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RESEARCH ARTICLE

Towards conceptual clarity in digital platform research: a systematic literature review

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Abstract

The emergence of digital platforms has attracted considerable attention in economics and information systems, shaping scholarly discourse over the past few years. Digital platforms have been the subject of extensive research by scholars, who have examined them from various perspectives, including technical, economic, and socio-technical perspectives. However, despite the frequent use of the term 'digital platform' in the literature, its definition covers a wide range of meanings. Scholars often use the term to mean distinct concepts, which creates semantic confusion within the scientific community. To clarify the different elements and perspectives that shape the definition of a digital platform, a systematic literature review was conducted. A total of 74 definitions from 58 scholarly resources were collected and analyzed through qualitative content analysis. This analytical process aimed to isolate and identify the fundamental elements used in defining digital platforms, as well as the multiple theoretical perspectives through which the term is conceptualized. Furthermore, this study traces the evolution of the term's definition alongside the rapid development of digital platforms in recent years.

Keywords

digital platform; definition; conceptualization; systematic literature review; typology.

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1. Introduction

The growing adoption of digital platforms across diverse areas of activity has attracted substantial attention from scholars in economics and information systems due to their transformative impact on economic, social, and political landscapes (De Reuver et al., 2018; Schreieck et al., 2024; Wulf & Westner, 2022). Recent studies emphasize that digital platforms have become central infrastructures of value creation and coordination in the digital economy (Assalaarachchi et al., 2025; Egbert & Ulbricht, 2024; Tian et al., 2024). They are regarded as drivers of innovation, enabling firms to reconfigure their business models and establish new logics of value co-creation and distribution (Hein et al., 2020; Mammadli et al., 2026). According to Kenney and Zysman (2015), the salience of digital platforms indicates that we are currently witnessing a fundamental restructuring of our economy, with platform companies acquiring a level of power comparable to that of Ford, General Motors, and General Electric in earlier eras. More recent analyses corroborate this view, highlighting the growing societal embeddedness and regulatory relevance of digital platforms (Heylen, 2024; Tian et al., 2024). With this expansion of digital platforms, it has become imperative for researchers to clearly understand and define the conceptual boundaries of the term 'digital platform'. Misinterpretation or misuse of this term could lead to paradoxical research results, prevent the comparability of studies, and hinder effective communication between researchers (De Reuver et al., 2018; Derave et al., 2024).

The need for a common understanding of the term 'digital platform' is not just a semantic necessity; it is fundamental to both theoretical and practical progress. The lack of a clear definition of the term 'digital platform' poses several challenges, particularly in academic research and legal regulation (De Reuver et al., 2018; Heylen, 2024; Tian et al., 2024; Zysman & Kenney, 2016). First, without clear definitions, researchers may study different phenomena under the same label. This can prevent researchers from building upon previous research, comparing findings across studies, or conducting meta-analyses (Kaplan, 2017; Koch et al., 2022; Tarannum et al., 2025). Second, the absence of a clear definition complicates the establishment of regulatory frameworks for digital platforms. Policymakers struggle to determine which entities qualify as platforms and how to categorize them without constraining innovation (Afina et al., 2024; Heylen, 2024). This challenge is illustrated by recent findings showing that heterogeneous digital compliance disclosures hinder effective evaluation and enforcement (Aberkane et al., 2025).

To build a common understanding of what constitutes a digital platform, this article presents a systematic literature review that collects and analyzes existing definitions of digital platforms. It then uses qualitative methods to analyze these definitions. A systematic literature review is a tool for synthesizing scientific evidence to answer a specific research question in a transparent and replicable way while seeking to include all published evidence on the subject and assess the quality of that evidence (Lame, 2019; Okoli, 2015). Systematic literature reviews are an appropriate approach for defining concepts and understanding the evolving aspects of terminology in a specific field of research (Lame, 2019; Snyder, 2019). Asadullah et al. (2018) used a systematic literature review to reveal the multidimensional and heterogeneous nature of digital platforms, as well as the persistent ambiguity surrounding their conceptualization in the information systems and management literature. More recently, Tian et al. (2024) highlighted the ongoing fragmentation of platform definitions and called for an integrative synthesis that connects diverse perspectives. Building on these insights, the present study systematically identifies, categorizes, and analyzes existing definitions to advance the conceptual clarity of digital platforms.

This article makes several important contributions to the literature on digital platforms. First, it provides a comprehensive review of the different definitions associated with the term digital platform, revealing a variety of perspectives and concepts that clarify the boundaries of the term and help determine which entities can be considered as platforms. Second, it highlights an important omission in many existing definitions, namely the limited attention given to the technological dimension, which makes it difficult to distinguish digital platforms from non-digital ones. Third, the article emphasizes the need to specify research perspectives, such as economic, technical, socio-technical, and organizational approaches, in

order to make studies more comparable and support cumulative knowledge building. Fourth, the study shows that the definition of a digital platform is not static but evolves with advances in technology and changes in platform applications. Building on these insights, the article proposes a theoretical framework in the form of a matrix that combines the economic, technical, socio-technical, and organizational perspectives to provide a comprehensive view of digital platforms. Finally, it presents a definition template based on the key concepts identified in each perspective to standardize the conceptual foundation of digital platform research, promote greater consistency across studies, and improve communication among researchers, practitioners, and policymakers.

This article proceeds as follows. First, the problem statement is discussed in greater detail. Second, the method and approach to a systematic review of the field are thoroughly explained. Third, the definitions of digital platforms are analyzed in-depth to highlight the key concepts, elements, and perspectives used by scholars to refer to digital platforms. Finally, suggestions are made as to where future research might focus.

2. Background

Current literature reflects an ongoing debate about how to conceptualize the term ‘digital platform’ (Asadullah et al., 2018; De Reuver et al., 2018; Heylen, 2024). Academics often use the term ‘digital platform’ to describe different ideas without clearly defining what they are referring to (Bonina et al., 2021; De Reuver et al., 2018; Zysman & Kenney, 2016). Despite the emergence of many studies on digital platforms across a range of academic disciplines in recent decades, the academic community often defines the term loosely (Egbert & Ulbricht, 2024; Tian et al., 2024). This ambiguity has resulted in a fragmented understanding, where scholars and practitioners alike use different approaches to defining digital platforms, driven by the dynamic evolution of information and communication technologies (Cusumano et al., 2019; Jovanovic et al., 2022; Egbert & Ulbricht, 2024). Many studies either omit a clear definition or rely on examples and illustrations to explain the term, further contributing to the lack of conceptual clarity (Van Eijk et al., 2015). Scholars have also used a variety of distinct yet overlapping terms, such as software platforms, online platforms, two-sided platforms, and multi-sided platforms to describe similar phenomena.

Some academics and industry experts argue that the term ‘digital platform’ encompasses a wide range of digital business models and technological systems, each with unique characteristics and implications (Mini & Widjaja, 2019). Others argue that the term ‘digital platform’ is a multifaceted term that can describe a variety of phenomena (Bonina et al., 2021; Zysman & Kenney, 2016). The confusion surrounding the conceptualization of digital platforms has prompted calls for a clearer definition (De Reuver et al., 2018). Zysman and Kenney (2016) noted that the absence of a clear and universally accepted definition complicates efforts to determine what constitutes a digital platform. Similarly, De Reuver et al. (2018) and Van Eijk et al. (2015) highlighted the necessity of providing an explicit outline of the perspectives from which the term ‘digital platform’ is defined.

A lack of shared conceptualization has significant consequences for research on digital platforms. As Conboy (2009) demonstrated in his reconstruction of the concept of agility, conceptual inconsistency hampers the cumulative development of theory and leads scholars to use the same term to describe different underlying phenomena. The same applies to digital platforms. When multiple, loosely defined conceptualizations coexist, knowledge creation becomes fragmented, which weakens the field’s capacity to produce insights that are both theoretically robust and practically relevant (De Reuver et al., 2018). This fragmentation affects not only academic discourse but also regulatory and managerial practices. Policymakers face difficulties in determining which entities qualify as platforms and how they should be governed (Heylen, 2024; Afina et al., 2024). Firms also encounter challenges in identifying their strategic positions and governance mechanisms within platform ecosystems (Cusumano et al., 2019; Gawer, 2022).

Although various systematic literature reviews and taxonomies have enhanced our understanding of digital platforms, they often focus on specific aspects. For example, Mallon (2021) performed a systematic literature review (SLR) on the business

models of digital platforms, highlighting unique characteristics that set them apart from traditional business models. In a similar vein, Hermes et al. (2020) conducted a systematic literature review focusing on the market dominance of digital platforms. Their findings highlight the urgent need for policymakers to develop new regulatory approaches to mitigate the potential exploitation of such dominant positions. To improve the conceptual understanding of digital platforms, other researchers have developed various taxonomies and typologies (Blaschke et al., 2019; Bock and Wiener, 2017; Derave et al., 2024; Staub et al., 2021). These frameworks focus mainly on the dimensions that distinguish digital platforms from one another.

Despite these efforts to refine the conceptualization of digital platforms, there remains no shared understanding of what constitutes a platform or which attributes define it. Existing studies emphasize different aspects such as technology, intermediation, governance, and ecosystems, yet three key gaps persist. First, the literature provides a limited synthesis of the elements that compose existing definitions and how they interrelate. Second, little is known about how definitions have evolved over time in response to technological and institutional change. Third, few analyses relate existing definitions to prevailing typologies of digital platforms. At the same time, scholars increasingly highlight the continued evolution of the digital platform concept. A growing body of work views platforms as complex, socio-technical infrastructures that both enable and govern interactions across multiple actors (Egbert & Ulbricht, 2024; Hamadi, 2026; Tian et al., 2024). Recent work on digital system lifecycles highlights growing ethical and accountability requirements, further emphasizing the importance of clearly defined platform boundaries (Alamäki et al., 2025). This ongoing evolution reinforces the need for periodic conceptual consolidation to ensure that scholarly definitions keep pace with technological and organizational change.

To address these gaps, this study systematically analyzes existing definitions of digital platforms and their evolution over time. It synthesizes the concepts and elements used to define platforms and proposes a unified framework aligned with prevailing typologies. Rather than imposing a single universal definition, the study offers a set of alternative formulations that provide the conceptual precision required for theoretical and empirical research. The proposed template ensures completeness by integrating key definitional elements identified across multiple perspectives, while also offering flexibility by allowing researchers to adapt these elements to specific theoretical lenses or disciplinary contexts. In doing so, this approach contributes to closing existing gaps in the literature by providing both scholars and policymakers with a clearer understanding of digital platforms and their diverse manifestations. Ultimately, it supports the development of a more coherent body of knowledge to guide future research and policy in this rapidly evolving field.

3. Research methods

The primary objective of this study is to systematically research and analyze the fundamental components of digital platform definitions, as documented in academic journals and book chapters. To achieve this overarching goal, this study seeks to answer the following research questions:

- (1) What are the different definitions of 'digital platform', and how many definitions have been identified?
- (2) What are the different concepts and perspectives used to define digital platforms?
- (3) What are the common elements used to define digital platforms?
- (4) How did the definition of 'digital platform' evolve over the past years?

3.1. Data collection method

To collect the definitions of the term 'digital platform', we conducted a systematic review analysis, adhering to the PRISMA protocol, focusing on English language, peer-reviewed journal articles, and book chapters. Such published works represent a scientifically validated source of knowledge (Reim et al., 2015; Podsakoff et al., 2005). To collect our data, we used the

Scopus database. The Scopus database is a reliable source of knowledge for conducting systematic literature reviews as it encompasses a wide range of academic literature in various fields (Omoredede et al., 2015).

To select our keywords, we began by conducting an initial literature review to understand the range of terminologies used in discussions of digital platforms. Drawing on the literature reviews by Asadullah et al. (2018) and De Reuver et al. (2018), we identified several key terms closely associated with digital platforms. This approach enabled the identification of terms that are not only widely used but also reflect the diverse conceptualizations and models of digital platforms across disciplines. These selected terms were then applied to identify relevant articles and book chapters for our literature review. Our search focused specifically on the keywords of each article, as these keywords are often carefully chosen by authors to represent the core themes of their research and are indexed accordingly. By limiting the search to keywords, we adopted a more targeted strategy that increased the likelihood of finding relevant definitions while minimizing the risk of gathering an unmanageable volume of data. The following search query was used to identify relevant publications, with no restrictions on publication date:

‘digital platform’ OR ‘two-sided platform’ OR ‘multi-sided platform’ OR ‘intermediary platform’ OR ‘platform marketplace’ OR ‘platform business model’

These keywords were intentionally broad enough to capture a wide range of articles that might include a definition of digital platforms. The search query returned 1,703 peer-reviewed journal articles and 228 book chapters. During the screening stage, we reviewed the titles and abstracts of all identified publications, excluding those in which digital platforms were not the primary focus of analysis. This step reduced the number of articles and book chapters to 186. At the eligibility stage, we conducted a full-text review to ensure that each publication provided a clear definition of the term ‘digital platform.’ Studies were excluded if (1) they only mentioned digital platforms in passing, or (2) they focused on non-digital platforms (e.g., industrial or physical platforms). Following this process, 51 articles met our inclusion criteria. Additionally, forward and backward citation searches identified seven additional relevant journal articles, resulting in a final total of 58 included studies. The above process is summarized in Fig. 1.

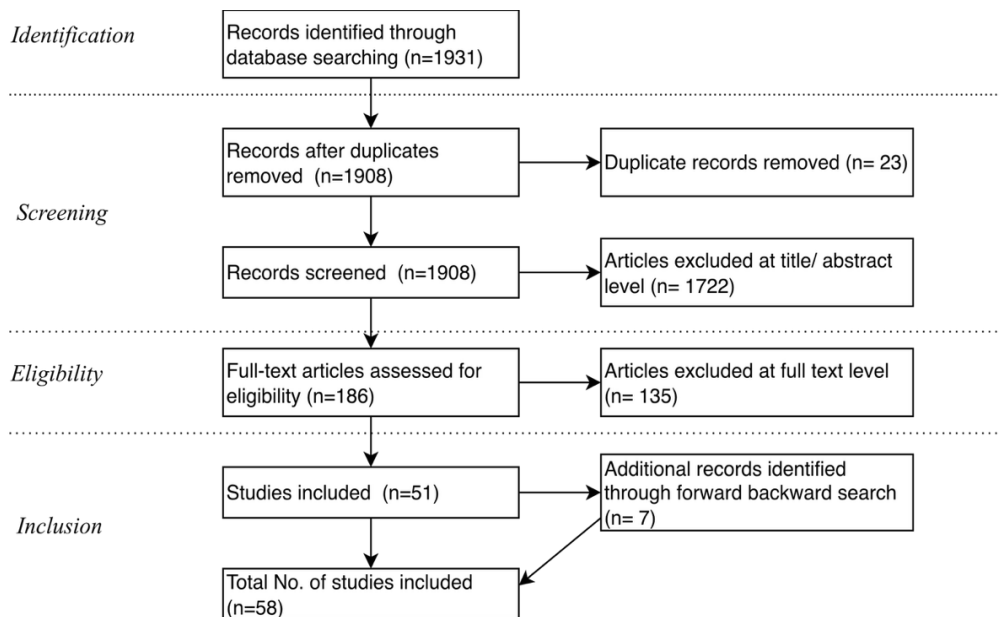


Fig. 1. Stages of the literature review.

From the articles and book chapters, 74 unique definitions of the term ‘digital platform’ were collected. The collected definitions were then stored in a separate document for analysis. Table 1 provides a summary of the frequency of definitions published by year, whereas Appendix A offers a detailed compilation of the collected definitions.

Table 1. Number of definitions published by year of publication.

Year	Number of definitions published
2010	1
2016	1
2017	2
2018	6
2019	4
2020	6
2021	10
2022	31
2023 (Jan–Aug)	13
Total:	74

3.2. Data analysis methods

The analysis of definitions related to digital platforms was conducted using NVivo, a qualitative data analysis software that facilitates the systematic examination of textual data. This study employed a content analysis approach, which is particularly effective for exploring written definitions and allows researchers to derive meaningful conclusions while describing and quantifying specific phenomena (Downe-Wamboldt, 1992; Lindkvist, 1981). Content analysis allows the examination and interpretation of content within the data to identify underlying themes, patterns, and meanings. It is also useful for classifying texts into categories that represent similar meanings (Drisko & Maschi, 2016).

The analysis began by identifying classes of objects (concepts) as presented in the definitions. A class of objects refers to the part of a definition that indicates the category or group to which a term belongs (Szczesniak, 1963). In this initial phase, we carefully reviewed all the collected definitions to extract key concepts. These identified concepts were then compared with established perspectives on digital platforms in the literature. This comparison contextualized the extracted concepts and ensured alignment with existing research. The frequency of each concept in the collected definitions is reported in Table 3.

In the second stage of the analysis, we used NVivo to examine word frequencies within the definitions, aiming to identify recurring elements that characterize digital platforms. This quantitative step offered valuable insights into the most frequently appearing terms across the dataset. We then grouped these terms based on their semantic similarity. For example, terms such as ‘orchestrate’, ‘intermediate’, ‘facilitate’, and ‘coordinate’ were grouped together. This process allowed us to create coding categories. For example, terms such as ‘software’, ‘technology’, ‘technical’, and ‘algorithm’ led to the creation of a coding category called ‘technology.’ These coding categories helped define the key elements of digital platform definitions. The frequency of each coding category is recorded in Table 4, providing a quantitative foundation for our qualitative analysis, and highlighting the prominence of each code within the dataset.

In the third stage of our analysis, we organized the collected definitions into four distinct categories, each representing a specific perspective: economic, technical, socio-technical, and organizational. Within each category, we conducted a

detailed examination to understand how the codes identified in stage 2 were reflected in the definitions from each perspective. Table 5 provides a summary of this coding process, showing the number of articles classified under each perspective and highlighting the key elements identified in those articles.

In the fourth stage of the analysis, we examined the evolution of definitions of digital platforms over time, linking these changes to advances in technology and information systems. Figure 4 illustrates this evolution by showing how the conceptual understanding of digital platforms has shifted. To further validate our findings, we compared the definitions with existing typologies of digital platforms.

The coding process for definitions across all stages was conducted iteratively and involved two researchers. Each researcher independently coded a subset of definitions to enhance reliability, followed by team discussions to resolve any discrepancies. This collaborative approach not only improved coding consistency but also deepened our understanding of the nuances within the definitions. Figure 2 summarizes the entire coding process.

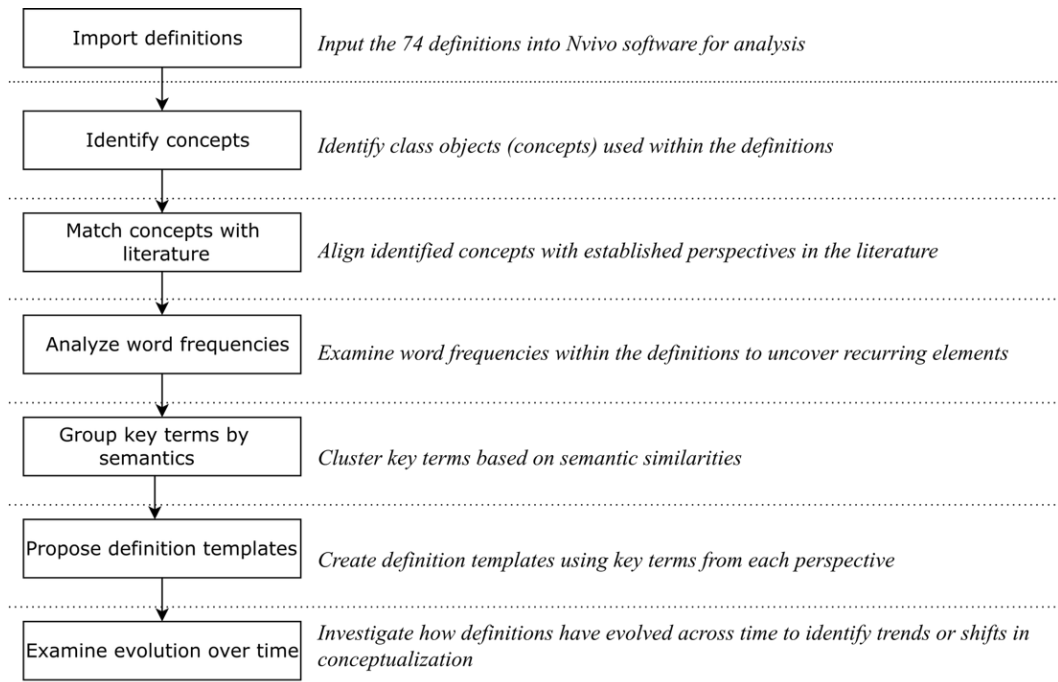


Fig. 2. Data analysis process.

4. Results and discussion

Although our sample of articles is limited, analyzing the distribution of subject areas among studies defining digital platforms provides valuable preliminary insights. As shown in Table 2, the conceptualization of digital platforms is most prevalent in Business, Management, and Accounting, underscoring a strong emphasis on economic interpretations. The significant representation of Computer Science and Engineering highlights the technical dimension of platform conceptualizations. Furthermore, contributions from Social Sciences and Psychology suggest a socio-technical perspective, aligning with definitions that frame platforms as intermediaries and socio-technical infrastructures shaping user interactions. A more detailed analysis of these perspectives will be provided in the next section.

Table 2. Distribution of articles by subject area.

Subject Area	Number of Papers
Business, Management and Accounting	39
Computer Science	17
Social Sciences	15
Decision Sciences	14
Economics, Econometrics and Finance	8
Engineering	7
Psychology	4
Energy	3
Environmental Science	3
Mathematics	2
Agricultural and Biological Sciences	1
Arts and Humanities	1
Medicine	1
Multidisciplinary	1
Nursing	1

4.1. Concepts and perspectives used to define digital platforms

During the analysis of the 74 definitions of digital platforms, an inventory of the key concepts used to define a digital platform was created in the first round of content analysis. The inventory identified 15 key concepts used in the 74 definitions. It was interesting to note that many definitions use these concepts when defining digital platforms. Academics have identified the use of three main perspectives to define digital platforms: (1) economics with a market-based perspective, (2) technology management with a technical perspective, and (3) information systems with a socio-technical perspective (De Reuver et al., 2018; Mallon, 2021; Hein et al., 2020).

Further analysis of the articles and concepts used in the definitions enabled us to identify an implicit perspective in the literature—the organizational perspective. This perspective is shaped by ongoing academic debates surrounding the nature of digital platforms. While some scholars regard platforms as distinct organizational entities, others highlight their transformative influence on traditional organizational structures (Gawer, 2022; Saadatmand et al., 2019).

Moreover, the analysis of the key concepts used in the definitions reveals a correlation between the perspectives and the concepts used in the definitions. For instance, concepts such as ‘software system’ and ‘technology architecture’ indicate a technical perspective. Similarly, concepts such as ‘third-party economic system’ and ‘two-sided markets’ are indicative of an economic perspective. Concepts such as ‘socio-technical infrastructures’ and ‘socio-technical intermediary’ point to a socio-technical perspective. Finally, terms such as ‘organizational forms’ and ‘supra-organizational forms’ highlight the organizational perspective in defining digital platforms. Table 3 lists the concepts used to define or refer to digital platforms across the 74 definitions, along with the number of definitions in which each concept appears.

Table 3. Concepts used to define digital platforms.

Concepts used to define digital platforms	# of definitions using the concept
Software-based system	6
Infrastructures	6
Digital (resources, systems, core)	5
Software and hardware	3
Socio-technical (infrastructures, intermediary, assemblage)	3
(Supra)organizational forms	3

Concepts used to define digital platforms	# of definitions using the concept
Business/online firm	3
Multi-sided platform	2
Two-sided markets	2
Marketplace	2
Technological platform	1
Information system	1
Technology architecture	1
Business model	1
Third-party economic system	1

4.1.1. Economic, Business, and Market-Based Perspective

This perspective focuses on the economic, business, and market-oriented aspects of digital platforms. It examines how digital platforms enable interactions and transactions among businesses (B2B), among consumers (C2C), between consumers and businesses (C2B), and between businesses and consumers (B2C). It also emphasizes their role as intermediaries that facilitate transactions and enable value creation. Based on our analysis of the definitions from this perspective, a digital platform can be defined as “a set of digital resources, including services and content, that enable value-creating interactions between external producers and consumers” (Komljenovic, 2021, p.381).

4.1.2. Purely Technical and Technological Perspective

This perspective focuses on the technical and technological aspects of digital platforms. It considers the software systems, architectures, and information and communication technology (ICT) components that form the core of digital platforms. By focusing on technical functionalities and extensible codebases, this perspective provides a better understanding of the technical foundations that govern platform operations. From this perspective, a digital platform can be defined as “*the extensible codebase of a software-based system that provides core functionality shared by the modules that interoperate with it and the interfaces through which they interoperate*” (Tiwana et al., 2010, p.676).

4.1.3. Socio-technical perspective

The socio-technical perspective views digital platforms as complex assemblages of technical elements (software and hardware) embedded in social components. This perspective recognizes that digital platforms are shaped by both technology and user interactions. It seeks to explore the complex interplay between technology and social systems, highlighting the wider ecosystem in which these platforms operate. From this perspective, digital platforms can be defined as “*hybrid structures (organizations, systems, and technologies) that focus on value creation by providing and facilitating direct interaction and exchange between two or more groups of external users within a single digital ecosystem of algorithmic relationships*” (Geliskhanov 2018, p.22).

4.1.4. Organizational perspective

The organizational perspective conceptualizes digital platforms as organizational forms that coordinate activities among independent users (see subsection 4.2). It emphasizes the role of digital interfaces in orchestrating interactions among diverse stakeholders and enabling novel forms of organization and control. From this perspective, digital platforms are defined as “supraorganizational entities that use digital technology to facilitate interactions between diverse actors, leading to novel forms of organization and accompanying forms of control” (Ens et al., 2023, p.890).

4.2. Common elements used to define digital platforms

In the next stage of the analysis, content analysis was employed to identify recurring elements used to define digital platforms across the collected definitions. The software NVivo was used to analyze word frequencies across all definitions. Subsequently, key terms were categorized into codes based on their semantic similarity and meaning. Table 4 provides an overview of the coding process, presenting the codes, their scope, and the frequency with which they occur across the 74 definitions. The content analysis revealed a strong emphasis on technology in definitions of digital platforms, as well as their role in facilitating intermediation and interactions among multiple user groups. The code 'organizational form' also emerged as a key element in several definitions, with some authors conceptualizing digital platforms as organizational forms characterized by specific governance mechanisms and technological architectures. Finally, value creation and exchange were identified in a subset of definitions, underscoring the role of digital platforms in generating stakeholder value and enabling value exchange.

Table 4. Content analysis of the definitions of digital platforms

Code	Number of definitions	Code scope
Technology	60	The definition refers to the technical components and infrastructure that support digital platforms.
Intermediation function	43	The definition refers to the intermediation role of digital platforms in connecting multiple user groups.
Multi-party interaction	28	The definition mentions interactivity among multiple users.
Organizational form	9	The definition characterizes digital platforms as organizational structures with specific governance mechanisms, or as mediators among organizations.
Value creation	6	The definition highlights the role of digital platforms in creating value for users, businesses, and other stakeholders.
Value exchange	3	The definition mentions the exchange of value between different parties facilitated by digital platforms.

4.2.1. Technology

Most authors recognize technology as a central element in defining digital platforms. It is commonly identified as the foundational component that enables platform operations, including interactions, transactions, and the creation and exchange of value among different user groups. Technology is also portrayed as the underlying infrastructure upon which digital platforms are built, allowing them to deliver services to users. Accordingly, the concept of technology is employed in several distinct ways in the literature to define digital platforms, as outlined below.

- **Enable interactions:** Many definitions emphasize the role of technology in enabling interactions and transactions among different user groups, including businesses, consumers, and peers. Technology functions as a facilitator that allows interactions to occur efficiently within the digital platform ecosystem. For example, digital platforms *"allow interaction between end-users, or demand and supply sides, based on varying degrees of extensible software systems that share functionality with add-on software"* (Müller et al., 2018, p.140).
- **Shape organizational forms:** Technology contributes to the organizational form of digital platforms by providing the architectural and infrastructural foundations required to orchestrate activities among independent users and complementors. In this sense, digital platforms *"are supraorganizational entities that use digital technology to*

facilitate interactions between diverse actors, leading to novel forms of organisation and accompanying forms of control” (Ens et al., 2023, p.890).

- **Promote Value Creation:** Several definitions highlight the role of technology in enabling value creation for users, businesses, and other stakeholders. Digital platforms rely on technology to create and deliver services, content, and resources that support value-creating interactions. As noted by Zoppelletto et al. (2020, p.562), digital platforms comprise *“digital resources that enable value-creating interactions between external actors.”*

Taken together, technology is used to define digital platforms by describing the foundational infrastructure on which they are built and the ways in which technology facilitates connections and interactions among different user groups and organizations to enable value creation.

4.2.2. Intermediation function

Several authors highlight the role of digital platforms as intermediaries among multiple user groups as a core element of their definition. Intermediation manifests in different forms and is discussed across a variety of contexts in the literature. The following forms of intermediation were identified across the analyzed definitions:

- **Transaction intermediation:** Digital platforms frequently act as intermediaries that facilitate transactions among different parties, such as businesses, consumers, and peers, by providing a digital space in which goods and services can be bought, sold, or exchanged. For example, *“digital platforms are online firms that intermediate transactions between businesses, consumers, and peers and extract rent from this” (Naudé, 2023, p.94).*
- **Value exchange intermediation:** Digital platforms function as intermediaries in processes of value exchange by enabling interactions among different user groups. They provide an environment in which such interactions support value co-creation through the exchange of resources and services. As noted by Drewel et al. (2021, p.412), *“digital platforms are intermediaries and enable interactions and the exchange of values between at least two different, interdependent user groups.”*
- **Collaboration intermediation:** Digital platforms facilitate collaboration among different user groups by lowering barriers to interaction and coordination. This form of intermediation supports cooperative activities aimed at mutual benefit. As Staub et al. (2022, p.907) observe, *“digital platforms facilitate interactions and collaboration between two or more mutually interdependent groups of participants thanks to their ability to leverage production, transaction, and innovation.”*

4.2.3. Multi-party interaction

Several authors mention interactivity among multiple platform users when defining or referring to digital platforms. This interactivity is described in different ways across the definitions, encompassing interactions between users with complementary needs as well as interactions between distinct sides of the marketplace. Within the digital platform ecosystem, such interactions are frequently associated with value-creation processes. The following forms of interaction were identified in the analyzed definitions:

- **Interaction between users with complementary needs:** Several definitions describe interactivity as occurring among users with complementary needs, often referred to as complementors. This perspective highlights the role of digital platforms in bringing together users or entities that provide products or services that enhance or complement those offered by other actors. As Wen (2023, p.2) notes, digital platforms are *“online tools that enable users with complementary needs to interact with each other.”*
- **Interactions within a marketplace:** In some definitions, interactivity is identified as a defining characteristic of digital platforms, particularly in the context of marketplaces. Interactions between the different sides of a marketplace facilitate the creation and exchange of value. For example, Eferin et al. (2019, p.132) describe digital platforms as *“multi-sided marketplaces with business models that enable producers and users to create value together by interacting with each other.”*

- **Interactions for value creation:** Several authors explicitly associate interactivity with value creation. Digital platforms are portrayed as dynamic environments in which diverse users engage in exchanges, transactions, and collaborative activities. Such interactions within the platform ecosystem foster value creation for multiple stakeholders. As articulated by Zoppelletto et al. (2020, p.562), digital platforms comprise *“digital resources that enable value-creating interactions between external actors.”*

4.2.4. Organizational form

Some authors use the term ‘*organization*’ when defining or referring to digital platforms. In this context, certain definitions emphasize the role of digital platforms in connecting bilateral or multilateral organizations, while others conceptualize digital platforms themselves as organizational forms that use technology to coordinate the activities of multiple actors. Such organizational arrangements typically comprise a technological component and interdependent user groups linked through formal and informal relationships, operating within a single digital ecosystem.

- **Digital platforms connecting organizations:** Some definitions employ the term ‘*organizations*’ rather than ‘*users*’ or ‘*actor*’ to describe the intermediating role of digital platforms. In this view, platforms connect coordinated entities or groups of individuals characterized by defined roles, responsibilities, and objectives. For example, Li et al. (2023, p.4) describe digital platforms as a *“third-party economic system that can connect bilateral (or multilateral) organizations to make transactions and gain benefits from them.”*
- **Digital platforms as organizations:** Other authors conceptualize digital platforms as organizations in their own right, emphasizing that platforms operate within a specific organizational framework that structures the conditions under which interactions occur. Accordingly, digital platforms *“are an organizational form made up of a technological architecture and governance mechanisms for managing autonomous complementors.”* (Saadatmand et al., 2019, p.1).

4.2.5. Value creation

Although value creation is not consistently identified as a core element in definitions of digital platforms, it is occasionally referenced in this context. Several definitions associate the concept of a digital platform with processes of value creation, whereby value emerges from dynamic interactions between external producers and consumers within a digital ecosystem. Moreover, some authors argue that the essence of digital platforms lies in fostering value creation among distinct groups of external users operating within a unified digital ecosystem governed by algorithmic relationships. For example, digital platforms have been described as “multi-sided marketplaces with business models that enable producers and users to create value together by interacting with each other” (Eferin et al., 2019, p.132) and as “digital resources that enable value-creating interactions between external actors” (Zoppelletto et al., 2020, p.562).

4.2.6. Value exchange

Value exchange is occasionally referenced in definitions of digital platforms. Although this element does not appear to be a necessary condition for defining digital platforms, it contributes significantly to understanding their role. In particular, it highlights the dual function of digital platforms: they not only generate value for a range of stakeholders but also facilitate the efficient exchange of that value. For example, digital platforms have been described as intermediaries that *“enable interactions and the exchange of values between at least two different, interdependent user groups”* (Drewel et al., 2021, p.412) and as *“a technology-enabled business model allowing producers and consumers to exchange value”* (Mancha et al., 2018, p.1).

4.3. Perspective-based analysis of definitions

This section presents an in-depth analysis of the term '*digital platform*' from multiple analytical perspectives. The definitions are examined in detail to elucidate how the previously identified codes are reflected in these definitions when considered from each perspective.

4.3.1. Key elements in defining digital platforms from a technical and technological perspective.

Of the 74 definitions analyzed, 16 explicitly adopt a technical perspective in defining or referring to digital platforms. Within this subset, the code '*technology*' was present in all definitions, whereas the other previously identified codes were absent. This finding suggests that, from a purely technical perspective, these other codes are not regarded as essential elements in the definition of a digital platform.

4.3.2. Key elements in defining digital platforms from economic, business, and market-based perspectives.

The analysis of the 74 definitions identified through the systematic review reveals a clear pattern: 32 definitions adopt an economic perspective when conceptualizing digital platforms. This prevalence indicates the prominence of economic considerations in how digital platforms are defined in the literature. In contrast to the technical perspective, this subset of definitions incorporates all previously identified codes. The *intermediation function* code appears in 25 of the 32 definitions, followed by *technology* (22), *multi-party interaction* (16), *value creation* (4), *value exchange* (3), and *organizational form* (1). From an economic perspective, these frequencies suggest that the core elements in defining digital platforms are their capacity to enable intermediation and interaction among users, underpinned by technological infrastructure.

4.3.3. Key elements in defining digital platforms from the socio-technical perspective.

A total of 21 definitions adopt a socio-technical perspective in defining digital platforms. This perspective integrates both technological and social dimensions. Content analysis of these definitions reveals the presence of the *technology* code in 19 of the 21 definitions, followed by *intermediation function* (14), *multi-party interaction* (10), *organizational form* (3), and *value creation* (2). Overall, the socio-technical perspective provides a holistic understanding of digital platforms by emphasizing the interplay between technical architectures and dynamic socio-economic relationships.

4.3.4. Key elements in defining digital platforms from an organizational perspective

In contrast to the preceding perspectives, the organizational perspective, which emerged in 2019, is relatively recent and less prominent in the literature. Only five definitions adopt this perspective when defining or referring to digital platforms. Within this subset, the *organizational form* code appears in all five definitions, followed by *technology* (4), *intermediation function* (4), and *multi party interaction* (2). This emerging perspective places greater emphasis on digital platforms as organizational entities characterized by distinct modes of control and governance.

Table 5 maps the various definitions of digital platforms according to four key perspectives: technical, economic, socio-technical, and organizational. Each perspective is analyzed through six key elements: technology, intermediation and connection function, multi-party interaction, organizational form, value creation, and value exchange. Across all perspectives, technology is consistently recognized as an essential element supporting platform functionalities. The technical perspective focuses exclusively on digital infrastructure, emphasizing software systems and modular architectures. In contrast, the socio-technical perspective integrates technological components with social processes, highlighting how technology supports social activities and community building. The economic perspective emphasizes how technology enables economic transactions and large-scale data distribution, linking it directly to market dynamics and value creation. The organizational perspective examines technology in relation to governance mechanisms and the structuring of organizational activities. To provide a concise visual synthesis, Figure 3 illustrates the extent to which each

definitional perspective emphasizes the six elements by reporting their frequency of occurrence across definitions, thereby highlighting areas of convergence and divergence among perspectives.

Table 5. Elements and definition perspectives matrix

Elements/Perspectives	Technical	Economic	Socio-technical	Organizational
Technology	5,6,15,24,31,36,44,48,49,50,54,57,58,59,63,72	1,4,13,19,20,23,25,26,27,29,32,37,38,43,45,50,52,55,61,65,67,70	7,8,9,17,22,28,30,33,34,39,42,46,51,56,60,66,68,73,74	10,11,12,47
Intermediation/ connection function		1,2,13,14,16,18,19,23,26,29,32,37,38,40,43,45,50,52,53,55,61,64,67,69,70	8,17,21,22,28,30,34,39,41,42,46,51,68,73	11,12,47,62
Multi-party interaction		3,4,14,16,18,19,26,35,38,43,45,61,64,69,70, 71	8,17,21,30,34,39,56,66,68,73	10,12
Organizational form		2	7,30,39	10,11,12,47,62
Value creation		18,19,26,71	33,39	
Value exchange		14,20,53		

Note: Numbers refer to the corresponding definition IDs in Appendix A.

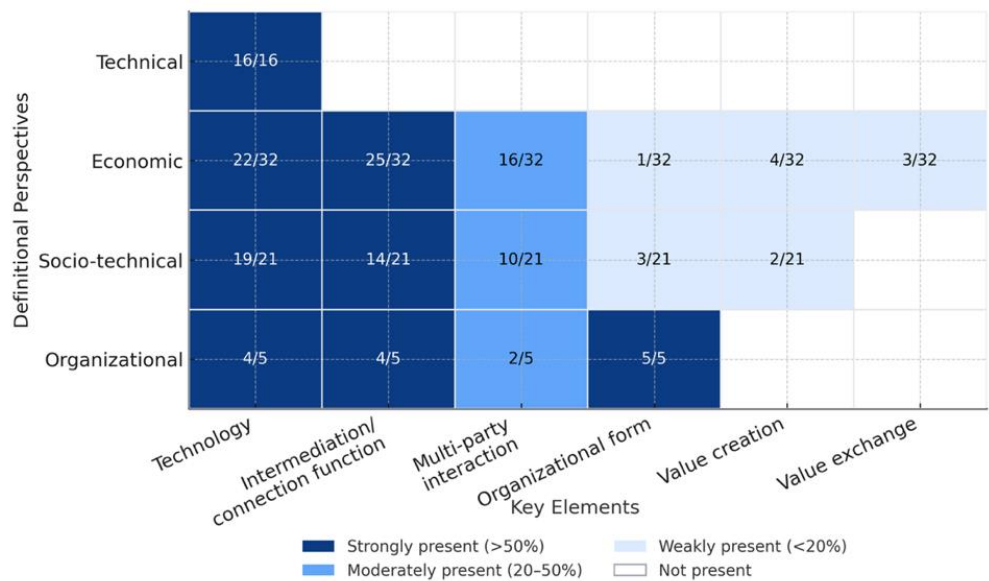


Fig. 3. Mapping of definitional perspectives and key elements of digital platforms.

As illustrated in Figure 3, intermediation and multi-party interaction are central elements in definitions of digital platforms and appear across all perspectives except the technical one. From an economic perspective, these elements are particularly prominent, reflecting the emphasis placed on the economic benefits and efficiencies generated through platform intermediation and the interactions it enables among economic actors. The socio-technical perspective broadens this view by incorporating intermediation and interaction in relation to a wider range of activities, including economic, political, and social processes. From an organizational perspective, these elements are used to examine how platforms coordinate activities among multiple parties and to assess the implications of such interactions for organizational structures and dynamics.

The key element organizational form is less prevalent across the definitions. It is consistently present within the organizational perspective and appears occasionally in the economic and socio-technical perspectives, while remaining absent from the technical perspective. When addressed, this element is commonly associated with the capacity of digital platforms to establish new organizational structures, orchestrate relationships among organizations, and enable organizations to leverage specific technological functionalities. The element value creation is mentioned sporadically within the economic and socio-technical perspectives and is absent from the others. By contrast, value exchange is exclusively referenced within the economic perspective.

Overall, the elements and definitional perspectives matrix provides a structured framework for interpreting the multifaceted nature of digital platforms. The insights derived from this matrix suggest that digital platforms are inherently multidimensional, shaped by diverse business models, heterogeneous user behaviors, and significant societal implications. This complexity underscores the importance of adopting an interdisciplinary approach to platform research. A comprehensive understanding of digital platforms therefore requires the integration of perspectives from multiple disciplines, including economics, sociology, technology studies, and business management.

4.4. Evolution of the definition of digital platforms in the last decade

The analysis of the definitions reveals a clear evolution in the concepts and elements used to characterize digital platforms, reflecting their increasing complexity and multifaceted nature. This evolution is illustrated in Figure 4, which traces the temporal progression of dominant concepts and definitional elements associated with digital platforms over time. As shown in the figure, shifts in emphasis correspond to broader technological, economic, organizational, and societal developments. This evolution can be attributed to several interrelated factors.

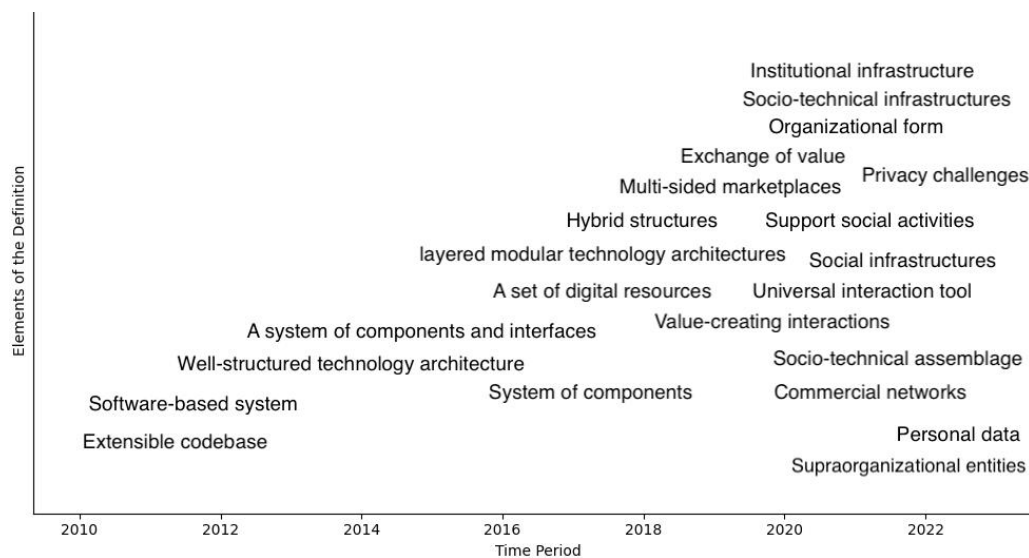


Fig. 4. Evolution in the definition of the term 'digital platform'

Technological advancements: In the early period from 2010 to 2017, definitions predominantly emphasized the technical foundations of digital platforms, such as extensible codebases and adaptable technological architectures. During this phase, platforms were primarily conceptualized as technical artifacts, with limited attention given to user experience or business model implications. The focus was instead placed on the technological capabilities required to support diverse applications and functionalities.

Economic impact: Around 2018, definitions began to incorporate economic dimensions, marking a significant shift in how digital platforms were conceptualized. Rather than being viewed solely as technological tools, platforms increasingly came to be understood as hybrid structures that facilitate value creating interactions within digital ecosystems. This shift reflects a growing recognition of the economic role of digital platforms as enablers of market activity and value generation.

Organizational shifts: By 2019, definitions further evolved to frame digital platforms as distinct organizational forms. Platforms were no longer perceived merely as technical infrastructures or economic intermediaries, but as organizational entities characterized by specific governance mechanisms, architectural arrangements, and modes of control. This shift was likely driven by the recognition that platforms actively shape, rather than simply host, the conditions under which interactions and transactions occur.

Socio-technical perspective: In 2021 and 2022, socio-technical perspectives became more prominent, emphasizing that digital platforms cannot be fully understood through purely technical or economic perspectives. Instead, they were increasingly conceptualized as socio-technical systems in which technological components, social interactions, and economic activities are tightly interwoven.

Societal impact: By 2023, the definitions recognized the societal impact of digital platforms, highlighting their role in forming communities, posing new privacy challenges, and processing large amounts of personal data. This reflects the growing concerns about the implications of digital platforms and the need for responsible data handling and privacy practices.

The evolution of the term 'digital platform' reflects the broader shifts in our understanding of these platforms, moving from a narrow, technology-centric view to a more holistic perspective that recognizes their multifaceted roles in society. Referring to Gartner's hype cycle (Dedehayir & Steinert, 2016), digital platforms such as social media, e-commerce platforms, cloud services, and digital collaboration tools have moved well beyond the initial hype. They are progressing through the 'slope of enlightenment' toward the 'plateau of productivity'. These platforms continue to evolve, addressing privacy, security, and regulatory challenges while delivering value to businesses and consumers around the world. The pace of innovation and adoption remains dynamic, driven by ongoing advancements in technology and changing societal needs.

4.5. Definitions of digital platforms and current typologies

Digital platforms can be categorized based on different dimensions. Some scholars classify platforms according to their business models, distinguishing among integrator platforms, product platforms, and multi-sided platforms (Boudreau & Lakhani, 2009). Other studies focus on interaction modes as a basis for classification (Boudreau & Lakhani, 2009). From this perspective, two main interaction modes have been identified: collaborative platforms and competitive platforms. Platforms can also be differentiated based on their governance modes, which are commonly classified as either open or closed (Boudreau & Lakhani, 2009; Broekhuizen et al., 2021; Parker & Van Alstyne, 2010).

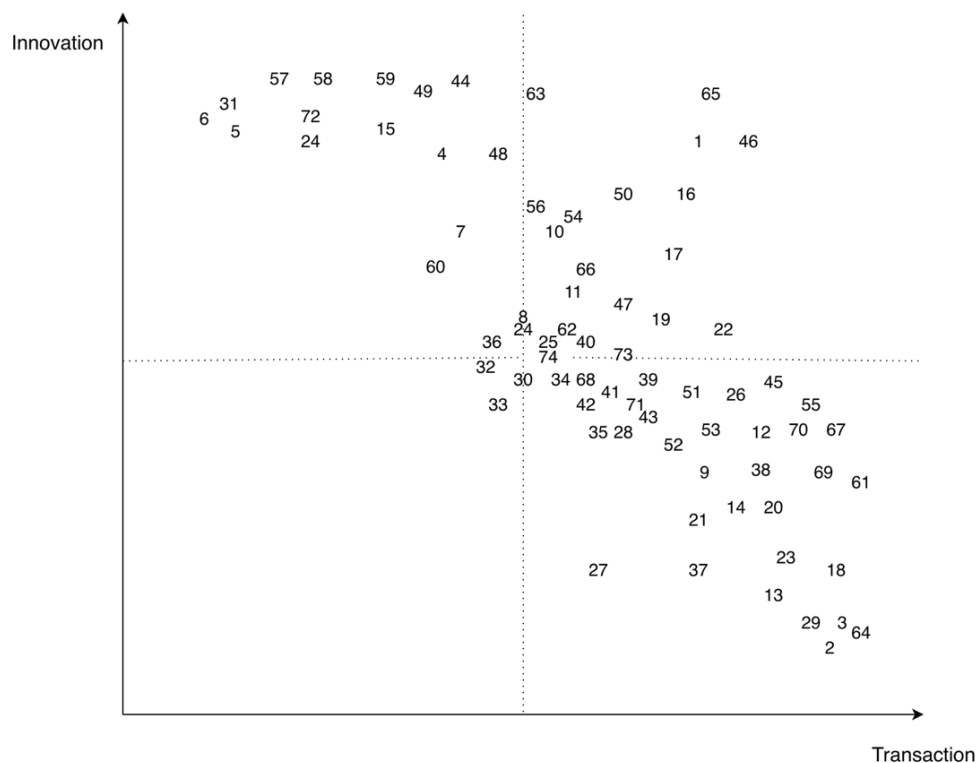
Two major types of digital platforms are dominant in the literature: transaction and innovation platforms (Cusumano et al., 2019). Transaction platforms are described as intermediaries or online marketplaces that enable people and organizations to share information or buy, sell, or access a variety of goods and services. Innovation platforms are different from transaction platforms, as they mainly provide a technological base from which new products can be developed (Cusumano et al., 2019). Given that many academics employ this straightforward classification system (transaction vs. innovation), our comparison of definitions is confined to these two platform categories.

The analysis of the 74 definitions reveals a noteworthy emphasis on the role of digital platforms as transaction intermediaries (Figure 5). These platforms are often described as facilitators of economic exchanges between businesses, consumers, and organizations. This focus on transactional characteristics indicates a keen interest among scholars in understanding the economic and business implications of digital platforms.

While some authors focus on the transactional functionalities of digital platforms, others emphasize the innovative aspects of digital platforms in their definitions. They view digital platforms as catalysts of novel ideas and transformative solutions. However, it is crucial to note that these two approaches to viewing digital platforms are not mutually exclusive but rather complementary. The essence of digital platforms lies in their dual role: they are often both transactional intermediaries and innovation incubators.

A comparison of the definitions with the current typologies of digital platforms revealed that most scholars do not specify the type of digital platform they refer to when defining them. The lack of clarity regarding the type of platform being considered has critical implications for the unit of analysis being studied, as the business model, the targeted user base, and the network effects can vary dramatically depending on the type of platform. For example, social media platforms such as Facebook have different business models, user bases, and network effects than e-commerce platforms such as Amazon.

The varied definitions show that digital platforms do more than facilitate transactions and innovation. They play a major role in building communities, offering new ways of creating and sharing value between stakeholders, and aggregating information that could benefit a large number of users. The growing scope of digital platforms and their increasing impact on society call for the development of typologies that better encompass the variety of services that digital platforms can offer.



Note: Numbers refer to definition IDs in Appendix A; positioning is indicative and reflects key elements emphasized in each definition.

Fig. 5. Conceptual positioning of definitions: Transaction vs. Innovation focus.

5. Conclusion

This article presented an analysis of 74 definitions of the term 'digital platform' from 58 academic publications. The goal was to identify the different perspectives, key concepts, and defining elements used across these definitions. The analysis highlights the existence of four main perspectives through which digital platforms can be defined: (1) economics with a market-based perspective, (2) technology management with a technical perspective, (3) information systems with a socio-technical perspective, and (4) organizational perspective. Academics use several concepts to refer to digital platforms, including concepts such as 'software-based systems' 'digital (resources, systems, core)', 'socio-technical (infrastructures, intermediary, assemblage)', 'organizational forms', and 'two-sided markets'.

Building on the insights gained from these definitions, our analysis of 74 definitions reveals that the key elements shared between all the definitions are: (1) the use of technology, (2) the intermediary function and (3) multi-party interaction. Common elements found in most, but not all, definitions are (1) reference to organization forms, (2) value creation, and (3) value exchange.

The study of the evolution of the definition of digital platforms over time indicates that the conceptualization of a digital platform has evolved alongside technological advancements and the maturation of digital ecosystems. Our analysis shows that researchers have gradually refined their understanding of digital platforms by incorporating new key elements into their definitions over time. Initially, researchers considered digital platforms primarily as technical infrastructures. Later, they began to recognize the economic impact of digital platforms, acknowledging their role in facilitating the creation and exchange of value. Over time, the conceptualization of digital platforms has broadened even further, recognizing that digital platforms are not only technical and economic entities but also enablers of social interactions and new forms of organization.

Our analysis shows that the term digital platform remains used inconsistently across the literature, largely because many definitions fail to clarify the context or theoretical perspective that guides them (e.g., Constantinides et al., 2018; De Reuver et al., 2018). Many definitions remain vague, failing to distinguish clearly between digital and non-digital platforms or to specify the core elements that define what a platform is. In addition, few authors make explicit the perspective from which they define digital platforms, which contributes to ongoing conceptual confusion.

Our findings confirm earlier theoretical views that emphasize the technological, economic, and socio-technical nature of platforms but extend them by identifying the core concepts and defining elements within each perspective. This broader understanding challenges narrow infrastructural or market-based conceptualizations by showing that platforms operate as governance and coordination mechanisms linking diverse actors, technologies, and value systems. Building on this, the study identifies four main perspectives: technical, economic, socio-technical, and organizational, and delineates the key elements emphasized in each, offering a clearer and more structured basis for understanding platforms. The resulting integrative framework consolidates dispersed definitional elements and makes their interconnections explicit, thereby bridging previously fragmented conceptualizations and establishing a robust foundation for future research to examine how definitional choices influence both theoretical framing and empirical analysis in digital platform studies.

For policymakers, this study provides a clearer conceptual foundation to identify the characteristics that define different types of digital platforms and to distinguish between entities that qualify as platforms and those that do not. By clarifying how different perspectives emphasize different aspects of governance, intermediation, and multi-party interaction, our study helps regulators better understand how platforms operate and exert influence. This understanding can support the development of more targeted and effective regulations addressing platform accountability, market fairness, and data governance (Heylen, 2024). Beyond policymaking, this study also holds practical value for platform owners, managers, and designers, as it clarifies the defining characteristics that shape platform governance, ecosystem coordination, and innovation strategies. It further helps practitioners align key dimensions of platform design and management—for example,

linking technological choices with business models and integrating social aspects that support business development and operations.

Based on these observations, we recommend that researchers clearly define the term ‘digital platform’ in their articles and specify the perspective from which they are examining these platforms. Additionally, it is advisable to indicate the specific type of platform being studied. To facilitate this process, this article proposes both a general definition of ‘digital platform’ and specific definitions tailored to various perspectives. The overarching definition integrates key elements identified across all definitions, whereas the perspective-specific definitions are derived from elements unique to each subset of definitions.

From a broad perspective, a digital platform is defined as a technology infrastructure (hardware and software) that mediates interactions and transactions among diverse participants within a well-structured organizational entity.

From a technical perspective, a digital platform can be defined as an extensible digital core (hardware and software) that provides core functionality shared by inter-operating modules and interfaces.

From an economic perspective, a digital platform is defined as a layered technological architecture that constitutes a dynamic third-party economic system. It mediates interactions and transactions among different stakeholders while promoting the creation and exchange of value.

From a socio-technical perspective, a digital platform is defined as a socio-technical infrastructure that integrates organizations, systems, and technologies. It leverages digital technology to enable communication, interaction, innovation, and engagement in economic and social activities.

From an organizational perspective, a digital platform is defined as an organizational entity that leverages digital technology to mediate interactions among a diverse range of stakeholders. Such entities are characterized by novel forms of control and governance.

These definition templates aim to help academics, researchers, and practitioners include all essential elements when defining digital platforms. Furthermore, these templates allow scholars and researchers to clarify the perspective from which they define or refer to digital platforms. These templates harmonize definitions, thereby improving communication among researchers and facilitating the comparison of studies.

In line with conventional research practices, it is important to interpret the results of this study within its limitations. This work is limited because it focuses only on definitions published in the Scopus database. This limitation not only underscores the need for further research but also presents specific research opportunities. Future research could broaden its horizons by incorporating definitions derived from a wider range of academic databases or grey literature. Subsequent studies could deepen the comparison between existing definitions and current typologies and taxonomies. Moreover, a promising direction would be to conduct a Delphi study to identify which key elements experts consider most important within each perspective. Such an approach could clarify whether the less frequently cited elements are absent from definitions due to unawareness or omission, or because they are viewed as less relevant. Another interesting area of exploration could be the study of how the lack of a universally accepted definition of the term ‘digital platform’ influences the development of regulations. This could reveal the interplay between definitional clarity and regulatory frameworks, thereby contributing to the discourse on digital platform governance.

Finally, as the digital landscape continues to evolve, it will be crucial for scholars to revisit and refine the definitions of digital platforms to account for emerging trends, technologies, and organizational innovations. This ongoing refinement will be essential for maintaining the relevance and clarity of the concept in a rapidly evolving digital environment.

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Appendix A. List of digital platform definitions.

1. "hybrid multi-sided platforms that use digital technology as an intermediary bridge between the demand side and the supply side, which enables new business models even in traditional industries" (Li et al., 2023, p.2).
2. "third-party economic system that can connect bilateral (or multilateral) organizations to make transactions and gain benefits from them" (Li et al., 2023, p.4).
3. "is typically a two-sided market created by sellers, buyers, and platform firms, consisting of buyers, sellers, trading partners, customers, and government or regulatory agencies" (Lee et al., 2023, p.58).
4. "refer to commercial networks which facilitate companies and customers to rapidly grow and activate digital services on a large scale" (Nassani et al., 2022, p.3).
5. "systems based on extensible software providing primary functionality to be shared by all applications operating with interfaces and between themselves" (Dos Santos et al., 2022, p.255).
6. "are layered modular information and communication technology (ICT) enabled architectures with stable core components and flexible complementary modules" (Senyo et al., 2021, p.1).
7. "socio-technical assemblage encompassing the technical elements of software and hardware, and associated organizational processes, standards, and dynamics" (Qiu et al., 2022, p.4).
8. "are digital systems that facilitate communications, interactions, and innovations to support economic transactions and social activities" (Chen et al., 2021, p.1307).
9. "are social infrastructures of the digital age that promote social inclusion, by offering the ability to form meaningful communities, while also presenting new privacy challenges, since they typically collect and process large amounts of personal data as a constitutive characteristic of their business models." (Arzoglu et al., 2023, p.1).
10. "are an organizational form made up of a technological architecture and governance mechanisms for managing autonomous complementors" (Saadatmand et al. 2019, p.1).
11. "organizational forms that orchestrate activities between independent users through the use of digital interfaces" (Harracá et al., 2023, p.2).
12. "are supraorganizational entities that use digital technology to facilitate interactions between diverse actors, leading to novel forms of organisation and accompanying forms of control" (Ens et al., 2023, p.890).
13. "are online firms that intermediate transactions between businesses, consumers, and peers and extract rent from this" (Naudé, 2023, p.94).
14. "are intermediaries and enable interactions and the exchange of values between at least two different, interdependent user groups" (Drewel et al., 2021, p.412).
15. "consist of constant components in the core and variable components in the periphery" (Drewel et al., 2021, p.412).
16. "facilitate interactions and collaboration between two or more mutually interdependent groups of participants thanks to their ability to leverage production, transaction, and innovation" (Staub et al., 2022, p. 907).
17. "Digital platforms are online tools that enable users with complementary needs to interact with each other" (Wen, 2023, p.2).
18. "multi-sided marketplaces with business models that enable producers and users to create value together by interacting with each other" (Eferin et al., 2019, p.132).
19. "digital resources that enable value-creating interactions between external actors" (Zoppelletto et al., 2020, p.562).
20. "a technology-enabled business model allowing producers and consumers to exchange value" (Mancha et al., 2018, p.1).
21. "infrastructures that mediate interactions between complementors and users" (Adam et al., 2023, p. 440).
22. "software-based systems, products, and services that facilitate transactions between parties. However, digital platforms enable more than simply economic transactions" (Ballerini et al., 2023, p.2).
23. "a software system to enable a digital ecosystem service that facilitates the exchange of assets (e.g., products and services) between their providers and consumers" (Bartels & Schmitt, 2022, p.2).

24. "is a common, shared set of services and architecture used to host complementary or additive offerings, including digital artifacts" (Braune & Dana, 2022, p.239).
25. "are technological platforms that allow firms to edit, homogenize, and distribute data on a huge scale" (Chatterjee et al., 2022, p.1).
26. "a set of digital resources including services and content that enable value-creating interactions between external producers and consumers" (Constantinides et al., 2018, p.381).
27. "a service offering by a digital platform company to the users that may be bound to an agreement" (Derave et al., 2022, p.3).
28. "a common foundation or technological base that enables transactions, information dissemination, and access among members of distinct customer groups" (Fuchikawa, 2020, p.103).
29. "digital marketplaces that connect and facilitate transactions between two or more groups of actors, or sides" (Garud et al., 2022, p.450).
30. "hybrid structures (organizations, systems, and technologies) that focus on value creation by providing and facilitating direct interaction and exchange between two or more groups of external users within a single digital ecosystem of algorithmic relationships" (Geliskhanov, 2018, p.22).
31. "the extensible codebase of a software-based system that provides core functionality shared by the modules that interoperate with it and the interfaces through which they interoperate" (Tiwana et al., 2010, p.676).
32. "are software and applications on the web that act as mediators between the service providers and service recipients" (Hanafizadeh et al., 2020, p.365).
33. "are computerized, technology-enabled touch-points that are conducive to cocreation" (Hollebeek et al., 2021, p.25).
34. "socio-technical infrastructures and business arrangements that facilitate and coordinate interactions between different sides of a marketplace" (Hracs & Webster 2021, p.41).
35. 'is a universal interaction tool that simplifies the management process and aims to increase economic efficiency' (Inozemtsev et al., 2022, p.21).
36. "a kind of legal asset—a set of software and hardware elements that provide services." (Inozemtsev et al. 2022, p.21).
37. "a business model that allows consumers and suppliers to connect online to exchange products, services, and information." (Inozemtsev et al., 2022, p. 83).
38. "an information society service accessible via the Internet or similar digital means that allows customers to enter into contracts with suppliers of goods, services or digital content" (Inozemtsev et al., 2022, p.148).
39. "cyber-physical structures (organizations, systems, technologies) focused on creating value. by providing and facilitating direct interaction and exchange between two or more groups of external users within a single digital ecosystem" (Inozemtsev et al., 2022, p. 82).
40. "are ecosystems; that is, business models that combine several groups of products, services, and information to meet customer needs" (Inozemtsev et al., 2022, p. 82).
41. "a service that performs an intermediary function when accessing information, services or goods. These services organize and prioritize content for presentation to end users" (Inozemtsev et al., 2022, p.81).
42. "a set of intermediary services provided wholly or in large part using the Internet" (Inozemtsev et al., p.81).
43. "a set of online services for connecting stakeholders, as a result of which they can interact without significant transaction costs" (Inozemtsev et al., 2022, p. 82).
44. "is a complex system of technologies, computer programs, and computer equipment and devices that provide a set of service capabilities on the basis of which many different products can be developed and deployed" (Inozemtsev et al., 2022, p. 82).
45. "an enterprise operating in two (or many) third-party markets that use the Internet to enable interaction between two or more different groups of users who are connected by indirect network effects" (Inozemtsev et al., 2022, p.148).

46. "is a complex information system that provides the functions of interconnection between market participants, open for use by customers and partners, application developers, service providers, and agents" (Inozemtsev et al., 2022, p.303).
47. "can be considered as a technical framework connecting organizations to the platform, which enables organizations to collect, integrate and calculate information in the platform" (Jiang et al., 2023, p.2).
48. "are combinations of hardware and software intended to aid in collecting, archiving, sharing, and using data for local or larger-scale assessment, planning, and decision-making" (Johnson et al., 2021, p.452).
49. "are layered modular technology architectures in business networks" (Kazan et al., 2018, p.186).
50. "is a software system that forms the technical core of a digital ecosystem, is directly used by providers and consumers via APIs or UIs—such as a digital marketplace—and facilitates the matching of a provider and a consumer in relation to an asset within a digital ecosystem service" (Koch et al., 2022, p.9).
51. "is a socio-technical intermediary creating multi-sided markets and coordinating network effects" (Komljenovic, 2021, p.1032).
52. "have a modular architecture and provide an interface that facilitates multilateral transactions and exchanges among users and providers of complementary products and services, i.e., 'complementors'" (Li et al., 2019, p.1448).
53. "are matchmakers facilitating the exchange of value between two or more platform sides" (Mancha et al., 2021, p.129).
54. "shared space to host services and an architecture that provides complementary offerings along with digital artifacts" (Modgil et al., 2022, p.2).
55. "are businesses that connect different groups of user, notably clients and workers, and charge a fee for an algorithmically managed service based on Terms of Service agreements" (Molina et al., 2023, p.17).
56. "allow interaction between end-users, or demand and supply sides, based on varying degrees of extensible software systems that share functionality with add-on software" (Müller et al., 2018, p.140).
57. "extensible codebases where third parties add complementarities in the form of new modules and services" (Müller et al., 2018, p.140).
58. "a shared, common set of services and architecture that serves to host complementary offerings, including digital artifacts" (Nambisan, 2017, p.1032).
59. "a system of components and interfaces that forms a common structure shared by a set of products" (Parmentier & Gandia, 2017, p.3).
60. "nested hierarchies of systems that are shaped by, and in interaction with, their environment" (Poniatowski et al., 2022, p.257).
61. "connect two interdependent groups of web users (parties offering goods, services, and digital content; and parties interested in accessing this supply) and enable their transactions" (Quarta, 2020, p.1).
62. "an institutional infrastructure enables, constrains, and coordinates the ecosystem actors and is used by the ecosystem orchestrator to govern the ecosystem actors" (Schreieck et al., 2022, p.9).
63. "a technology architecture that allows the development of its computing functionalities and allows the integration of information, computing and connectivity technology platforms available to an organization" (Sedera et al., 2016, p.367).
64. "connect potential buyers and sellers, allows them to negotiate, and facilitates the final transactions" (Shree et al., 2021, p.354).
65. "are technological infrastructures that allow member firms to develop, configure, and deliver advanced services efficiently and on an unprecedented scale" (Suuronen et al., 2022, p.415).
66. "multi-sided digital frameworks that shape the terms on which participants interact with one another" (Szalkowski & Mikalef 2023, p.1).
67. "a service that connects different groups of entities and mediates transactions through digitalized mechanisms to take advantage of network externality" (Takagi, 2020, p.452).

68. "is a connected digital system that provides a common set of design and governance rules to facilitate interactions between multiple users" (Teece et al., 2022, p.7).
69. "act as intermediaries between different kinds of 'customers,' matching supply and demand of a given resource, and engaging in new forms of interaction with different customer groups" (Trabucchi et al., 2021, p.35).
70. "are multi-sided platforms that enable interactions between two or more groups of surrounding customers and complementors online" (Wang et al., 2022, p.2).
71. "places of consumer crowdsourcing and crowdsending, which lie at the core of platformized value creation and which the brand can foster or restrict to shape platform interactions" (Wichmann et al., 2022, p.110).
72. "an extensible digital core that is equipped with complements for third parties" (Xie et al., 2022, p.1).
73. "is a programmable digital infrastructure that facilitates interaction between users through the aggregation of information and shapes the 'platform ecology' in the information society" (Xu & Wang 2022, p.1).
74. "information aggregation infrastructures coupled with technology, society, and economics" (Xu & Wang 2022, p.2).

Biographical notes



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