu, 2019). For accounting firms, this means rethinking internal routines, developing digital capabilities, improving integration with clients, and using data more intelligently to generate value (Hsiung & Lin, 2025; Januszewski *et al.*, 2025; Pargmann *et al.*, 2023). Thus, digital transformation is no longer merely a form of operational modernization and becomes an opportunity for accounting firms to reposition themselves, enabling a more advisory, analytical, and innovation-oriented role (Hsiung & Lin, 2025; Knudsen, 2020; Moll & Yigitbasioglu, 2019).

2.2 Digital dynamic capabilities

Digital dynamic capabilities represent an extension of the dynamic capabilities originally proposed by David Teece, adapted for the digital context (Albannai *et al.*, 2024). The development of micro foundations of these capabilities, aimed at the digital transformation of organizations, has been addressed by several authors (de Paula Pereira *et al.*, 2024; Ellström *et al.*, 2022; Warner & Wäger, 2019). Digital dynamic capabilities, or dynamic capabilities for digital transformation, encompass

three main components: digital sensing, digital seizing, and digital transformation (Warner & Wäger, 2019).

Digital sensing includes activities such as exploring digital trends and competitors, analyzing customer behavior trends, and digital scenario planning, which involves interpreting future scenarios and formulating digital strategies. Moreover, this dimension encompasses the development of a digital mindset, which translates into a strategic vision focused on digital aspects (Zia *et al.*, 2023). Digital sensing capabilities enable firms to understand changes in the business environment and respond to them proactively (Ellström *et al.*, 2022; Warner & Wäger, 2019).

Digital seizing involves practices such as rapid prototyping, which includes creating simplified versions of new services or tools to test their feasibility and obtain customer feedback. It also encompasses balancing digital portfolios, aimed at expanding innovative business models and strengthening their execution, as well as strategic agility, which requires reallocation resources and providing rapid responses to market changes (Zia *et al.*, 2023). As companies implement new technologies in their business processes, capacity gaps may arise, making the seizing capability essential for capturing value from these innovations (Ellström *et al.*, 2022; Karimi & Walter, 2015).

Digital transformation, in turn, requires (1) navigating innovation ecosystems, including connecting to digital networks and external partners to explore new opportunities and capabilities; (2) redesigning internal structures, which may involve hiring digital specialists and digitalizing business models; and (3) improving digital maturity, which encompasses leveraging internal digital knowledge, assessing the maturity of the digital workforce, and recruiting digital natives when necessary (Zia *et al.*, 2023; Warner & Wäger, 2019). In this context, the structure of the digital dynamic capabilities described refers to organizational capabilities that facilitate digital transformation within organizations, driven by the role of the digital leader in developing and sustaining the three dimensions of these capabilities (Albannai *et al.*, 2024).

3. Methodology

This article aims to identify the conceptual elements of digital dynamic capabilities (DDC) that support the digital transformation process in accounting firms. The research is qualitative and descriptive, and in terms of procedures, it consists of a systematic literature review. The systematic literature review represents an important tool for reducing the gap between academic research and professional practice (Massaro *et al.*, 2016).

The collection of publications that compose the sample of this systematic literature review was carried out in the Web of Science and Scopus databases. The choice of these databases is justified by their relevance and recognition in the scientific field of applied social sciences (Wanyama *et al.*, 2022; Lamboglia *et al.*, 2021). Regarding the search terms, two combinations were used: "dynamic capabilities" AND "digital transformation" AND "accounting" and "dynamic capabilities" AND "digital transformation," both applied to the title field, with the aim of retrieving articles that specifically addressed these themes while avoiding an excessive expansion of results.

The first combination sought to identify studies that simultaneously integrated dynamic capabilities, digital transformation, and accounting. However, no articles addressing these themes jointly were found. Given this gap, a second search was conducted using the terms "dynamic capabilities" AND "digital transformation", enabling the identification of studies that discuss the relationship between these constructs in different organizational contexts. The absence of studies that simultaneously integrate the terms "dynamic capabilities", "digital transformation", and "accounting" highlights a theoretical gap in the accounting literature. In light of this, it was decided to utilize evidence from other service sectors and organizational contexts investigating digital dynamic capabilities and digital transformation. This decision finds support in Warner and Wäger (2019), who developed an organizational rather than a sector-specific framework, as well as in Wohlleber et al. (2022), who demonstrated the possibility of adapting this structure to specific contexts. Additionally, studies such as those by Pereira et al. (2024) and Kowalski et al. (2024) reinforce the applicability of these mechanisms in knowledge-intensive and service-oriented organizations, characteristics that are also present in accounting firms.

The systematic literature review was conducted in accordance with the PRISMA guidelines (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) (Marcondes & da Silva, 2023). The PRISMA protocol includes a flow diagram, which assists the researcher in organizing the steps required for the development of the systematic literature review. Although it was originally designed for reporting intervention studies, it is now also applied in business research (Aiswarya & Muthumeenakshi, 2024). The selection criteria for the analyzed studies are presented in the PRISMA diagram (Figure 1).

Regarding the filters, only articles from the two databases were selected. In the case of Scopus, a filter was also applied by the areas of Business, Management, and Accounting, aiming to restrict the search to studies aligned with the research focus, given the large number of results initially retrieved from this database. The search prioritized conceptual precision over semantic breadth, a methodological decision

valid for ensuring focus on the core concepts, which is why variations or synonyms of the main terms were not used.

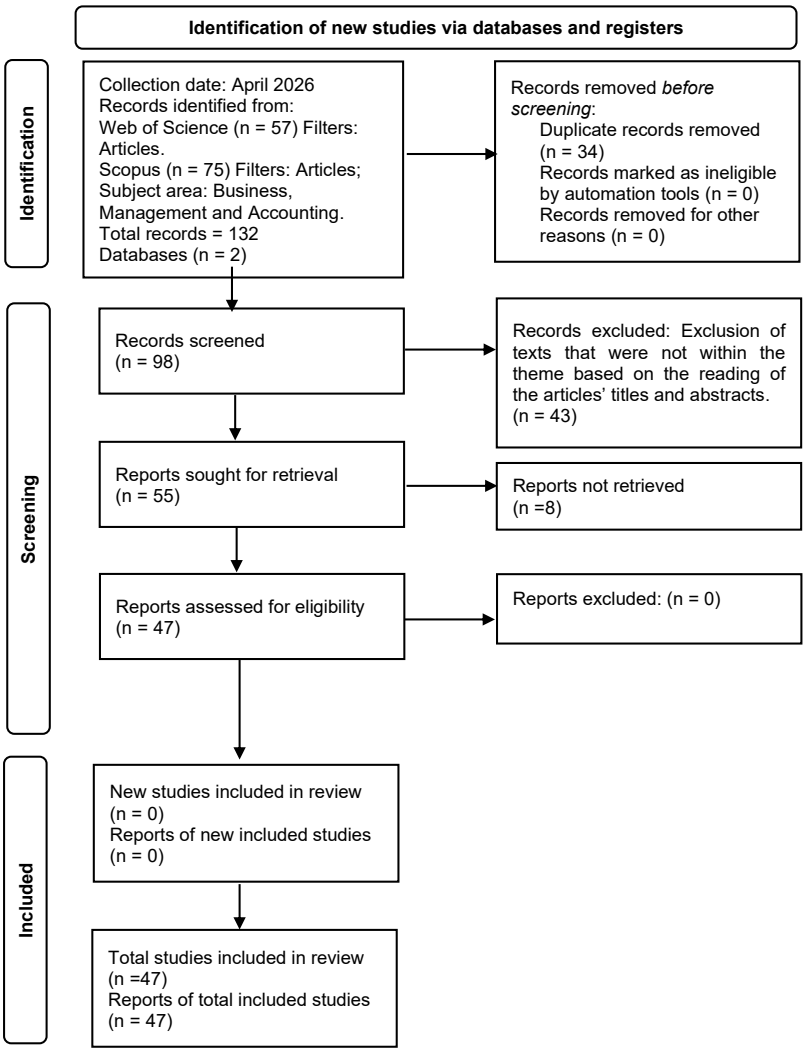


Figure 1. PRISMA Chart Depicting Selection of Studies
Source: Elaborated by authors.

In terms of data analysis, it is noteworthy that all 47 remaining scientific articles were read in full (Appendix A). As for the data analysis technique, content analysis was employed as the objective was to conduct a systematic analytical process to identify the characteristics of the information contained in the collected textual elements (Bardin, 2011). All data collected were saved in text documents or PDF files for analysis using the NVivo 15 software. Figure 2 below presents the categories

of content analysis used to organize and interpret the evidence extracted from the selected articles.

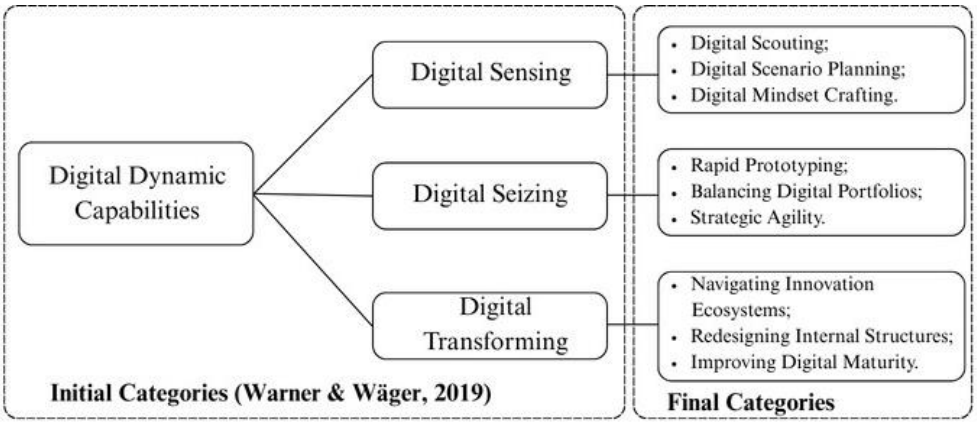


Figure 2. Categories of content analysis
Source: Elaborated by authors.

Regarding the initial and intermediate categories that guided the content analysis, the construct of Digital Dynamic Capabilities stands out, along with its internal concepts (Warner & Wäger, 2019). The selection of these initial categories is aligned with the objective of this study. It should be noted that the final categories of the content analysis, which were data-driven, are presented and discussed throughout the results section. Thus, the 47 selected articles were deeply analysed through the content analysis performed, although only the studies that highlighted specific conceptual elements were explicitly cited in the results section.

4. Results and discussion

4.1 Conceptual elements of digital dynamic capabilities

The conceptual elements of digital dynamic capabilities (DDC) most frequently used in the analyzed articles can be grouped into three main capabilities: digital sensing, digital seizing, and digital transforming (Dobrovnik *et al.*, 2025; Kowalski *et al.*, 2025; Ellström *et al.*, 2022; Ghosh *et al.*, 2022; de Paula Pereira *et al.*, 2024; Warner & Wäger, 2019; Wohlleber *et al.*, 2024). The following section presents the most recurring elements (capabilities and sub-capabilities) in the analysis. Table 1 illustrates the main elements of the digital sensing capability, including digital scouting, digital scenario planning, and digital mindset crafting.

Table 1. Digital sensing and its sub-capabilities

Digital Sensing
Digital scouting: (Dobrovnik *et al.*, 2025; Kowalski *et al.*, 2025; Albannai *et al.*, 2024; de Paula Pereira *et al.*, 2024; Wohlleber *et al.*, 2024; Ellström *et al.*, 2022; Shen *et al.,* 2022; Warner & Wäger, 2019) • Scanning for technological trends; • Screening digital competitors; • Sensing customer-centric trends.
Digital Scenario Planning: (Dobrovnik *et al.*, 2025; Kowalski *et al.*, 2025; Albannai *et al.*, 2024; de Paula Pereira *et al.*, 2024; Wohlleber *et al.*, 2024; Ellström *et al.*, 2022; Shen *et al.,* 2022; Warner & Wäger, 2019) • Analysis of identified signals; • Interpretation of digital future scenarios; • Formulation of digital strategies.
Digital Mindset Crafting: (Dobrovnik *et al.*, 2025; Kowalski *et al.*, 2025; Albannai *et al.*, 2024; de Paula Pereira *et al.*, 2024; Wohlleber *et al.*, 2024; Ellström *et al.*, 2022; Shen *et al.,* 2022; Warner & Wäger, 2019) • Establishment of a long-term digital vision; • Fostering an entrepreneurial mindset; • Promotion of a digital mindset.

Source: Elaborated by authors

Digital sensing is an essential digital dynamic capability for organizations seeking to adapt and thrive in an increasingly digital environment (Dobrovnik *et al.*, 2025; de Paula Pereira *et al.*, 2024; Warner & Wäger, 2019). It involves identifying opportunities and threats in the digital landscape, enabling firms to anticipate changes and prepare for the future. Digital sensing can be divided into three main sub-capabilities: digital scouting, digital scenario planning, and digital mindset crafting.

Digital scouting refers to the process of actively monitoring the external environment to identify emerging trends and opportunities (Dobrovnik *et al.*, 2025; de Paula Pereira *et al.*, 2024; Warner & Wäger, 2019). This process includes: technological trend scanning, which enables tracking innovations that may impact the sector in which the organization operates; digital competitor screening, focused on analyzing competitors' strategies and movements in the digital environment; and customer-centric trend sensing, aimed at identifying changes in consumer behavior and expectations.

Digital scenario planning involves analyzing the signals identified during scouting to forecast possible future scenarios (Dobrovnik *et al.*, 2025; de Paula Pereira *et al.*, 2024; Warner & Wäger, 2019). This process encompasses: signal analysis, which

seeks to interpret the data collected in digital scouting and understand its implications; digital future scenario interpretation, aimed at developing projections about the evolution of the digital environment; and digital strategy formulation, focused on creating action plans that enable the organization to adapt and thrive in different future scenarios.

In digital transformation contexts, the adoption of digital technologies and the shift towards service-oriented business growth require organizations to strengthen their strategic sensing capacity. In this regard, evidence from the firms interviewed by Ghosh *et al.* (2022) suggests that companies with more developed sensing capabilities were better able to support the transformation of their operating models as part of their digital transformation capability. Conversely, firms with weaker sensing capabilities appeared to be adrift, facing greater difficulty in formulating coherent digital transformation strategies and executing them in a meaningful way (Ghosh *et al.*, 2022).

Digital mindset crafting is essential to ensure that the organization is culturally prepared for digital transformation. This process involves: establishing a long-term digital vision, which defines a clear and inspiring direction for the organization's digitalization; enabling an entrepreneurial mindset, aimed at fostering innovation and proactivity among employees; and promote a digital mindset, with the purpose of nurturing a culture that values and embraces digital change (Warner & Wäger, 2019). For this to be effective in practice, the organization must be structured around a digitally oriented culture and guided by a long-term strategic vision, ensuring that decisions are not merely reactive but future-oriented (de Paula Pereira *et al.*, 2024).

Dobrovnik *et al.* (2025) identified in their research that digital scenario planning, which involves projecting possible futures to guide strategic decisions, as well as the development of a culture oriented toward the adoption and strategic use of digital technologies through digital mindset crafting, are the most relevant sub-capabilities for the organization. However, among the articles analyzed, digital sensing and digital scenario planning appear as the most frequently cited. Table 2 presents the main elements of the digital seizing capability, including rapid prototyping, balancing digital portfolios, and strategic agility.

Digital seizing is an important dynamic digital capability for organizations that aim to capitalize on opportunities identified and can be divided into three sub-capabilities: rapid prototyping, balancing digital portfolios, and strategic agility (Dobrovnik *et al.*, 2025; Kowalski *et al.*, 2025; de Paula Pereira *et al.*, 2024; Wohlleber *et al.*, 2024; Ellström *et al.*, 2022; Ghosh *et al.*, 2022; Warner & Wäger, 2019).

Table 2. Digital seizing and its sub-capabilities

Digital Seizing
Rapid Prototyping: (Dobrovnik *et al.*, 2025; Kowalski *et al.*, 2025; Albannai *et al.*, 2024; de Paula Pereira *et al.*, 2024; Wohlleber *et al.*, 2024; Ellström *et al.*, 2022; Ghosh *et al.*,2022; Shen *et al.,* 2022; Warner & Wäger, 2019) • Creating Minimum Viable Products (MVPs); • Considering a Lean Start-up Methodology; • Using digital innovation labs.
Balancing Digital Portfolios: (Dobrovnik *et al.*, 2025; Kowalski *et al.*, 2025; Albannai *et al.*, 2024; de Paula Pereira *et al.*, 2024; Wohlleber *et al.*, 2024; Ellström *et al.*, 2022; Shen *et al.,* 2022; Warner & Wäger, 2019) • Balancing internal and external options; • Scaling up innovative business models; • Setting an appropriate speed of execution.
Strategic Agility: (Dobrovnik *et al.*, 2025; Kowalski *et al.*, 2025; Albannai *et al.*, 2024; de Paula Pereira *et al.*, 2024; Wohlleber *et al.*, 2024; Ellström *et al.*, 2022; Shen *et al.,* 2022; Warner & Wäger, 2019) • Rapid reallocation of resources; • Acceptance of redirection and changes; • Pacing strategic responses.

Source: Elaborated by authors

Rapid prototyping is the agile development process of digital products or services aimed at quickly testing and validating ideas (Warner & Wäger, 2019). This process includes: creating minimum viable products (MVPs), which involves developing simplified versions of products to test concepts and gather user feedback; considering a lean start-up methodology, which applies iterative and incremental approaches to minimize waste and maximize learning; and using a digital innovation lab, which provides dedicated spaces for experimentation and the development of innovative solutions. In this sense, rapid prototyping supports experimentation, learning, and the rapid conversion of digital opportunities into viable solutions.

This capability becomes particularly relevant in highly dynamic digital environments, where technological change, increasing customer demands, and competitive pressure require firms to innovate quickly. In this regard, most interviewees in the study conducted by Ghosh *et al.* (2022) recognized innovation and rapid prototyping capabilities as essential competencies for digital transformation and for seizing digital opportunities. Their findings also indicate that rapid prototyping functions as a prerequisite for exploiting digital opportunities, since firms need to respond to complex emerging technologies, absorb technological uncertainty, and deliver customized solutions aligned with specific customer needs (Ghosh *et al.*, 2022).

Moreover, digital innovation labs can strengthen this process by enabling firms to experiment with minimum viable products and collect near real-time customer feedback, which can then be used to quickly respond to customer-centered trends (Warner & Wäger, 2019). Therefore, prototyping simulates examples of strategic decisions through digital innovation labs and viable product experiments, enabling organizations to reduce time-to-market while collecting real-time customer feedback (de Paula Pereira *et al.*, 2024).

Balancing digital portfolios involves the management of digital initiatives to ensure that the organization invests in the right areas. This process encompasses: balancing internal and external options, which combines internal developments with external partnerships and acquisitions to maximize innovation potential; scaling innovative business models, aimed at identifying and expanding business models with growth and value creation potential; and setting an appropriate execution speed, which adjusts the pace of implementation to ensure that initiatives are carried out efficiently and effectively.

Strategic agility refers to the organization's ability to rapidly adapt to changes in the digital environment. This process includes: rapid resource reallocation, which enables the agile movement of human, financial, and technological resources to higher-priority areas; accepting redirection and change, which involves being open to strategic adjustments based on new ideas or market transformations; and pacing strategic responses, aimed at making decisions and implementing actions quickly to seize opportunities or mitigate threats (Warner & Wäger, 2019). Agility, understood as the capacity for rapid adaptation, is the central factor for strategically renewing the business model, internal collaboration practices, and organizational culture, allowing the company to remain competitive in a constantly changing environment (Warner & Wäger, 2019).

Rapid prototyping and strategic agility are the most frequently mentioned elements in the analyzed articles that address these sub-capabilities, especially in contexts of innovation and adaptation to rapid market changes (Dobrovnik *et al.*, 2025; Kowalski *et al.*, 2025; de Paula Pereira *et al.*, 2024; Wohlleber *et al.*, 2024; Ghosh *et al.*, 2022; Warner & Wäger, 2019). Table 3 presents the main elements of the digital transforming capability, including navigating innovation ecosystems, redesigning internal structures, and enhancing digital maturity.

Table 3. Digital transforming and its sub-capabilities

Digital Transforming
Navigating Innovation Ecosystems: (Dobrovnik *et al.*, 2025; Kowalski *et al.*, 2025; Albannai *et al.*, 2024; de Paula Pereira *et al.*, 2024; Wohlleber *et al.*, 2024; Shen *et al.,* 2022; Warner & Wäger, 2019) • Entering digital ecosystems; • Interacting with multiple external partners;

Digital Transforming
• Exploring new ecosystem capabilities.
Redesigning Internal Structures: (Dobrovnik *et al.*, 2025; Kowalski *et al.*, 2025; Albannai *et al.*, 2024; de Paula Pereira *et al.*, 2024; Wohlleber *et al.*, 2024; Ellström *et al.*, 2022; Ghosh *et al.*, 2022; Shen *et al.,* 2022; Warner & Wäger, 2019) • Hiring a Chief Digital Officer (CDO); • Digitalizing business models; • Designing team-based organizational structures.
Improving Digital Maturity: (Dobrovnik *et al.*, 2025; Kowalski *et al.*, 2025; de Paula Pereira *et al.*, 2024; Wohlleber *et al.*, 2024; Shen *et al.,* 2022; Warner & Wäger, 2019) • Identifying digital workforce maturity; • External recruitment of digital natives; • Leveraging digital knowledge inside firm.

Source: Elaborated by authors

Digital transforming is the final and most comprehensive stage of digital dynamic capabilities, in which organizations implement profound changes in their operations, structures, and culture to adapt to the digital environment. This process involves integrating digital technologies into all aspects of the business, with the purpose of enhancing efficiency, driving innovation, and strengthening competitiveness. Digital transforming can be divided into three sub-capabilities: navigating innovation ecosystems, redesigning internal structures, and enhancing digital maturity.

Navigating innovation ecosystems refers to the organization's ability to integrate and collaborate with other actors in the digital environment (Warner & Wäger, 2019). This process includes: entering digital ecosystems, which involves participating in digital networks and platforms that connect companies, startups, suppliers, and customers; interacting with multiple external partners, aimed at establishing strategic partnerships to co-create value and drive innovation; and exploring new ecosystem capabilities, which seeks to leverage the competencies and resources available in the ecosystem to foster innovation and growth. In this sense, networking becomes an important capability for digital transformation, as it allows firms to search for new opportunities and solutions beyond the boundaries of their own industry (Ellström *et al.*, 2022). Moreover, participation in innovation ecosystems can help organizations respond more rapidly to customer needs when compared to firms that remain attached to traditional product-based business models (Warner & Wäger, 2019).

This discussion is especially relevant because traditional firms increasingly need to build or become part of digital ecosystems in order to work with new partners through co-creation and coopetition, which can accelerate collaborative behaviors and support the development of new business models (Warner & Wäger, 2019). Evidence from SMEs also reinforces this perspective, showing that engagement in digital innovation ecosystems can increase the tendency and frequency with which

firms adopt collaborative approaches with external partners, both to access new ideas and digital solutions and to improve the outcomes of research and development efforts (Secundo *et al.*, 2025). Therefore, considering innovation ecosystems in digital transformation strategies is essential, as they provide greater flexibility in the connections between business actors, expand access to complementary capabilities, and contribute to improved financial performance (Freitas Junior *et al.*, 2023).

Redesigning internal structures involves adapting the organization to support digital transformation (Warner & Wäger, 2019). This process includes: hiring a Chief Digital Officer (CDO), that is, appointing a leader responsible for guiding the organization's digital strategy (Albannai *et al.*, 2024; Faro *et al.*, 2024); digitalizing business models, which seeks to transform traditional processes and operations into technology-based models; and designing team-based organizational structures, aimed at promoting a more agile and collaborative organization, with multifunctional teams working on digital projects. In this sense, the redesign of internal structures is only possible through transformational leadership and decentralization, as these practices foster innovation and autonomy within organizations (de Paula Pereira *et al.*, 2024).

This capability is also emphasized by evidence showing that an adequate organizational structure is an essential competence for digital transformation, since internal structures may either facilitate or hinder such initiatives (Ghosh *et al.*, 2022). In this regard, firms need to develop appropriate internal operating structures, with clearly defined roles and responsibilities, to successfully implement digital transformation initiatives and adapt their structures to better support digitalization (Ghosh *et al.*, 2022). Moreover, the role of the CDO remains relevant in managing digital transformation initiatives, although this role may become less necessary as organizations mature digitally and existing positions, such as the Chief Technology Officer (CTO), become capable of coordinating these initiatives (Ghosh *et al.*, 2022).

Enhancing digital maturity refers to the development of the organization's digital skills and capabilities (Warner & Wäger, 2019). This process includes: identifying digital workforce maturity, which assesses the level of employees' digital skills and identifies areas for improvement; recruiting external digital natives, aimed at hiring professionals with expertise in digital technologies to drive innovation; and leveraging internal digital knowledge, which promotes the dissemination of digital knowledge among employees. In this sense, enhancing digital maturity also depends on organizational efforts to strengthen digital knowledge through structured learning processes, targeted recruitment, and the creation of environments that support continuous capability development.

In this regard, evidence from the interviews analyzed by Secundo *et al.* (2025) shows that digital maturity can be reinforced through periodic training sessions on digital document management platforms and data flow processing, multilevel training

initiatives focused on digital advertising and corporate branding, and a stronger emphasis on recruiting digital natives and establishing research and development partnerships. Moreover, the authors show that internal learning platforms can further support this process by facilitating employee development through integrated training programs and customized courses designed to address skill gaps, thereby contributing to the systematic improvement of organizational digital knowledge (Secundo *et al.*, 2025).

Digital transforming is a complex and multifaceted process that requires profound changes in how organizations operate and compete. Redesigning Internal Structures and Enhancing Digital Maturity are the most prominent elements in the analyzed articles, reflecting the need for structural changes and capacity building for digital transformation (Dobrovnik *et al.*, 2025; Kowalski *et al.*, 2025; Albannai *et al.*, 2024; de Paula Pereira *et al.*, 2024; Wohlleber *et al.*, 2024; Ellström *et al.*, 2022; Ghosh *et al.*, 2022; Warner & Wäger, 2019). Figure 3 presents the structure of digital dynamic capabilities and their sub-capabilities.

As presented in Figure 3, the model of digital dynamic capabilities is composed of three main dimensions: digital sensing, digital seizing, and digital transforming. Digital sensing encompasses digital scouting, involving the monitoring of technological trends and competitors; digital scenario planning, which interprets future signals and formulates strategies; and digital mindset crafting, encouraging a long-term vision and entrepreneurial attitudes (Dobrovnik *et al.*, 2025; Kowalski *et al.*, 2025; de Paula Pereira *et al.*, 2024).

In digital seizing, the most prominent elements are: rapid prototyping, using agile methodologies and minimum viable products; balancing digital portfolios, balancing internal and external innovations; and strategic agility, which enables the agile reallocation of resources and adaptation to change (Dobrovnik *et al.*, 2025; Kowalski *et al.*, 2025; de Paula Pereira *et al.*, 2024). Digital transforming includes navigating innovation ecosystems, with integration into digital environments and external partnerships; redesigning internal structures, digitalizing business models and leadership; and enhancing digital maturity, leveraging digital talent and knowledge already existing within the organization (Kowalski *et al.*, 2025; de Paula Pereira *et al.*, 2024). These dimensions work together to drive adaptation and innovation in the digital environment.

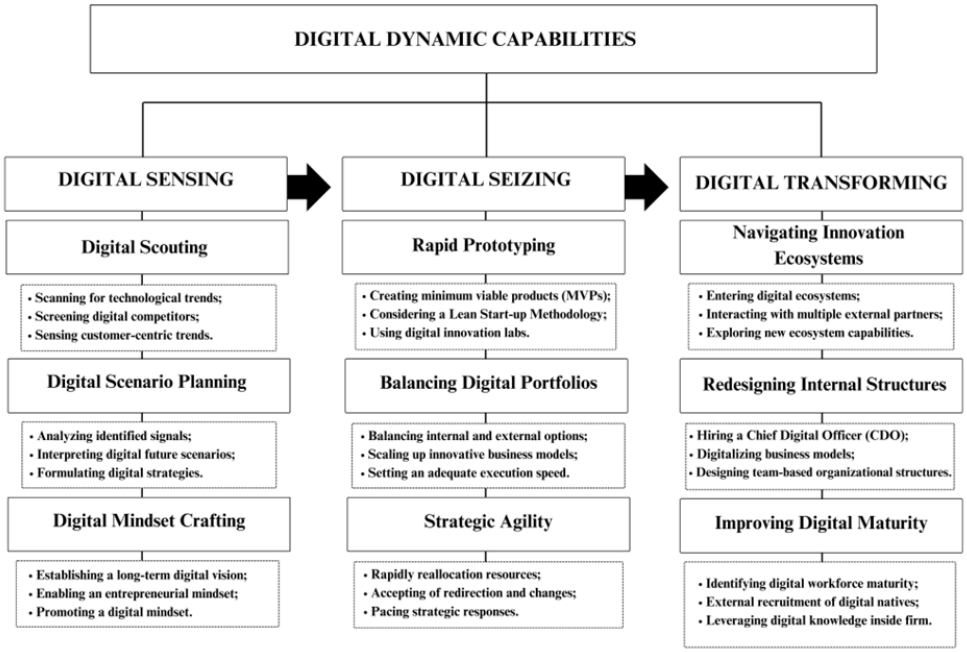


Figure 3. Structure of digital dynamic capabilities and their sub-capabilities
Source: Elaborated by authors

4.2 Theoretical framework proposed

In the study by Wohlleber *et al.* (2024), investigating which dynamic capabilities are most effective in driving digital transformation in the container shipping industry, the concepts of digital sensing, digital seizing, and digital transforming, as proposed by Warner and Wäger (2019), were applied. These concepts were adapted by the authors to reflect the specificities of organizations in the container shipping sector. Analogous to the approach adopted by Wohlleber *et al.* (2024), this research presents a framework based on the digital dynamic capabilities described by several authors (Dobrovnik *et al.*, 2025; Kowalski *et al.*, 2025; Albannai *et al.*, 2024; de Paula Pereira *et al.*, 2024; Wohlleber *et al.*, 2024; Ellström *et al.*, 2022; Shen *et al.,* 2022; Warner & Wäger, 2019), which were adapted to the specific context of accounting firms.

Therefore, digital transformation is essential for accounting firms that seek to remain competitive in an increasingly dynamic and technology-driven market. The digital dynamic capabilities (DDC) framework for accounting firms provides a structured guide for this journey, divided into three capabilities: digital sensing, digital seizing, and digital transforming (Dobrovnik *et al.*, 2025; Kowalski *et al.*, 2025; Albannai *et al.*, 2024; de Paula Pereira *et al.*, 2024; Wohlleber *et al.*, 2024; Ellström *et al.*, 2022; Ghosh *et al.*, 2022; Shen *et al.,* 2022; Warner & Wäger, 2019). These capabilities

can help firms identify opportunities, implement innovative solutions, and adapt their structures and services to the digital future. Figure 4 presents the theoretical framework of digital dynamic capabilities adapted to the context of accounting firms.

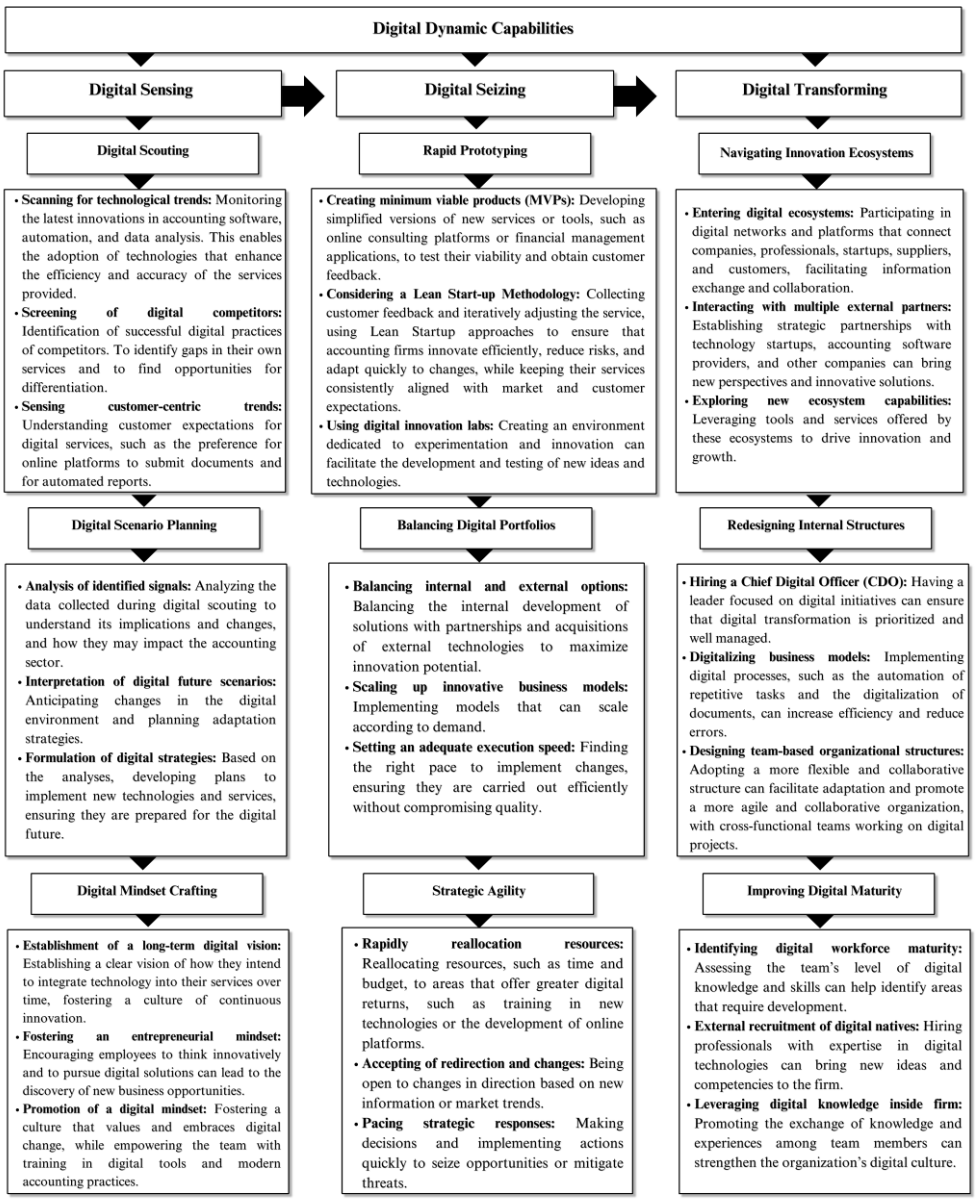


Figure 4. Theoretical framework of digital dynamic capabilities for accounting firms
Source: Elaborated by authors

Digital sensing capability is an essential component of digital dynamic capabilities, enabling accounting firms to identify emerging opportunities and proactively respond to environmental transformations. This involves not only the exploration of technological trends and the observation of competitors but also the critical analysis of client expectations in the digital context. As Teece (2018) points out, the sensing capability is the first step toward the continuous renewal of organizational competencies. In the accounting sector, this means anticipating regulatory, technological, and behavioral changes that may directly impact the services provided.

Based on the sensing capability, the creation of digital scenarios emerges as a strategic step that enables the development of responses aligned with the reality of accounting firms. This projection of possible futures supports the formulation of adaptive actions, which are especially relevant for micro and small firms, whose limited resources require more selective and effective technological choices (Fredo *et al.*, 2023). However, such planning does not occur in isolation; it must be linked to the building of an organizational digital mindset (de Paula Pereira *et al.*, 2024; Warner & Wäger, 2019), fostering a culture that promotes continuous innovation and technological learning as central elements of the firm's identity.

Moving forward in this process, the digital seizing phase reinforces the need to transform insights into actions (de Paula Pereira *et al.*, 2024; Warner & Wäger, 2019). Rapid prototyping, in this context, is a powerful sub-capability, as it enables agile experimentation through the creation of MVPs (Warner & Wäger, 2019). This makes it possible to test services and tools such as online consulting platforms or financial management applications with direct client feedback before major investments. In this way, accounting firms can continuously adjust their services with lower risk and greater flexibility by leveraging agile methodologies and digital innovation labs.

This practical approach strengthens organizational flexibility and contributes to the development of balanced digital portfolios, integrating internal and external solutions with a focus on incremental and disruptive innovations (de Paula Pereira *et al.*, 2024). The efficient orchestration of these resources, combined with the definition of an adequate execution speed, supports an agile response to changes and the consistent delivery of customer value (de Paula Pereira *et al.*, 2024; Warner & Wäger, 2019). At the same time, strategic agility becomes a competitive advantage by enabling rapid resource reallocations and adaptive decision-making in the face of uncertainties within the digital landscape.

In this process, digital transformation, as the culminating stage, cannot be understood merely as the digitalization of processes (Warner & Wäger, 2019). It requires a structural reconfiguration of the organization, with emphasis on new forms of leadership, more adaptable structures, and increasing digital maturity (Dobrovnik *et*

al., 2025; Kowalski *et al.*, 2025; de Paula Pereira *et al.*, 2024; Ellström *et al.*, 2022; Ghosh *et al.*, 2022). Navigating innovation ecosystems thus becomes a fundamental strategic action. This is not only about connecting with startups or platforms but about co-creating value with multiple actors and integrating accounting and technological expertise into novel solutions.

This collaborative logic reinforces the active role of accounting firms in driving sectoral innovation. As highlighted by Fredo *et al.* (2023), accounting digital transformation requires a collaborative and systemic approach, in which the firm is not merely a user of technology, but also an active agent in sectoral innovation. For small and medium-sized firms, this represents a fundamental mindset shift: moving away from operating in isolation and positioning themselves as part of an interdependent system of value creation.

To sustain this shift, the redesign of internal structures, through the adoption of more flexible models and the incorporation of digital leadership, contributes to more effective governance of transformation. This is a systemic change that goes beyond the adoption of tools and extends to organizational culture and business models (Fredo *et al.*, 2023). The pillars of fostering a digital mindset and enhancing digital maturity sustain the entire process by promoting an environment conducive to continuous change (Dobrovnik *et al.*, 2025). Encouraging a long-term vision, equipping employees with digital skills, assessing the workforce, and recruiting digital talent are actions that strengthen organizational resilience. These elements are not merely complementary, but indispensable to ensure that digital transformation unfolds in a consistent and integrated manner (Dobrovnik *et al.*, 2025).

Thus, the proposed framework is not limited to the description of best practices but rather advances a robust conceptual structure for understanding how accounting firms can develop digital dynamic capabilities. Its contribution lies in bridging theory and practice, offering an analytical model that guides the implementation of digital transformation through interdependent, progressive, and context-adaptable processes. This approach is particularly relevant for organizations that, despite limited resources, aim to foster continuous innovation and strategic repositioning in response to the demands of an expanding digital environment.

4.3 Facilitating and hindering factors

4.3.1 Facilitating Factors

The enabling factors mentioned in the articles are related to: the internal environment of organizations and the necessary support for digital transformation. These enabling factors are: cross-functional teams, involving collaboration across different areas of the organization to foster innovation (Kowalski *et al.*, 2025; Warner & Wäger, 2019); fast decision making, ensuring agility in strategic decision-making to respond

to market changes (Kowalski *et al.*, 2025; Warner & Wäger, 2019); executive support, with the involvement and commitment of top leadership in digital transformation, where CEOs and executives promote a digital culture (Kowalski *et al.*, 2025; Ghosh *et al.*, 2022; Warner & Wäger, 2019); data-driven culture, leveraging data to guide decisions and strategies (Kowalski *et al.*, 2025); and a defined strategy for digital transformation, involving clear planning aligned with organizational goals, including the establishment of short- and long-term objectives for digitalization (Kowalski *et al.*, 2025; Ghosh *et al.*, 2022; Saeedikiya *et al.*, 2024; Soluk & Kammerlander, 2021).

4.3.2 Hindering Factors

The barriers presented in the articles are related to internal resistance and the lack of preparedness for change. The hindering factors identified in the articles were: change resistance, stemming from employees' difficulty in adopting new technologies and processes, as well as their reluctance to abandon traditional methods (Kowalski *et al.*, 2025; Saeedikiya *et al.*, 2024; Soluk & Kammerlander, 2021; Warner & Wäger, 2019); rigid strategic planning, characterized by inflexible organizational structures that hinder adaptation (Kowalski *et al.*, 2025; Warner & Wäger, 2019); and high hierarchy, where hierarchical structures prevent agile communication and innovation (Kowalski *et al.*, 2025; Soluk & Kammerlander, 2021; Warner & Wäger, 2019).

Other barriers highlighted include: the lack of digital skills in leadership, where leaders do not possess sufficient knowledge to guide digital transformation (Kowalski *et al.*, 2025); organizational inertia, characterized by the difficulty in sustaining employees' interest and engagement over time, especially when no tangible short-term results are achieved; and integration with legacy systems, which presents technical challenges in incorporating new technologies into old systems (Saeedikiya *et al.*, 2024). Updating processes and technologies is complex, as legacy technologies are not always compatible with new ones, requiring changes to established practices. Figure 5 systematizes the internal enabling and hindering factors for the implementation of DDC identified in the analyzed articles.

The enabling and hindering factors show that digital transformation strongly depends on the organization's internal environment, with emphasis on culture, leadership, adaptability, and human resource management. Change resistance, high levels of hierarchy, and the lack of digital leadership skills are among the main obstacles. In this regard, Kowalski *et al.* (2025) show that companies with less developed dynamic capabilities for digital transformation tend to have fewer leaders with digital skills, which creates barriers to the advancement of digital transformation. This limitation is also related to the lack of strategic human resource management for digital transformation, since traditional firms often face difficulties in recruiting and training digitally skilled professionals capable of mastering digital technologies (Kowalski *et al.*, 2025).

Similarly, when identifying the digital competencies and skills of accounting professionals, limited digital literacy has been pointed out as a barrier that negatively affects the digital transformation of teams (Karcioglu & Binici, 2023). Organizational culture also plays a central role in this process. Conservative and traditional environments may reduce the attractiveness of firms to digitally skilled professionals, as illustrated by a participant in the study conducted by Kowalski *et al.* (2025), who stated that digital natives are less willing to work in companies that preserve rigid and conventional structures. Therefore, digital transformation should not be understood only as a technological challenge, but also as a cultural, leadership, and talent management challenge. Conversely, executive support, the development of cross-functional teams, fast decision making, and the strategic management of digitally skilled professionals emerge as important enablers of this process.

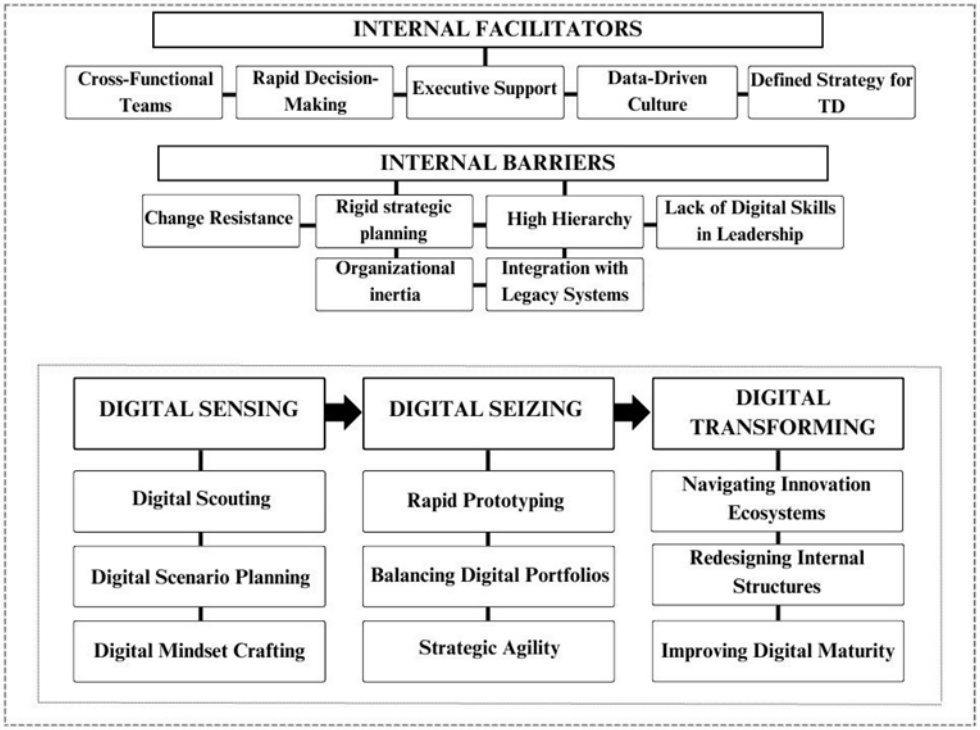


Figure 5. Internal facilitating and hindering factors in the implementation of DDC
Source: Elaborated by authors

5. Conclusion

The objective of this study was to identify the conceptual elements of digital dynamic capabilities to support the digital transformation process in accounting firms. To this end, a systematic literature review was conducted, with a final sample of 47 articles, which were analyzed through content analysis. The results showed that the

conceptual elements of digital dynamic capabilities can be grouped into three main capabilities: digital sensing, digital seizing, and digital transforming. These capabilities are composed of specific sub-capabilities that, in an integrated manner, enable organizations to monitor technological trends, interpret future scenarios, develop a digital mindset, experiment with solutions, balance digital portfolios, respond with strategic agility, navigate innovation ecosystems, redesign internal structures, and enhance digital maturity.

The identified facilitating and hindering factors show that digital transformation depends heavily on the organization's internal environment, particularly organizational culture, leadership, adaptability, and digital competencies. Resistance to change, hierarchical rigidity, inflexible strategic planning, the lack of digital skills in leadership, organizational inertia, and difficulties in integrating with legacy systems emerge as relevant barriers. Conversely, executive support, the formation of multifunctional teams, agile decision-making, a data-driven culture, and the existence of a defined strategy for digital transformation stand out as factors that foster the development and implementation of digital dynamic capabilities.

This study contributes to the literature on dynamic capabilities (Teece, 2018; 2007) by reinforcing the role of digital dynamic capabilities as specific mechanisms of sensing, seizing, and transforming in digital contexts. In addition, it advances the contributions of Warner and Wäger (2019) and Kowalski *et al.* (2025) by shifting the focus of digital dynamic capabilities to accounting service firms, thereby broadening the understanding of how organizations in this sector can develop capabilities to address the challenges and opportunities of digital transformation.

Although previous studies have discussed digital dynamic capabilities in sectors such as banking (de Paula Pereira *et al.*, 2024), supply chains (Dobrovnik *et al.*, 2025), industry (Ghosh *et al.*, 2022), maritime transportation (Wohlleber *et al.*, 2024), and small and medium-sized enterprises (Saeedikiya *et al.*, 2024; Soluk & Kammerlander, 2021), investigations focused on accounting service firms remain scarce. Thus, this study contributes by organizing the conceptual elements of digital dynamic capabilities into a framework directed toward this sector, showing how the capabilities of digital sensing, digital seizing, and digital transforming can support the adaptation, innovation, and competitiveness of these organizations.

From a practical standpoint, the study provides support for accounting firms and consulting firms that assist organizations in digital transformation processes. The proposed conceptual framework can be used as a diagnostic tool to assess existing digital capabilities, identify gaps, and guide improvement recommendations. In this sense, consultants and managers can compare the organization's current capabilities with the elements of the proposed framework, establishing intervention roadmaps aimed at developing digital dynamic capabilities. In addition, the research presents implications for companies that are beginning or improving their digital

transformation journey by highlighting the importance of developing capabilities that can monitor digital trends, integrate new technologies, and respond to unexpected disruptions.

In managerial terms, the study contributes to decision-making by offering a clearer understanding of the elements that precede and sustain digital dynamic capabilities. The results reinforce that digital transformation depends not only on the adoption of technologies but also on organizational aspects, such as digital culture, leadership support, the formation of multifunctional teams, decision-making agility, and the development of digital competencies. Thus, the proposed framework can help managers address rapid technological changes, reduce uncertainties, and leverage market opportunities associated with digital transformation, contributing to the continuity, adaptation, and sustainable growth of accounting firms.

As a limitation, it should be noted that the systematic review was conducted only in the Scopus and Web of Science databases, which may have restricted the scope of the analyzed sample, although these databases are recognized for their scientific relevance. In addition, the final sample consisted of 47 articles, reflecting the scarcity of studies directly related to digital dynamic capabilities applied to the context of accounting firms. Another limitation concerns the fact that the proposed framework was developed based on the literature and has not been empirically validated in accounting organizations. Thus, although the conceptual framework provides a relevant starting point, its practical application still requires testing in real-world contexts.

In light of these limitations, future research may conduct empirical studies in accounting firms through case studies, interviews, surveys, or mixed-methods approaches to validate, refine, and expand the proposed framework. It is also recommended that future studies investigate how cultural factors, digital leadership, digital maturity, and resource availability influence the development of digital dynamic capabilities in accounting firms of different sizes. Longitudinal studies may also contribute to understanding how these capabilities evolve over time and how they affect innovation, strategic adaptation, and organizational performance during digital transformation.

References

Afiqah Zamain, N. S., & Subramanian, U. (2024). The impact of artificial intelligence in the accounting profession. *Procedia Computer Science*, *238*, 849-856. https://doi.org/10.1016/j.procs.2024.06.102

Aiswarya, S., & Muthumeenakshi, M. (2024). Exploratory bibliometric analysis on geopolitical risk. *International Research Journal of Multidisciplinary Scope*, *05*(04), 1180-1197. https://doi.org/10.47857/irjms.2024.v05i04.01652

Albannai, N. A., Raziq, M. M., Malik, M., Scott-Kennel, J., & Igoe, J. (2024). Unraveling the role of digital leadership in developing digital dynamic capabilities for the digital transformation of firms. *Benchmarking: An International Journal*, *32*(6), 2250-2275. https://doi.org/10.1108/BIJ-10-2023-0756

Bardin, L. (2011). *Análise de conteúdo*. Edições 70.

De Paula Pereira, G., De Medeiros, J. F., Kolling, C., Ribeiro, J. L. D., Morea, D., & Iazzolino, G. (2024). Using dynamic capabilities to cope with digital transformation and boost innovation in traditional banks. *Business Horizons*, *67*(4), 317-330. https://doi.org/10.1016/j.bushor.2024.03.006

Dobrovnik, M., Herold, D. M., & Kummer, S. (2025). Exploring supply chain managers' complex perceptions of dynamic capabilities for digital transformation. *Digital Business*, *5*(1), 100098. https://doi.org/10.1016/j.digbus.2024.100098

Ellström, D., Holtström, J., Berg, E., & Josefsson, C. (2022). Dynamic capabilities for digital transformation. *Journal of Strategy and Management*, *15*(2), 272-286. https://doi.org/10.1108/JSMA-04-2021-0089

Faro, B., Abedin, B., Cetindamar, D., & Daneshgar, F. (2024). Dynamic capabilities for nimbleness and resilience in a continuous digital transformation: Action design research in an Australian financial services organisation. *Journal of Enterprise Information Management*, *37*(4), 1206-1226. https://doi.org/10.1108/JEIM-10-2023-0567

Fredo, A. R., Motta, M. E. V. D., Camargo, M. E., & Priesnitz, M. C. (2023). Transformação digital: A digitização da contabilidade. *Revista de Gestão e Secretariado*, *14*(1), 681-714. https://doi.org/10.7769/gesec.v14i1.1542

Freitas Junior, J. C. D. S., Maçada, A. C. G., Brinkhues, R. A., & Costa Netto, Y. W. E. D. (2023). Digital ecosystem: the missing link between strategy and financial performance for digital businesses. *Alcance*, *30*(1), 73-90. https://doi.org/10.14210/alcance.v30n1(jan/abr).p73-89

Ghosh, S., Hughes, M., Hodgkinson, I., & Hughes, P. (2022). Digital transformation of industrial businesses: A dynamic capability approach. *Technovation*, *113*, 102414. https://doi.org/10.1016/j.technovation.2021.102414

Hentati, H., Rebai Azouz, S., & Boulila Taktak, N. (2025). The digitalization of accounting firms: Anticipating pre- and post-implementation technological risks. *African Journal of Economic and Management Studies*. https://doi.org/10.1108/AJEMS-08-2024-0453

Hsiung, H.-H., & Lin, J.-Y. (2025). The impact of intellectual capital on the digital transformation of accountancy firms in Taiwan. *Sage Open*, *15*(4), 21582440251374444. https://doi.org/10.1177/21582440251374444

Januszewski, A., & Pietrysiak, A. (2025). Impact of digital transformation on accounting profession in the opinions of accounting firms' employees. *Procedia Computer Science*, *270*, 2386-2397. https://doi.org/10.1016/j.procs.2025.09.360

Karcioglu, R., Ataturk University, Erzurum, Turkey, Binici, F. O., & Agrı Ibrahim Cecen University, Agri, Turkey. (2023). Developing a maturity model to identify digital skills and abilities of accounting professionals: Evidence from Turkey. *Access Journal - Access to Science, Business, Innovation in the Digital Economy*, *4*(2), 221-247. https://doi.org/10.46656/access.2023.4.2(6)

Karimi, J., & Walter, Z. (2015). The role of dynamic capabilities in responding to digital disruption: A factor-based study of the newspaper industry. *Journal of Management Information Systems*, *32*(1), 39-81. https://doi.org/10.1080/07421222.2015.1029380

Knudsen, D.-R. (2020). Elusive boundaries, power relations, and knowledge production: A systematic review of the literature on digitalization in accounting. *International Journal of Accounting Information Systems*, *36*, 100441. https://doi.org/10.1016/j.accinf.2019.100441

Kowalski, M., Bernardes, R. C., Gomes, L., & Borini, F. M. (2025). Microfoundations of dynamic capabilities for digital transformation. *European Journal of Innovation Management*, *28*(8), 3717-3746. https://doi.org/10.1108/EJIM-12-2023-1074

Lamboglia, R., Lavorato, D., Scornavacca, E., & Za, S. (2021). Exploring the relationship between audit and technology. A bibliometric analysis. *Meditari Accountancy Research*, *29*(5), 1233-1260. https://doi.org/10.1108/MEDAR-03-2020-0836

Marcondes, R., & Da Silva, S. L. R. (2023). O protocolo PRISMA 2020 como uma possibilidade de roteiro para revisão sistemática em ensino de ciências. *Revista Brasileira de Pós-Graduação*, *18*(39), 1-19. https://doi.org/10.21713/rbpg.v18i39.1894

Massaro, M., Dumay, J., & Guthrie, J. (2016). On the shoulders of giants: Undertaking a structured literature review in accounting. *Accounting, Auditing & Accountability Journal*, *29*(5), 767-801. https://doi.org/10.1108/AAAJ-01-2015-1939

Matarazzo, M., Penco, L., & Profumo, G. (2021). How is digital transformation changing business models and internationalisation in Made in Italy SMEs? *Sinergie Italian Journal of Management*, *38*(3), 89-107. https://doi.org/10.7433/s113.2020.06

Moll, J., & Yigitbasioglu, O. (2019). The role of internet-related technologies in shaping the work of accountants: New directions for accounting research. *The British Accounting Review*, *51*(6), 100833. https://doi.org/10.1016/j.bar.2019.04.002

Pargmann, J., Riebenbauer, E., Flick-Holtsch, D., & Berding, F. (2023). Digitalisation in accounting: A systematic literature review of activities and implications for competences. *Empirical Research in Vocational Education and Training*, *15*(1), 1. https://doi.org/10.1186/s40461-023-00141-1

Roos, D., Schlegel, D., & Kraus, P. (2025). Adopting artificial intelligence in accounting: Prerequisites and applications. *Journal of Electronic Business & Digital Economics*, *4*(2), 374-384. https://doi.org/10.1108/JEBDE-03-2025-0023

Saeedikiya, M., Salunke, S., & Kowalkiewicz, M. (2024). Toward a dynamic capability perspective of digital transformation in SMEs: A study of the mobility sector. *Journal of Cleaner Production*, *439*, 140718. https://doi.org/10.1016/j.jclepro.2024.140718

Secundo, G., De Turi, I., Garzoni, A., Posa, M., & Barile, D. (2026). Unveiling knowledge practices and microfoundations of knowledge-based dynamic capabilities for digital transformation in SMEs through industry–university perspective. *Journal of Knowledge Management*, *30*(4), 1237-1265. https://doi.org/10.1108/JKM-02-2024-0244

Shen, L., Zhang, X., & Liu, H. (2022). Digital technology adoption, digital dynamic capability, and digital transformation performance of textile industry: Moderating role of digital innovation orientation. *Managerial and Decision Economics*, *43*(6), 2038-2054. https://doi.org/10.1002/mde.3507

Soluk, J., & Kammerlander, N. (2021). Digital transformation in family-owned Mittelstand firms: A dynamic capabilities perspective. *European Journal of Information Systems*, *30*(6), 676-711. https://doi.org/10.1080/0960085X.2020.1857666

Teece, D. J. (2007). Explicating dynamic capabilities: The nature and microfoundations of (Sustainable) enterprise performance. *Strategic Management Journal*, *28*(13), 1319–1350. https://doi.org/10.1002/smj.640

Teece, D. J. (2018). Business models and dynamic capabilities. *Long Range Planning*, *51*(1), 40-49. https://doi.org/10.1016/j.lrp.2017.06.007

Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, *18*(7), 509-533. https://doi.org/10.1002/(SICI)1097-0266(199708)18:7%3C509::AID-SMJ882%3E3.0.CO;2-Z

Wanyama, S. B., McQuaid, R. W., & Kittler, M. (2022). Where you search determines what you find: The effects of bibliographic databases on systematic reviews. *International Journal of Social Research Methodology*, *25*(3), 409-422. https://doi.org/10.1080/13645579.2021.1892378

Warner, K. S. R., & Wäger, M. (2019). Building dynamic capabilities for digital transformation: An ongoing process of strategic renewal. *Long Range Planning*, *52*(3), 326-349. https://doi.org/10.1016/j.lrp.2018.12.001

Wohlleber, A. J., Bock, M., Birkel, H., & Hartmann, E. (2024). Implementing vital dynamic capabilities to succeed in digital transformation: A multiple-case study in maritime container shipping. *IEEE Transactions on Engineering Management*, *71*, 13627-13645. https://doi.org/10.1109/TEM.2022.3201770

Zia, N. U., Shamim, S., Zeng, J., Awan, U., Chromjakova, F., Akhtar, P., & Orel, M. (2023). Avoiding crisis-driven business failure through digital dynamic capabilities. B2B distribution firms during the COVID-19 and beyond. *Industrial Marketing Management*, *113*, 14-29. https://doi.org/10.1016/j.indmarman.2023.05.015

Appendix: Articles analyzed

Article	Authors	Year
A conceptual framework for driving digital transformation in Japanese SMEs: Integrating dynamic capabilities and service-dominant logic	Yamamoto, T., Toyama, R., Uchihira, N., & Nishimura, T.	2026
A dynamic capability perspective on digital transformation: Drivers, the process and consequences	Shu, C., & Srimuang, K.	2026
Blockchain and supply chain performance: Leveraging digital transformation-enabled operational and strategic dynamic capabilities	Pattanayak, S., Ramkumar, M., Goswami, M., Chan, F. T. S., & Rana, N. P.	2026
Bridging law and strategy: How intellectual property courts reshape corporate digital transformation through dynamic capabilities	Xu, L., Luo, Y. S., & Xu, J.	2026
Building dynamic capabilities for digital transformation: An ongoing process of strategic renewal	Warner, K. S. R., & Wäger, M.	2019
Creating organizational resilience through digital transformation and dynamic capabilities: Findings from fs/QCA analysis on the example of Polish CHP plants	Kwiotkowska, A.	2024
Data-driven dynamic capabilities in emerging markets: A grounded theory approach to digital transformation in African retail banking	Anning-Dorson, T., Baba, F., Zulu, M., & Acheampong, G.	2025
Developing dynamic capabilities for successful digital transformation projects: The mediating role of change management	Al-Moaid, N. A. A., & Almarhdi, S. G.	2024
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Dynamic capabilities for digital transformation	Ellström, D., Holtstrom, J., Berg, E., & Johansson, C.	2022
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