



## DYNAMIC CAPABILITIES IN REGIONAL STUDIES: A SYSTEMATIC LITERATURE REVIEW

CAPACIDADES DINÂMICAS EM ESTUDOS REGIONAIS: UMA REVISÃO SISTEMÁTICA DA LITERATURA

CAPACIDADES DINÁMICAS EN ESTUDIOS REGIONALES: UNA REVISIÓN SISTEMÁTICA DE LA LITERATURA

#### **ABSTRACT**

**Objective:** To integrate knowledge on dynamic capabilities and territories and/or regions, contributing to the formulation of more robust theoretical and practical approaches in this interface.

**Design/methodology/approach:** Systematic literature review of the Web of Science and Scopus databases, covering the period from 2006 to 2022, following the procedures of Tranfield et al. (2003). Previously defined descriptors were used, selecting 48 articles relevant to the study.

**Results:** There is evidence of growth in scientific production on dynamic capabilities from the perspective of territories and/ or regions, highlighting central concepts and themes, such as organizational management with territorial connections, regional clusters, innovation, entrepreneurial ecosystems, and digital transformation. Despite the recent increase, literature still lacks in-depth analysis on the application of the dynamic capabilities model specifically in the territorial and regional context.

**Limitations:** The study could be enriched by expanding the databases and search strategies. Theoretical implications: Contributes to the debate on dynamic capabilities in territories and regions, systematizing concepts, authors, and central themes, consolidating an incipient field in the literature, and identifying gaps for future research.

**Practical implications:** Provides support for public administrators, development agencies, and regional governments to strengthen competitiveness and territorial resilience, guiding public policies, local strategies, and actions focused on innovation clusters and ecosystems.

**Social implications:** Promotes regional adaptation, inclusion, opportunities, and inequality reduction.

**Originality:** This is one of the first systematic reviews to directly address the interface between dynamic capabilities and territorial and regional development, filling a gap that has been little explored in the literature.

**Keywords:** Dynamic Capabilities. Regional. Territorial. SystematicLiterature Review.

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# 2

#### **RESUMO**

**Objetivo:** Integrar os conhecimentos sobre capacidades dinâmicas e territórios e/ou regiões, contribuindo para a formulação de abordagens teóricas e práticas mais robustas nessa interface.

**Design/metodologia/abordagem:** Revisão sistemática da literatura realizada nas bases Web of Science e Scopus, abrangendo o período de 2006 a 2022, seguindo os procedimentos de Tranfield et al. (2003). Foram utilizados descritores previamente definidos, selecionando-se 48 artigos relevantes para o estudo.

**Resultados:** Evidencia-se crescimento da produção científica sobre capacidades dinâmicas na perspectiva dos territórios e/ou regiões, destacando conceitos centrais e temáticas, como gestão organizacional com conexão territorial, regionais, clusters inovação, ecossistemas empreendedores, transformação digital. Apesar do incremento recente, a literatura ainda carece de aprofundamento sobre a aplicação do modelo de capacidades dinâmicas especificamente no contexto territorial e regional.

**Limitações:** O estudo poderia ser enriquecido pela ampliação das bases e estratégias de busca.

**Implicaçõesteóricas:** Contribui para o debate sobre capacidades dinâmicas em territórios e regiões, sistematizando conceitos, autores e temáticas centrais, consolidando um campo incipiente na literatura e indicando lacunas para pesquisas futuras.

**Implicações praticas:** Oferece subsídio para gestores públicos, agências de desenvolvimento e governos regionais fortalecerem competitividade e resiliência territorial, orientando políticas públicas, estratégias locais e ações voltadas a clusters e ecossistemas de inovação.

Implicações sociais: Promover adaptação regional, inclusão, oportunidades e redução de desigualdade.

**Originalidade:** Constitui uma das primeiras revisões sistemáticas a abordar diretamente a interface entre capacidades dinâmicas e desenvolvimento territorial e regional, preenchendo uma lacuna pouco explorada na literatura.

**Palavras-chave:** Capacidades Dinâmicas. Regional. Territorial. Revisão Sistemática da Literatura.

#### **RESUMEN**

**Objetivo:** Integrar el conocimiento sobre capacidades dinámicas y territorios y/o regiones, contribuyendo a la formulación de enfoques teóricos y prácticos más robustos en esta interfaz.

**Diseño/metodología/enfoque:** Revisión sistemática de la literatura en las bases de datos Web of Science y Scopus, abarcando el período de 2006 a 2022, siguiendo los procedimientos de Tranfield et al. (2003). Se utilizaron descriptores previamente definidos, seleccionando 48 artículos relevantes para el estudio.

Resultados: Existe evidencia de un crecimiento en la producción científica sobre capacidades dinámicas desde la perspectiva de territorios y/o regiones, destacando conceptos y temas centrales, como la gestión organizacional con conexiones territoriales, los clústeres regionales, la innovación, los ecosistemas emprendedores y la transformación digital. A pesar de este reciente aumento, la literatura aún carece de un análisis profundo sobre la aplicación del modelo de capacidades dinámicas específicamente en el contexto territorial y regional.

**Limitaciones:** El estudio podría enriquecerse ampliando las bases de datos y las estrategias de búsqueda.

**Implicaciones teóricas:** Contribuye al debate sobre las capacidades dinámicas en territorios y regiones, sistematizando conceptos, autores y temas centrales, consolidando un campo incipiente en la literatura e identificando brechas para futuras investigaciones.

**Implicaciones prácticas:** Brinda apoyo a administradores públicos, agencias de desarrollo y gobiernos regionales para fortalecer la competitividad y la resiliencia territorial, orientando políticas públicas, estrategias locales y acciones centradas en clústeres y ecosistemas de innovación.

**Implicaciones sociales:** Promueve la adaptación regional, la inclusión, las oportunidades y la reducción de la desigualdad.



**Originalidad:** Esta es una de las primeras revisiones sistemáticas que aborda directamente la interfaz entre las capacidades dinámicas y el desarrollo territorial y regional, llenando un vacío poco explorado en la literatura.

**Palabras clave:** Capacidades dinámicas. Regional. Territorial. Revisión Sistemática de la Literatura.

#### INTRODUCTION

Dynamic Capabilities (DCs) have emerged as a new approach to strategic management and are associated with the dynamism of the environment, characterized by rapid and constant mutations, such as crises, which can wear out resources or even make them obsolete, the emergence of consumer markets, technologies, products and services, globalization, rapid diffusion of knowledge, governance and organizational trajectories (Teece et al., 1997; Barcelos & Contador, 2015; Labory& Bianchi, 2021). Thus, by combining the dynamism of the environment and the skills to integrate, build and reconfigure internal and external competencies, organizations can generate competitive advantage to respond to these changes (Teece et al., 1997; Teece, 2007).

In this approach, from the development of DCs, strategies are implemented that exploit organizational strengths, responding to opportunities, neutralizing external threats and avoiding internal weaknesses (Barney, 1991; Teece et al., 1997). Furthermore, according to Augier and Teece (2008), DCs can use contributions from innovation based on Schumpeter's competition, so that organizations use constant learning processes.

From the initial perspective of DCs focused on firm capacity (Teece et al., 1997), the theoretical development around this approach has revealed a myriad of definitions, focusing on determining elements through which firms develop their capabilities, including behaviors, routines, skills, learning mechanisms and knowledge, aiming to act in a strategic and/or innovative way in the context of environmental changes (Meirelles & Camargo, 2014).

Accordingly, it is observed that the exploration of the studies focuses on the business field and business contexts, specifically the strategic organizational management and its operations, innovation, entrepreneurship, marketing, human resource management, learning (Meirelles & Camargo, 2014; Rosa et al., 2019; Zaluski et al., 2021).

Therefore, the need for researchers to expand the theory to other fields of research is highlighted, embracing elements such as innovation (Widener et al., 2017), network formation (Martins & Ling, 2017) and regional clusters (Gjelsvik & Haus-reve, 2016), which are implicitly complementary to the DCs approach. Furthermore, it is pointed out that DCs can go beyond the exploitation of the capacity of thefirm, they can also be built by regions and/or territories (Labory& Bianchi, 2021).

In turn, the literature on regional studies has sought an understanding of the strategies and processes of adaptation of regions in the face of the highly complex and rapidly changing environment, combined with contemporary digital transformation, ratifying the need for assimilation for the continuous development of these spaces (Labory& Bianchi, 2021; Dallabridaet al., 2022).

From this perspective, it is important to understand that regions are built through human activities and actions, so transitions and changes are constant processes, demanding the support of regional competitive advantages (Billington et al., 2017). In addition, the location factor can act as a potential development resource when its capacity is exploited (Lowe et al., 2006).

According to Harmaakorpi and Uotila (2006), regions are considered entities dependent on their history, and for the construction of any regional strategy, it is necessary to thoroughly evaluate regional assets and resource configurations, which must be renewed over time to keep the regions competitive, building paths for development



Since the regional performance process is related to adaptability to the emerging environment (Pihkalaet al., 2007), it is suggested that at the regional level dynamic capacities can also be built, especially in times of disruption, leading regions to different development trajectories (Labory& Bianchi, 2021).

Cannas (2021), on the other hand, relates territorial issues, such as the identity or uniqueness of the place, as a source of competitive advantage when combined with dynamic personal/ managerial level capabilities, so that it allows the organization to face rapid market changes. In this way, the geographic context or spatial categories, such as regions and territories, are built through actions and human interaction (organizations and, within them, research, innovation), in addition to also being suppliers of resources and capabilities to organizations, that is, there is an interdependent relationship between region and organizations, creating a commitment to obtaining sustainable competitive advantage over time (Billington et al., 2017).

Given that in the context of firms, the construction of DCs generates competitive advantage, their applicability in contexts of territories and regions can provide important insights into the development processes in Urban and Regional Planning and Demography (PLURD), considering the changes and challenges in the scenarios of the area, in different aspects (Leite et al., 2023).

Although there have been advances in studies on HCs at the organizational level, the literature still lacks a more in-depth analysis of this concept from a regional and/or territorial perspective. Understanding the relationship between dynamic capacities and the development of territories and regions is essential for the formulation of innovative and sustainable strategies, especially in contexts of rapid socioeconomic transformations. This discussion acquires greater relevance when linked to concrete contemporary challenges, such as regional inequality, environmental crises, innovation difficulties in peripheral territories, the consolidation of regional innovation ecosystems, and the impacts of digital transformation.

In this sense, a pertinent question needs to be answered: How is scientific research that relates dynamic capacities and territories and/or regions unraveled? Thus, the present systematic review of the literature aims to integrate knowledge about dynamic capacities and territories and/or regions, seeking to contribute to the formulation of more robust theoretical and practical approaches at this interface.

To this end, the research was conducted based on a systematic review in the Web of Science and Scopus databases, applying refinement filters that allowed the selection of articles adhering to the theme. The analysis involved the systematization of publications considering the evolution of scientific production over time, the most recurrent journals, the authors who stand out in the area, as well as the classification of the corpus into major themes and methodological approaches.

This process made it possible to identify a set of information that directs the exploration of the theme from the perspective of territories and/or regions, highlighting key concepts and main lines of theoretical discussion. The results show that, although there has been significant growth in scientific production in the last three years, there are still significant gaps regarding the application and deepening of the dynamic capabilities model in the territorial context, signaling a promising field for future investigations.

In view of the above, the article is structured as follows: in addition to this introduction, the research method used to search for the relevant articles for the study is described. Next, the main findings of the research are presented, in terms of the evolution of the productions, authors, journals, thematic categories worked, and methodological approaches adopted in the research. Finally, the final considerations are presented, with the main findings that respond to the objective of the study, research limitations and suggestions for future work.

#### SYSTEMATIC REVIEW METHOD

The systematic literature review (RSL) approach offers several merits over conventional approaches, as it can synthesize the literatu-



re in a systematic, transparent, and reproducible way (Tranfield et al., 2003). The authors also report that RSL helps reduce bias and the effect of chance and increases the legitimacy of data analysis. Although different authors propose different approaches to conduct the RSL process,

this study covers the steps following the guidelines proposed by Tranfield et al. (2003), and this process consists of 3 stages: i) planning of the review; ii) conduct the review; and iii) dissemination of knowledge. Each stage is composed of phases, as shown in Table 1.

**Table 1**Stages of Systematic Literature Review

| Stage 1: Planning the review   |                                     |  |
|--|-------------------------------------|--|
| Phase 0: Identif   | ication of a need for a review      |  |
| Phase 1: Preparation   | n of a research question for review |  |
| Phase 2: Devel   | opment of a review protocol         |  |
| Stage 2: Conductingthe review  |                                     |  |
| Phase 3: Ide   | ntification of the research         |  |
| Phase 4  | 1: Selection of studies             |  |
| Phase 5: Evaluation of the quality of the selected studies                     |                                     |  |
| Phase 6: Data extraction and progress monitoring                               |                                     |  |
|  | e 7: Data synthesis                 |  |
| Stage 3: Reporting and dissemination of knowledge                              |                                     |  |
| Phase 8: Reporting and recommendations Phase 9: Turning evidence into practice |                                     |  |

Source: Adapted from Tranfield et al. (2003, p. 214).

In compliance with these stages, after the formulation of the research problem "What is the state of the art of scientific production on dynamic capacities and territories and/or regions?", the process of conducting the review began. Thus, data collection occurred through the review of scientific production on the CAPES Journal Portal, from the registration for teaching and research institutions in the Federated Academic Community (CAFe). For the search, the Web of Science databases - WoS and SCOPUS - were used, considered two highly visible databases relevant to the scope of the study and widely used in studies of this nature (Bueno & Zarelli, 2013; Silva et al., 2023).

For the selection of articles, we searched for studies that presented the following descriptors in the title, keywords or abstract: ("Dynamic capabilities") AND ("territorial" OR "regional"). It is noteworthy that the terms used in the searches were translated into English, to search the articles in the databases. In addition, territorial and/or regional expressions were chosen to expand the search results, considering that it is possible to speak of a neighborhood or municipality, or even the cut of a region, using the expression

"territory" (Dallabridaet al., 2022).

As a technique for refining the search, inclusion and exclusion criteria were defined and adopted. Thus, in the first stage, the type of publication was chosen, selecting only the option for documents of the type "articles". The search returned 50 articles in WoS and 74 in SCOPUS, totaling an initial sample of 124 articles in both databases. The second stage represented a comparison of the two databases with the aim of excluding the articles repeated in both, resulting in a sample of 79 articles. Therefore, an inspection reading was carried out where the abstracts, keywords, structure of the sections, figures, tables were read, aiming at the framing and semantic relevance to the research theme explored and, in case of doubts, the introductions and conclusions were read, and 31 articles without adherence were excluded, leaving a final sample of 48 articles that made up the corpus for the analysis.

After this refinement, the articles were submitted to an analytical reading, and this deepening was important for the framing within "thematic categories", namely: (i) evolution of publications by year; (ii) number of articles published

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by authors; (iii) number of articles published by journals; (iv) main themes addressed in the articles; and (v) methodological approaches to the corpus. Finally, it is noteworthy that the time frame was not delimited, which was restricted to the limit of the databases researched.

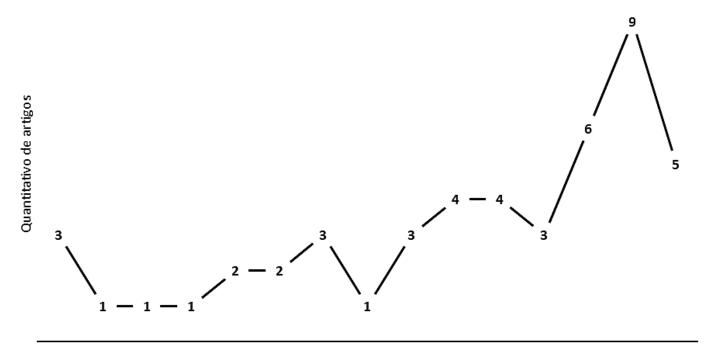
#### PRESENTATION OF RESULTS

In this section, the main indicators around scientific production on dynamic capacities and territories/regions are presented and discussed, and which correspond to the sample collected in the two databases used for this study. Microsoft Excel® was used to aid in the analysis of the RSL.

### ANALYSIS AND EVOLUTION OF PUBLICATIONS

The analysis of scientific productions on dynamic capacities and territories and/or regions begins by verifying the number of publications over the years, in theWoS and SCOPUS databases, representing this evolution through Figure 1, below:

**Figure 1** *Evolution of publications by year* 



2006 2007 2011 2010 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022

Source: Prepared by the authors (2024).

Figure 1 shows that publications on the subject began in 2006, extending to the current period, with at least one annual production. Between 2006 and 2016, a total of seventeen articles were published, ranging from one, two or at most three articles per year.

Between the years 2016 and 2019, there is the formation of a curve, with an increase from three to four articles in the years 2017 and 2018, followed by a further decrease to three articles in 2019. Between the years 2020 and 2021, the peak of production is observed with fifteen articles in the two years, reaching nine articles on the subject in 2021. In 2022 there was a small reduction, although it was still higher than the average of the initial twelve years.

Regarding the authors who write on the subject, Table 2 was prepared, where the main authors and their respective number of articles are listed. Given that there may be the participation of more than one author in the articles, this participation was analyzed individually, that is, their co-authorships.



### **Table 2**Number of articles published by author

| Author              | Quantity of items |
|---------------------|-------------------|
| Harmaakorpi, Vesa   | 3                 |
| Alonso, Abel Duarte | 2                 |
| Kok, Seng           | 2                 |

Source: Prepared by the authors (2024).

From the analyzed articles, 123 names of authors and co-authors involved in the productions were identified, and only three names are repeated in articles on the theme, as observed in Table 2. In the table, it is observed that the author Vesa Harmaakorpi stands out among the productions, having participated in three articles, followed by the authors Alonso and Kok, with two productions each.

Vesa Harmaakorpi, professor of innovation systems at the Lappeenranta University of Technology, in Finland, stands out in productions around innovative systems and processes, as well as innovation environments linked to regional development. Among the articles analyzed on the subject, both deepen the discussion around the perspective on dynamic capacities and contexts of regional development (Harmaakorpi, 2006; Harmaakorpi& Uotila, 2006; Pihkalaet al., 2007).

In addition, Abel Duarte Alonso, Senior Professor at the School of Administration and Business, in Vietnam, and Seng Kok, linked to Liverpool John Moores University, in the United Kingdom, have productions related to Dynamic Capabilities in the context of the local economy (Alonso & Kok, 2018; Alonso et al., 2020).

Continuing with the analysis, Table 3 was prepared in relation to the journals chosen for publication of the articles located in theWoSand SCOPUS databases, detailing the names of the journals and the number of articles published in each one.

Table 3 indicates that only 4 journals had more than one article published during the analysis period. Among the journals that had the most publications, Sustainability and the Journal of Economic Geography stand out with three publications each. Sustainability is an international, interdisciplinary journal with an interest in publications that relate aspects of sustainability and sustainable development, in different aspects, environmental, cultural, economic, and social

(Sustainability, 2024). In the case of the Journal of Economic Geography, the objective is to the field of geography and economics, specifically urban and regional economics and understanding the economics of location (Joeg, 2024).

**Table 3** *Number of articles published by journals* 

| Journal  | Quantitative |
|--|--------------|
| Sustainability   | 3            |
| Journal of economic geography  | 3            |
| European planning studies  | 2            |
| Regional studies   | 2            |
| Journal of small business management                                   | 1            |
| Research in transportation business and management                     | 1            |
| Internacional business review  | 1            |
| Growth and change  | 1            |
| Suply chain management-an internacional journal                        | 1            |
| Journal of science and technology policy management                    | 1            |
| Technological forecasting and social change                            | 1            |
| Local economy  | 1            |
| Sustentability Science   | 1            |
| Journal of entrepneuship   | 1            |
| Journal of internacional business studies                              | 1            |
| Managerial and decision economics                                      | 1            |
| International review of retail distribution and consumer research      | 1            |
| International journal of urban and regional research                   | 1            |
| Journal of management & organization                                   | 1            |
| Research in transportation business and management                     | 1            |
| Water  | 1            |
| Journal for international business and entrepreneurship development    | 1            |
| Entrepreneurship and regional development                              | 1            |
| Technological forecasting and social change                            | 1            |
| Journal of Evolutionary Studies in Business                            | 1            |
| European Project Management Journal                                    | 1            |
| Journal of Optimization in Industrial Engineering                      | 1            |
| International Journal of Production Economics                          | 1            |
| Asia and the Pacific Policy Studies                                    | 1            |
| Competitiveness Review   | 1            |
| Journal of Small Business and Entrepreneurship                         | 1            |
| Knowledge and Process Management                                       | 1            |
| Journal Globalization  | 1            |
| International Journal of Innovation Management                         | 1            |
| International Journal of Management and Enterprise<br>Development      | 1            |
| International Journal of Entrepreneurship and Innovation<br>Management | 1            |
| International Journal of Entrepreneurial Behaviour and Research        | 1            |
| International Journal of Quality and Reliability Management            | 1            |
| Australasian Journal of Construction Economics and Building            | 1            |
| International Journal of Research in Marketing                         | 1            |
| Contributions to Political Economy                                     | 1            |
| Small Enterprise Research  | 1            |
| Total de Artigos Publicados  | 48           |

Source: Prepared by the authors (2024).



Moreover, with two publications, European Planning Studies is a European journal focusing on spatial or urban and regional development processes (European Planning Studies, 2024). In the same approach, Regional Studies, an international journal, also with two publications, aims to gather insights dedicated to understanding how and why regions and cities evolve (Regional Studies, 2024).

Given the journals chosen for the publica-

tions, it is possible to perceive the emphasis of the studies considering the relationship between an organizational theory, such as dynamic capacities, and the relationship with development processes in geographic spaces, such as regions/territories. Thus, in order to identify more clearly the themes of the studies analyzed, Table 4 was elaborated, which contains the main themes discussed in the articles and their frequency in relation to the total number of articles.

**Table 4**Main themes addressed in the articles

| Thematic categories   | Quantitative | Percentage |
|---|--------------|------------|
| Management of organizations: integrating DCs and regional/territorial aspects | 18           | 38%        |
| Regional approach to DCs  | 10           | 21%        |
| DCs and relationship with regional innovation                                 | 6            | 13%        |
| DCs in the context of Regional Clusters                                       | 6            | 13%        |
| CDS, Entrepreneurial ecosystems and regional context                          | 3            | 6%         |
| DCs and the learning and knowledge process as a local strategic advantage     | 3            | 6%         |
| CDs, Digital Transformation and Applicability in Regions                      | 2            | 4%         |
| Total   | 48           | 100%       |

Source: Prepared by the authors (2024).

By reading Table 4, it is perceived that there is an interrelation of the DCs with different themes and, therefore, we tried to list the central or main theme developed in each of the articles, aiming to group them into thematic categories. From the analysis of Table 4, it is possible to observe that the central axis of the studies on dynamic capabilities remains around the performance or management of the firm, given that 38% of the analyzed articles presented the organizational focus, although integrating the insertion of local contexts, such as cities, regions, countries, highlighting factors about immersion at different levels, sustainability, comparison of companies in different regions, and use of local expertise as a strategic resource.

With a deeper understanding of the central theme of this study, the regional approach to DCs is perceived in 21% of the articles, bringing theoretical and empirical discussions on the concept of dynamic capacities, how DCs can be implemented/developed at the regional/territorial level, dynamic capacities for understanding

the attractiveness of countries/regions, as well as in the process of regional adaptation, and the relationship with sustainable development at different levels.

Therefore, DCs are analyzed from the perspective of regional innovation systems (13%), highlighting that in this case the central discussion of the article focused on the innovation element, sometimes applied in organizations, networks or different contexts, bringing contributions on regional aspects involved in this dynamic. In addition, the context of regional clusters (13%) is also emphasized in the analyzed articles, presenting elements that explore dynamic capacities in clusters, highlighting regional aspects of this insertion.

In addition, based on the theory of DCs, it seeks to identify forces through which ecosystems influence entrepreneurship, reflecting on the process of regional development, such an approach stands out in 6% of the articles. With the same percentage, learning process and knowledge (6%) are crucial around the theme of



dynamic capacities, aiming to obtain local strategic advantage, mainly by mobilizing shared learning between groups or organizations in learning networks.

The use of information and communications technology - ICTs and/or the context of digital transformation, is incipient when explored using the dynamic capabilities approach plus its applicability in a regional dimension (4%).

After these studies, there is a gap in the integration of the theories of dynamic capacities with the processes of territorial and/or regional development, so that approaches that prioritize the firm as the central unit of analysis still predominate, relegating the regional and/or territorial dimension to a secondary or indirect role. This theoretical fragmentation limits the understanding of the mutual influence between the approach of dynamic capabilities and territorial and/or regional contexts, especially considering

that these spatial dimensions not only condition the strategies of firms, but also transform themselves in response to the capabilities developed by them.

To assist future researchers in deciding which approaches, collections, and analyses they can use in their work, we sought to identify the methodological approaches most used in the studies that form the corpus of this article. To this end, Table 5 is presented, which contains a mapping of the frequency of all types of research used in the articles.

Initially, it is worth noting that the articles present in the corpus were predominantly qualitative, corresponding to 47.9% of the total number of studies gathered. In turn, the quantitative approach was used in 27.1% of the texts. It is also observed that 12.5% of the studies used the mixed approach and another 12.5% were theoretical studies.

**Table 5** *Methodological approaches to the corpus* 

| Types of approaches   | Quantitative | Percentage |
|-----------------------|--------------|------------|
| Quantitative Research | 13           | 27,1%      |
| Qualitative Research  | 23           | 47,9%      |
| Mixed Research        | 6            | 12,5%      |
| Theoretical Study     | 6            | 12,5%      |
| Total                 | 48           | 100%       |

Source: Prepared by the authors (2024).

It is possible that the preponderance of qualitative research perceived in this study offers a series of benefits for the advancement of knowledge, as the relationship between dynamic capacities and territory and/or regions has been an area little explored. From this perspective, qualitative approaches play a fundamental role in shedding light on new or little-studied topics, since they map the nuances and complexities of the phenomenon in question. In addition, its contribution to the formulation of hypotheses and relevant questions for future research, serving as a basis for quantitative and experimental studies.

### THE RELATIONSHIP BETWEEN DYNAMIC CA-PACITIES AND TERRITORIES AND/REGIONS

The Dynamic Capacities approach is particularly relevant in regional/territorial contexts, suggesting that regions create, integrate and reorganize their local and unique resource configurations, developing competitive advantages and adapting to technological and socio-economic changes (Harmaakorpi, 2006).



Locational assets can serve as leverage for the development of dynamic capabilities, and the abundance of natural resources in a given region can be a determining factor in attracting companies, becoming a competitive advantage (Labory, Bianchi, 2021). In addition, the knowledge and skills developed in regional industries are considered important technological and productive capabilities, standing out as a differential in regional competitiveness (Labory, Bianchi, 2021).

It is recognized that locational assets, such as natural endowments, skilled labor and infrastructure, are important in strategic choices aimed at developing regional competitive advantage. However, these assets have a limited role if they are not accompanied by a dynamic capacity for adaptation and transformation that allows the exploration of new opportunities for growth and long-term competitiveness, as explained by Labory and Bianchi (2021).

In their article, using the Emilia-Romagna region in Italy as a case study, the authors Labory and Bianchi (2021) illustrate the implementation of an industrial policy focused on the development of dynamic capacities to face the challenges of Industry 4.0. Regional policy focused on promoting both value creation and value capture, involving all regional actors in a working compact that guided the development of new capabilities in specific sectors.

In this same perspective, in the article by Alonso and Kok (2018), with Western Australia as a case study, it is observed the combination of a solid resource base with dynamic capacities to adapt to changes in the natural resource sector (such as mining), crucial to maintain its international attractiveness. The study recognizes the importance of integrating different resources and capabilities in a strategic way (such as education, both at the university level and with a focus on industry, as well as research and development) to address challenges and seize new opportunities, consolidating the international attractiveness of the region.

In both cases, they underline the need for strategic integration between physical assets (natural resources, infrastructure) and intangible resources (knowledge, skills, innovation networks) so that regions mobilize their dynamic capacities to transform these assets into lasting competitive advantages.

At this point, Regional Knowledge and Innovation Systems, where regions often develop specialized knowledge bases and innovation networks, can also be exploited by companies with strong dynamic capabilities to leverage these regional systems to access new knowledge, collaborate with partners, and foster innovation.

Also, local institutions, policies, and regulations shape the business environment. Dynamic capabilities help companies navigate these institutional contexts, adapt to changing policies, and leverage regional support mechanisms. For example, when considering a technology cluster in a specific region, companies within this cluster can benefit from access to qualified researchers (regional resources), proximity to universities and research institutions (regional knowledge system), supportive government policies that promote innovation (regional institutions).

The study by Hilliard and Jacobson (2011) investigates how companies located in clusters can develop dynamic capabilities in response to environmental regulations. The analysis reveals that spatial proximity in clusters can facilitate the adoption of new technologies and management processes required by regulations, especially in issues such as technological innovation and problem solving.

While clusters provide a favorable environment for knowledge sharing and collaboration, success in developing dynamic capabilities depends both on the interaction between the firms in the cluster and on the specific capabilities of each firm (Hilliard, Jacobson, 2011).

This dynamic between clusters (regional context) and firm-specific capabilities suggests that regions can benefit from a positive effect on dynamic capabilities through integration and cooperation within clusters, which facilitates innovation and adaptation to new regulatory or market demands (Hilliard, Jacobson, 2011).

On the other hand, although regional clusters can be beneficial for promoting the firm's innovation, for Gjelsvik and Haus-Reve (2016), by expanding their reach to national and internatio-



nal levels, it is possible to find greater innovation potential. Collaboration with companies in broader geographic contexts can improve market access as well as be effective in fostering innovation.

Thus, a greater detail of how dynamic capacities manifest and articulate themselves in different territorial contexts, delving into the mechanisms and microfoundations underlying this interface, are shown to be ways to understand the relationship between dynamic capacities and the formulation of regional development strategies.

#### **FINAL CONSIDERATIONS**

This study aimed to analyze the current panorama of scientific production on the relationship between dynamic capacities and territories and/or regions. To achieve this, the Systematic Review of the Literature (RSL) method was used, with the search for articles in the Web of Science and Scopus databases. The method adopted for this review followed the guidelines proposed by Tranfield et al. (2003), which include three phases: (i) planning of the review; (ii) conducting the review; (iii) dissemination of knowledge. During this systematic process, several relevant and crucial points were identified.

The data analyzed allowed us to conclude that the productions related to the theme began in 2006 and continue to the present day, showing a continuous and growing interest over the years. Notably, the period of 2020 and 2021 represented the apex of this production, with a total of fifteen articles published, nine of which were concentrated in 2021. This significant increase can be attributed to factors such as the sociopolitical or academic context of the time, which aroused interest in further studies on the subject.

Among the authors who stand out in the productions on the subject, Vesa Harmaakorpi stands out with the participation in three articles, evidencing her relevance and intellectual leadership in the field under study. Soon after, Alonso and Kok also stand out, each with two productions, offering theoretical and empirical analyses that deepen the understanding of the theme of Dynamic Capacities (DCs) and their interactions with territorial and/or regional contexts. Altoge-

ther, there is list of authors analyzed, sought to broaden theoretical and practical perspectives, consolidating the theme as an area of strategic investigation.

As for the journals chosen for publication of the articles located in the databases, only four of them had more than one article published during the period of analysis, namely, Sustainability, Journal of Economic Geography, European Planning Studies and Regional Studies. Among the journals chosen for publications, the emphasis of the studies considering the relationship between an organizational theory, such as dynamic capacities, and the relationship with development processes in geographic spaces, such as regions and/or territories, can be perceived.

In relation to the main themes of the analyzed articles, it is perceived that the concept of dynamic capabilities (DCs) maintains its predominant focus in the management of the firm. However, a significant aspect is the expansion of this discussion to different levels of immersion, addressing the internal dynamics of organizations and their interactions in broader contexts, such as locations, territories and/or regions. This multi-scalar approach reflects an attempt to integrate micro and macro perspectives, demonstrating the versatility of the concept in responding to different organizational and territorial demands.

In addition, the second most explored theme involves theoretical and empirical reflections on DCs in regional and territorial contexts, covering their implementation and development. This line of research not only seeks to understand how DCs can strengthen the attractiveness of countries and regions. It also investigates how these capacities contribute to regional adaptation in scenarios of constant change. This connection to sustainable development is particularly relevant, as it highlights the role of DCs in promoting balanced and inclusive growth strategies at different levels.

Other emerging themes include regional innovation, clusters, entrepreneurial ecosystems, and the relationship of these elements with specific regional contexts. These topics reflect a growing interest in understanding how learning processes and knowledge management can be transformed into local strategic advantages. Di-



gital transformation, in turn, is presented as a key element, both as an enabler of change and as a challenge for regions in search of global competitiveness.

These discussions, when intertwined, reveal the richness of the concept around the theme of Dynamic Capacities and its applicability in multiple dimensions, from the organizational to the territorial and/or regional level. The analysis indicates an expanding field of study, which connects theory to practice and provides tools to face contemporary challenges, especially in the context of globalization, rapid technological changes and the search for sustainability.

The analysis of the corpus revealed a significant predominance of qualitative studies, totaling 47.9% of the studies. This prevalence demonstrates the relevance of qualitative research for the investigation in focus, allowing a deep and contextualized understanding of complex and multifaceted themes. The quantitative approach, on the other hand, was used in 27.1% of the studies. This lower proportion indicates that, although quantification is relevant in some cases, the nature of the topics addressed in the corpus demanded, for the most part, a qualitative investigation. It is worth noting the presence of 12.5% of studies that combine qualitative and quantitative methods, seeking a comprehensive and complementary analysis of the data. Additionally, 12.5% of the papers consisted of theoretical studies, offering critical reflections and building conceptual frameworks relevant to the field of research.

Thus, the data obtained demonstrate and confirm the statements about the need to advance in the discussion on Dynamic Capabilities in territories/regions, so that analyzing a period of more than a decade of publications in the WoS and SCOPUS databases, only 48 articles were refined, of which 79% of them present in the discussions an indirect relationship between the theory of Dynamic Capabilities and Territories/regions, and only 21% of the articles bring more in-depth discussions on the concept and applicability of dynamic capabilities at the regional/territorial level.

Regarding the implications of this study, it is expected that it can contribute to the dee-

pening of the debate around dynamic capacities from the perspective of territories/regions, since it provides a set of information that directs the exploration of the theme, such as concepts, authors who write about the subject, as well as highlighting the major themes that involve this theoretical construct. In relation to the practical contribution, the exploration of dynamic capacities can be important in the development process of territories/regions, especially in times of adaptability, in the face of environmental mutation, especially with regard to environmental crises, social inequalities and the challenges of innovation and new technologies, whose studies can constitute references for the adoption of public policies that can prevent and mitigate the effects resulting from the natural and social phenomena experienced in contemporary society.

As a limitation of this study, it is highlighted that, even if the databases that were used for this research have fulfilled the objective of the study, the inclusion of other databases and/ or query expressions could qualify the study. It is also reiterated that the theme has been little explored and that there are several possibilities for research in the area. Studies on dynamic capacities and territories/regions are recommended, such as: (i) Empirical deepening: Case studies that explore in detail the dynamic capacities of specific companies or clusters in different territories/ regions; Benchmarking the dynamic capacities of different territories/regions to identify specific success factors and challenges; Longitudinal studies that investigate how the dynamic capacities of a territory/region develop over time; (ii) Innovative Methodological Approaches: Combination of qualitative and quantitative methods in order to obtain a more complete and comprehensive view of the theme; Analysis of social networks to map the relationships between different actors in a territory/region; Experiments, with the objective of testing the influence of different factors on the dynamic capacities of a territory/region; (iii) Exploration of New Themes: Dynamic capacities and sustainability, with a focus on investigating how dynamic capacities can contribute to the sustainable development of a territory/ region; Dynamic capacities and inequality, analyzing how dynamic capacities can affect social and economic inequality in a territory/region; Dyna-



mic capacities and public policies, assessing the role of public policies in the development and promotion of dynamic capacities in a territory/ region; (iv) Expansion of the Geographic Scope: Studies in developing countries, with the objective of investigating dynamic capacities in different socioeconomic contexts; International comparative studies, comparing the dynamic capacities of different countries and regions of the world; (v) Stakeholder Engagement: Collaboration with governments, businesses and civil society to understand and analyze possibilities for developing practical solutions to challenges related to dynamic capacity building in territories/regions.

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