



COMPETITIVENESS DIMENSIONS IN THE AGE OF DIGITAL PLATFORMS

 **Adrielle Aparecida Gomes de Bem**¹  **Ana Cláudia Azevedo**²  **Nayara Gonçalves Lauriano**³

¹ Master's student in Administration, Federal University of Viçosa – UFV. Viçosa, Minas Gerais – Brazil. adrielle.bem@ufv.br

² PhD in Administration, University of São Paulo – FEA/USP. Professor at the Federal University of Viçosa – DAD/UFV. Viçosa, Minas Gerais – Brazil. anaazevedo@ufv.br

³ PhD candidate in Administration, Federal University of Viçosa – UFV. Viçosa, Minas Gerais – Brazil. nayara.lauriano@ufv.br

Abstract

Objective: While there is a consolidated view of the competitive dispositions under which traditional approaches to competitive advantage operate, there is no cohesive view of how this logic manifests itself in a scenario based on technology and digitization where digital platforms operate. Therefore, this study aimed to analyze what are the prevailing competitive dispositions in digital platforms.

Methodology/Approach: this is an exploratory study, correlating the topics of digital platforms and competitive advantage through a literature review on the Web of Science database, presenting a sociometric analysis of the data and a synthesis of the main competitive dispositions in digital platforms.

Originality/Relevance: despite the acknowledged inadequacy of traditional strategies to explain competitiveness in the context of digital platforms, the studies dedicated to discussing this issue are still limited, and the present study has contributed by extending the discussion and providing perspectives to this novel scenario.

Main results: The results define certain differences between the competitive dispositions regarding traditional enterprises and platform-based business models. Among the new elements identified, the distinct focus of the value creation process, the centrality of a networked structure as well as the use of data, and interaction of a more heterogeneous set of participants are highlighted.

Theoretical/methodological contributions: the present study contributes to the current debate by indicating a first effort to align and consolidate the competitive dimensions that present themselves in digital platforms, in comparison to what is known concerning traditional pipeline approaches. Moreover, by proposing a research agenda, the development of future studies is also assisted.

Keywords: Competitive advantage. Digital platforms. Strategy.

DIMENSÕES DE COMPETITIVIDADE NA ERA DAS PLATAFORMAS DIGITAIS

Resumo

Objetivo do estudo: Embora tenhamos uma visão consolidada das disposições competitivas sob as quais operam as abordagens tradicionais de vantagem competitiva, não temos uma visão coesa de como essa lógica se manifesta em um cenário baseado em tecnologia e digitalização no qual operam as plataformas digitais. Logo, o objetivo deste estudo é analisar quais são as disposições competitivas predominantes nas plataformas digitais.

Metodologia/Abordagem: este estudo de natureza exploratória correlaciona através de uma revisão de literatura na base Web of Science, os tópicos de plataformas digitais e vantagem competitiva, apresentando uma análise sociométrica dos dados e a síntese das principais disposições competitivas nas plataformas digitais.

Originalidade/Relevância: apesar da reconhecida inadequação da estratégia tradicional para explicar a competitividade do contexto das plataformas digitais, ainda são poucos os estudos que se dedicam a debater a questão, o presente estudo contribui estendendo a discussão e oferecendo perspectivas a este novo cenário.

Cite as / Como citar

American Psychological Association (APA)

Bem, A. A. G., Azevedo, A. C., & Lauriano, N. G. (2022). Competitiveness dimensions in the age of digital platforms. *Iberoamerican Journal of Strategic Management (IJSM)*, 21, 1-31, e21475. <https://doi.org/10.5585/riae.v21i1.21475>.

(ABNT – NBR 6023/2018)

BEM, Adrielle Aparecida Gomes de; AZEVEDO, Ana Cláudia; LAURIANO, Nayara Gonçalves. Competitiveness dimensions in the age of digital platforms. *Iberoamerican Journal of Strategic Management (IJSM)*, v. 21, p. 1-31. 2022. <https://doi.org/10.5585/riae.v21i1.21475>.

Principais resultados: Os resultados definem determinadas diferenças entre as disposições competitivas em torno das empresas tradicionais e os modelos de negócios baseados em plataformas. Entre os novos elementos identificados, são acentuados o enfoque distinto do processo de criação de valor, a centralidade de uma estrutura em rede, bem como da utilização de dados, e interação de um conjunto mais heterogêneo de participantes.

Contribuições teórico/metodológicas: o presente estudo contribui com o debate em curso apontando para um primeiro esforço de alinhamento e consolidação das dimensões competitivas que se apresentam nas plataformas digitais, em comparação ao que é conhecido sobre as abordagens tradicionais pipelines. Além disso, ao propor uma agenda de pesquisa, o desenvolvimento de estudos futuros também é auxiliado.

Palavras-chave: Vantagem competitiva. Plataformas digitais. Estratégia.

DIMENSIONES DE COMPETITIVIDAD EN LA ERA DE LAS PLATAFORMAS DIGITALES

Resumen

Objetivo del estudio: Si bien tenemos una visión consolidada de las disposiciones competitivas bajo las cuales operan los enfoques tradicionales de ventaja competitiva, no tenemos una visión cohesiva de cómo esta lógica se manifiesta en un escenario basado en la tecnología y la digitalización en el que operan las plataformas digitales. Por tanto, el objetivo de este estudio es: analizar cuáles son las disposiciones competitivas imperantes en las plataformas digitales.

Metodología: este estudio exploratorio correlaciona, a través de una revisión de literatura en la base de datos Web of Science, los temas de plataformas digitales y ventaja competitiva, presentando análisis sociométricos de los datos y síntesis de las principales disposiciones competitivas en plataformas digitales.

Originalidad/Relevancia: a pesar de la reconocida inadecuación de la estrategia tradicional para explicar la competitividad del contexto de las plataformas digitales, aún existen pocos estudios dedicados a debatir el tema, nosotros contribuimos ampliando la discusión y ofreciendo visiones a este nuevo escenario.

Principales resultados: Los resultados definen ciertas diferencias entre los arreglos competitivos en torno a las empresas tradicionales y los modelos de negocio basados en plataformas. Entre los nuevos elementos identificados, se destaca el distinto enfoque en el proceso de creación de valor, la centralidad de una estructura de red, así como el uso de datos y la interacción de un conjunto más heterogêneo de participantes.

Contribuciones teóricas/metodológicas: contribuimos al debate en curso apuntando a un primer esfuerzo para alinear y consolidar las dimensiones competitivas que se presentan en las plataformas digitales, en comparación con lo que sabemos de los enfoques de tubería tradicionales. Además, al proponer una agenda de investigación, también asistimos en el desarrollo de futuros estudios.

Palabras clave: Ventaja competitiva. Plataformas digitales. Estrategia.

1 Introduction

In recent decades, technology has driven significant implications for the economy and society. With the rise of digital transformation (Adner, Puranam, & Zhu, 2019; Furr & Shipilov, 2019), the rise of enabler technologies, and the dominance of new technology companies (Furr, 2021), an increasing number of individuals engage in entrepreneurial endeavors to create and capture value using technological resources (Cusumano, Gawer, & Yoffie, 2019). In this context, digital platforms stand out, which have emerged as a novel and highly expandable business model capable of scaling rapidly (Nambisan, Siegel, & Kenney, 2018; Parker, Alstynne, & Choudary, 2018). As such, they have transformed the nature and pursuit of entrepreneurship across a range of industries and sectors (Gawer, 2021), assisting an economy-wide redesign of the creation, delivery, and value capture processes (Autio et al., 2018).

Digital platforms correspond to a set of digital resources, whether services or content, that enable value-creating interactions between external producers and consumers, by providing an infrastructure for such interactions and establishing operating conditions for them (Constantinides, Henfridsson, & Parker, 2018). Their primary purpose is to promote contact between users and to enable the exchange of goods, services, or “social currencies”, thus providing value creation for all participants.

The rise of digital platforms reverberates in traditional business organizations (pipelines) and their management methods, causing disruption in a range of industries, from transportation, real estate, hospitality, finance, healthcare, to media, and retail (Parker, Van Alstynne, & Choudary, 2019). The age of “platformization” takes place in a different reality than the one where the seminal theories of competitive advantage were developed (Nambisan, Siegel, & Kenney, 2018; Tiger & Pinheiro, 2019). To which Parker, Alstynne, and Choudary (2018) highlight: it is not that such theories have lost value, but one must recognize that the logic of competition has changed.

While there is a consolidated view of the competitive dispositions under which traditional competitive advantage approaches operate, such as the Porter’s Five Forces Model (1985), or the Resource-Based View Theory (Barney, 1991; Peteraf, 1993), there is no cohesive view of how this competitive logic manifests itself in a more dynamic and complex scenario, based on technology and digitization, where digital platforms operate (Cassiman, Ricart & Valentini, 2022; Kovalenko, 2017). Traditional concepts of competition, which for decades have dominated business mindsets, cannot explain the changing competition and the new competitive battle by themselves (Parker, Alstynne, & Choudary, 2018).

Previous studies have discussed this point (e.g., Cassiman, Ricart, & Valentini, 2022; Cusumano, Gawer, & Yoffie, 2019; Hänninen & Paavola, 2020; Kovalenko, 2017), and have as a common argument the fact that digital platforms have transformed the guiding principles of business competition. Furthermore, a previous analysis of the curricula of Strategic Management subjects (and their nominal variations), of the main Brazilian business schools enables noticing that the syllabuses are

outlined by scopes focused on traditional approaches, and address little to nothing of competitive advantage in its most up-to-date dimensions.

Thus, knowing that the avenue that addresses competitiveness within digital platforms has not yet been completely paved, and that discrepancies are acknowledged at a general level, but rarely listed in a substantive way, the objective of this study was to analyze what the prevailing competitive dispositions are in digital platforms. That said, this exploratory study proposes to review the literature in order to correlate the digital platforms and competitive advantage topics, in order to analyze what the studies that have already progressed in this understanding have covered.

To operationalize the research, a literature review was conducted based on the Web of Science database, and an overview was prepared that presents the following: (i) data description and sociometric analysis; (ii) synthesis of the main competitive dispositions in digital platforms; and (iii) trends for future studies and proposed research agenda. The present study's results contribute to the current debate by indicating a first effort to align and consolidate the competitive dimensions that present themselves in digital platform business models, compared to what is known from traditional pipeline approaches. Moreover, by proposing a research agenda, the present study also assists in the development of future studies.

In addition to this introduction, the article is structured as follows: the next section outlines a basis of understanding regarding digital platform type business models and traditional competitive approaches in the field of strategy. Subsequently, the methodological aspects that grounded the study are described, followed by the presentation of results and discussion. Finally, the final considerations are presented, along with the study's limitations.

2 Digital platforms and traditional competitive approaches

At first, to better understand what digital platforms are, it is necessary to understand platforms themselves. Platforms are business models based on enabling interactions for value creation between producers and consumers, which have an open and participatory infrastructure for these interactions, defining governance conditions for them to happen (Libert, Beck, & Wind, 2016). The main objective of these dispositions is to consolidate correspondences between users; to promote the exchange of goods, services, or social currency; and to enable value creation for all participants within their ecosystem (Gawer & Cusumano, 2014).

Digital platforms, in this sense, are defined as business models that use information technology and connectivity to promote interactions, including business transactions between users, as well as to collect and use data regarding these interactions (Evans & Schmalensee, 2016; Gawer, 2021). These businesses explore and control digitized resources that lie beyond the scope of the company, which imply aspects regarding competition, leadership, and innovation that must reach beyond a limited view of an exchange locus between sides (Gawer, 2021).

It is highlighted that a digital platform itself does not necessarily hold physical assets in the form of infrastructure resources, nor does it create value through the sale of a particular product. These platforms fit into a model that emphasizes key interactions between the participants in this setup, including producers, consumers, and third parties, with digital platforms in some cases being the avenue for building an influential innovation ecosystem (Constantinides, Henfridsson, & Parker, 2018).

Digital platforms, therefore, tend to display structural and governance rules that seek ways to balance the management of their resources and the incentives needed to engage their stakeholders in order to generate value from one to the other (Kathuria, Karhade, & Konsynski, 2020). Generally, conceived within the confines of digital infrastructures such as computing and network resources, such platforms must allow a range of stakeholders to orchestrate their services and content needs (Constantinides, Henfridsson, & Parker, 2018).

In light of this, it is understood that the digital platform business model is often multifaceted, distributed in nature, and intertwined with institutions, markets, and technologies (Helfat & Raubitschek, 2018). Digital platforms, in this sense, share three basic characteristics, namely: (i) they are technologically mediated, (ii) they allow interaction between groups of users, and, (iii) they allow these groups of users to perform defined tasks (Cusumano, Gawer, & Yoffie, 2019; De Reuver et al., 2018; Gawer, 2009).

In line with the spread of platforms across several different industries, digital platforms have presented themselves as a result of the exponentially increasing scale of innovation in the digital economy and the increasing complexity of platform architectures for value creation (De Reuver et al., 2018). The rise of digital platforms is transforming, in this sense, the simple conformation of traditional businesses into a new, more complex system where producers, consumers, and the platform itself constitute a set of variable relationships with each other (Nambisan, Siegel, & Kenney, 2018; Parker, Van Alstyne, & Choudary, 2019).

Before addressing this issue, it is worth reflecting on the so-called traditional approaches to competitive advantage and their dissonance with the perspective of digital platforms. By seeking to describe industry-specific competition patterns, Porter (1985) proposed the Five Forces model, which allows assessing the profitability potential of a given industry as a function inversely proportional to the bargaining power of suppliers and buyers, the threat of new entrants and substitutes, and the intensity of rivalry among direct competitors (Grundy, 2006).

In Porter's (1985) view, the competitive objective is to control each of the Five Competitive Forces in order to retain and appropriate the value added within the company. By controlling these forces, the structures of the industry allow a protective barrier to be built around the business, enabling the company to segment markets, differentiate products, control resources, avoid price wars, and defend its profit margins (Grundy, 2006). In contrast to this view, in the context of digital platforms, competition requires treating buyers and suppliers from a less threatening perspective, i.e., not as something to be

dominated, but rather, partners to be courted and encouraged to play varied roles for joint value creation (Parker, Alstyne, & Choudary, 2018).

Also according to Parker, Alstyne, and Choudary (2018), the five forces model hinges on the different boundaries that define traditional product markets, and each of these forces is a particularity that must be managed independently. On the other hand, in platform markets, a winning strategy blurs the boundaries between market participants, thereby increasing valuable interactions in the ecosystem. So the intention is not to push them away by using a protective barrier, but to integrate them through partnerships.

Another approach widely disseminated in the strategy literature is the Resource-Based View - RBV, where organizations create value and achieve sustainable competitive advantage due to the unique combination of a set of heterogeneous resources and capabilities within an industry that are scarce, durable, and difficult to imitate (Barney, 1991). In contrast to what Porter dictates, the RBV approach focuses on the use of internal resources as the main determinants of competitiveness. Therefore, it is a theory that seeks to support companies in assessing their internal environment, especially their resources and capabilities, gauging how these can create competitive advantages for the organization (Barney & Hesterly, 2011). As laid out, the resource-based view presumes that a company must possess, or at least control, the inimitable resource (Parker, Alstyne, and Choudary, 2018).

Whereas in the realm of digital platforms, the nature of such an inimitable resource evolves from the physical asset to the access to the consumer-producer network and the resulting interactions therefrom (Kovalenko, 2017). Indeed, it may be better for the organization to not own physical resources, as abstaining from ownership allows it to grow faster (Parker, Alstyne, & Choudary, 2018), which has challenged traditional companies since it is possible to offer products and services without the need to own physical assets or operational capacity (Tiger & Pinheiro, 2019).

This leads, in a sense, to a revisited variant of the traditional resource-based theory of value: a platform business does not need to own all the inimitable resources in its ecosystem, but should try to own the highest-value resources (Cassiman, Ricart, & Valentini, 2022). In other words, they do not need to have access to all crucial assets, as long as they have access to them in their ecosystems (Cusumano, Gawer, & Yoffie, 2019).

In summary, in the world of pipelines, companies compete with each other trying to create better quality products and services. Similarly, digital platforms compete with each other by trying to improve the quality of the tools they have available to attract users, promote interactions, and bring producers and consumers together (Parker, Alstyne & Choudary, 2018). Therefore, these are new competitive dispositions, which this review sought to identify.

3 Methodological procedures

This exploratory study aimed to analyze which competitive dispositions are prevalent in digital platforms. Operationally, a literature review and a sociometric analysis of the articles within the scope of interest were conducted to analyze what the studies that have already progressed in this understanding are addressing.

To this end, the study objectives were defined, and the primary data source was identified. It was decided to limit the sources to peer-reviewed journals, since they can be considered validated knowledge and of significant impact in the field (Crossan & Apaydin, 2010). The database chosen for the articles was the Web of Science, as it is one of the most relevant scientific databases, due to its wealth of citations and rigorous indexing criteria. In addition, they have important and well-recognized themes, which makes the database quite popular among academics in the Social Sciences (Scaringella & Radziwon, 2018). The search script is synthesized in Figure 1.

Figure 1

Search criteria

Database:	Web of Science Core Collection
Search string	Topic: “Digital Platform*” AND “Competit*” AND “strateg*”
Search date	April 27th, 2021
Filters	
Publication years	All up to 2021.
Document types	Articles and Review Articles
WoS Categories	Management, Business, and Economics
Languages	English

Source: Developed by the authors.

The search based on the established criteria resulted in an initial pool of 93 articles. A new screening was then performed in order to refine the selection of publications to be reviewed. To this end, the reading of abstracts was considered according to (i) the research objective, (ii) the studied theme, and (iii) the empirical and theoretical contributions, resulting in 89 articles remaining for analysis. The list of all articles resulting from the search, as well as those included in the final analysis can be found in the appendix.

Then, the sociometric data analysis was performed, which aims to review the information of the documents that relate to each other through cluster techniques (sets of concepts congregated in the same color), to highlight possible similarities, differences, and trends of the theme studied (Ribeiro, Antonialli, & Zambalde, 2015). More specifically, through sociometry, the Citation Relational Analysis was performed, by the methods of cocitation and bibliographic coupling, in order to display the thematic proximities between authors and articles and, thus, reveal the scientific domains and the set of themes addressed therein, reflected in the literature and in the links of the citations of researchers in their publications (Grácio, 2016).

To obtain the classification of the documents in a structured and organized way, the VOSviewer® (1.6.6) software was used, allowing the visualization of relational networks, with the data being transformed into graphics that aid the visualization of the information (Ribeiro, Antonialli, & Zambalde, 2015).

Then, the content review of the publications was carried out, in order to categorize the identified thematic domains and to recognize the dimensions that guide the competitive advantage of digital platforms. The synthesis of the data obtained in this review was organized in the presentation of the aspects that defined the theoretical clusters found from the keywords; as well as the dimensions of competitiveness in digital platforms and the overview of the analyzed studies; concluding with a proposal for a research agenda.

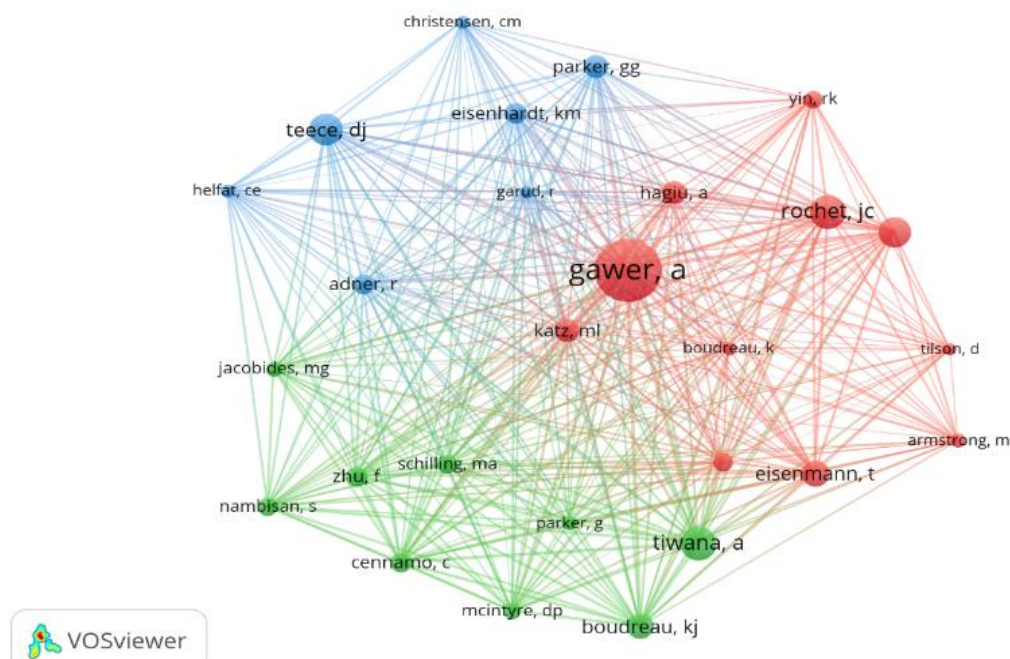
4 Results and data analysis

4.1 Description and sociometric analysis of the data

Figure 2 presents a display of the thematic organization analyzed from the cocitation of authors. These authors are the most cited in the cocitation networks and may have more than one published work on the theme, representing a picture of the intellectual influences on research activities (Grácio, 2016).

Figure 2

Author cocitation



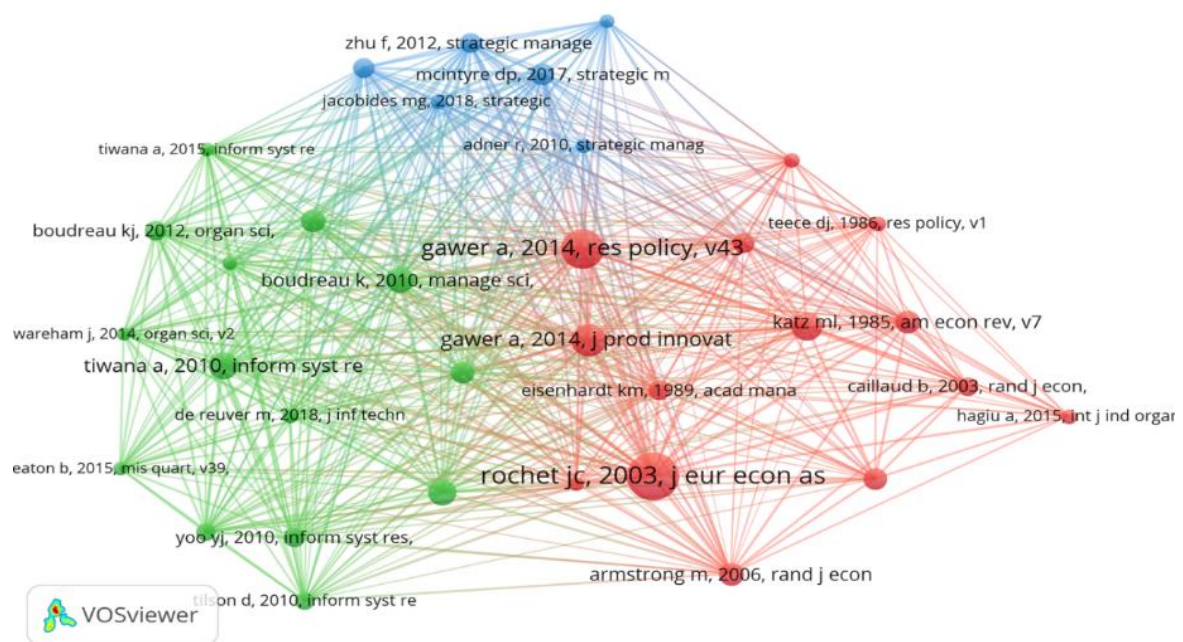
Source: Research data.

The analysis indicated *Annabelle Gawer* as the most cocited author with the strongest connections in the network, with the relationships centered in the red cluster. She is a Professor of Digital Economy at the University of Surrey (England) and the European Commission’s Expert on Digital Platforms and Ecosystems. Another notable author is *Jean Charles Rochet*, also located in the red cluster, who is a Professor at the University of Geneva (Switzerland). In the sequence, other prominent cocited authors were *Amrit Tiwana*, located in the green cluster, who is a Professor of Business at the University of Georgia (United States), with a focus on Information Technology governance; and *David Teece*, who is a Professor of Global Business at the University of California (Berkeley/United States), located in the blue cluster.

To complement the analysis and the identification of the citation patterns of the analyzed articles, the bibliographic coupling analysis of the authors was carried out, as represented in Figure 3. Among the most cited works, it is possible to highlight *Jean Charles Rochet’s* work - *Platform Competition in Two-Sided Markets* (2003), published in the *Journal of the European Economic Association*, which sought to build a model of platform competition; and *Annabelle Gawer’s* work - *Bridging differing perspectives on technological platforms: Toward an integrative framework* (2014), published in the *Research Policy* journal, which developed an integrative framework for technological platforms.

Figura 3

Acoplamento bibliográfico de autores



Source: Research data.

aspects: (i) the dynamics through which the platform model creates value, (ii) and the centrality placed on data, along with its use as a competitive tool.

As a first important aspect, it is possible to realize that the potential for **value creation** under the logic of digital platforms is presented around the ability to orchestrate resources, rather than the ability to control them. In this way, such a platform represents the process of developing communities where people and companies create value jointly and efficiently (Van Alstyne, Parker, & Choudary, 2016).

Thus, a shift is observed from generating value under a unidirectional flow, with consumers on one side and producers on the other, to a network structure where value is created and redistributed in different directions. Moreover, external optimization is more important than internal optimization (Parker & Van Alstyne, 2018). Therefore, the focus is no longer placed on generating value only for the customer, but rather on generating value for an entire ecosystem (Libert, Beck, & Wind, 2016).

It is worth mentioning the changes in how value is captured and created in the context of digital transformations. In light of this, there is no value creation process focused solely on the enterprise level, which concerns the company's activities or organizational resources. Moreover, the strategic approach to value creation, in the case of platform-type businesses, does not focus specifically on cost efficiency as noted by Porter (1985), or on the exclusivity of a set of resources as referenced by Barney (1991). In the context of digital platforms, value is jointly generated from a relational perspective between multiple stakeholders and the platform itself (Parker, Van Alstyne, & Choudary, 2019; Zott & Amit, 2009). That being said, competitiveness among these platforms is acquired by the difficulty in imitating the community itself and the resources its members possess and contribute with, whether these are rooms or cars, ideas or information (Rochet & Tirole, 2003).

Another important aspect present in the collected studies, concerning the dynamics of value creation, is the fact that digital platforms target a specific set of users. That is, the platform is designed to offer tools, products, services, or any other benefits that will attract a specific set of users, consumers, and/or producers. That said, it is explicit that a critical mass of users is needed on one side of the market to attract users on the other side, so that a positive feedback loop can be created (Hracs & Webster, 2021; Parker, Van Alstyne, & Choudary, 2019). This aspect is anchored in the fact that initial users create units of value and attract more users, in order to spark a cycle that will lead to the continuous growth of the digital platform (Karhu, Gustafsson, & Lyytinen, 2018; Parker, Van Alstyne, & Choudary, 2019). In light of this, it can be noted that while in pipeline companies their main focus is to attract customers and sell to them on profitable terms, digital platforms need to attract two or more types of customers (Evans & Schmalensee, 2016; Gawer, 2021).

Furthermore, evolving Porter's (1985) generic strategies, where a search for maximizing the value of individual product and service customers over time is noted, which is positioned at the end of a linear process, one finds the search for maximizing the integral value of an entire ecosystem that

expands in a circular, interactive, and feedback-driven process (Gawer & Cusumano, 2014; Parker, Van Alstyne, & Choudary, 2019).

Another element significantly present in the studies of the sample considered is the role filled by **data** as an important competitive and strategic instrument in the business model based on digital platforms. Data is a source of value that is being increasingly used by companies in several ways to sustain market positions. In fact, the most successful digital platforms in the market are those with data supremacy. Competitors without data cannot create value and therefore cannot generate interactions – which in turn limits their access to data (Xie et al., 2016; Khanagha et al., 2020).

In light of this, it is possible to highlight the notion that the basis of competition would no longer be the same, abandoning aspects such as content and price, and moving to the engineering of attractive experiences that leverage the unique and interconnected possibilities of the platform (Hracs & Webster, 2021). Thus, it is understood that digital platforms transition from providing products to offering experiences and leverage the quality of this experience to ensure a certain competitive advantage (Hracs & Webster, 2021; Karhu, Gustafsson, & Lyytinen, 2018).

In this sense, personalization at scale is identified as an important strategy. Digital platforms operate at scale and the digital data they collect enables them to create data profiles of different people (Mayorov, 2020; Trabucchi & Buganza, 2020). Thus, data collection proves to be important not only to drive personalization, but also the platforms' advertising ventures. The data collected on users enables these platforms to sell targeted ads to brands and deliver content not only according to demographic criteria, but also behavioral patterns. This allows these companies to obtain information about users' social, spatial, and emotional contexts at specific times, generating audience segments to be sold to third-party brands (Hracs & Webster, 2021; Karhu, Gustafsson, & Lyytinen, 2018; Mayorov, 2020; Trabucchi & Buganza, 2020).

With this, people can be viewed as divided individuals, and thus the way they provide personalized recommendations is optimized for their varying states of need. In this sense, digital platforms collect data on micro interactions between consumers and sellers, from what people search to what they consume (Bogusz, Teigland, & Vaast, 2019; Mayorov, 2020; Trabucchi & Buganza, 2020).

In addition, some other studies discuss what they call “technical entrapment” as a strategy used by digital platforms to strengthen their competitive advantage. First, the data that feeds personalization at scale is trapped in a platform, as this resource is proprietary and of substantial economic value, digital platforms are unwilling to allow this data to leave. Thus, changing platforms would result in the loss of this recorded history (Hracs & Webster, 2021; Karhu, Gustafsson, & Lyytinen, 2018). Restricting access to this data is potentially important for the market power of these businesses in a broader way. In this sense, keeping data stored on a digital platform helps businesses to amass market influence. That said, the treatment that such platforms give to user data may eventually create barriers to new entrants (Gawer, 2021).

4.1.2 Group 2 - Digital Platforms and the value network

The second group, composed of 18 articles, whose focus was found to revolve around “Digital Platforms”, proved to explore, above all, the connection between such platforms and their value network. In this sense, among the aspects that were grounding such connections, there is the so-called **Network Effects** and their implications, and among them, the centrality of participation as the core element of the platforms’ strategies.

Networks consist of complex, interconnected systems of people or things. They can be found in virtually all complex systems, from energy networks, communication networks, road networks, to social media, and human brains (Borgatti & Halgin, 2011). In this sense, the dependence of digital platforms on what is called **Network Effects**, which are mechanisms in an organized system where each new user makes the product, service, or experience more or less valuable to all other participants in the network, is highlighted (Muzellec, Ronteau, & Lambkin, 2015). To achieve this effect, digital platforms seem to seek the largest number of participants by offering, often for free, a wide range of features and applications, seeking to obtain positive feedback. The more users who adopt them, the more valuable they become to owners and users (Tiger & Pinheiro, 2019).

Given this, it is noteworthy that network effects ultimately represent the idea of an economy of scale on the demand side (Muzellec, Ronteau, & Lambkin, 2015; Rogers, 2017). Under the logic of industrial economics, in terms of the competitive positioning approach, more specifically the Value Chain (Porter, 1985), companies seek efficiency through scale economies on the supply side. Pipeline companies hope to reach their market strength by controlling resources, significantly increasing efficiency, and avoiding challenges from any of the Five Forces (Porter, 1985). The higher the output, the more diluted fixed costs and indirect expenses will be, resulting in lower unit costs and lower prices to customers (Tiger & Pinheiro, 2019). However, the platform model shows that the fixed assets and cost structure of websites and apps, for example, present relatively less importance for the success of digital platforms than, therefore, the growth of their network members (Tiger & Pinheiro, 2019).

For Parker, Van Alstyne, and Choudary (2019), network effects cause companies to “reverse” the shift of production from inside to outside the company. Referring back to classical conceptions, it is highlighted that, while product value refers to something depreciated by use, in the case of digital platforms, through network effects, they end up having their value appreciated by use. That is, an elevation of the value proposition of digital platforms happens, based on positive feedback, which tends to overcome any static or declining value proposition (Libert, Beck, & Wind, 2016; Parker, Van Alstyne, & Choudary, 2019). It is therefore not a matter of being limited to creating value, with companies being in a control position, but rather positioning themselves as orchestrators, where platforms will seek to orchestrate the creation of value by users (Libert, Beck, & Wind, 2016).

The platform owner will seek to manage, build structures, and focus on the governance of their network, so that the consumer-producer relationship is increasingly better and stronger. From this

relationship, the owner will seek more consumers and more producers to incorporate into this relationship. The main goal of the platform is to generate a positive effect on the relationship between producers and consumers, since the “good experiences” for users will determine a positive effect or not (Gawer, 2011; Zhu & Furr, 2016). In this model, there is a shift from a production-based, asset-building economy, where there is the creation of entry barriers, for example, to a focus on the orchestration of resources in order to generate value for an entire ecosystem (Mahesh & Hari, 2020; Montalban, Frigant, & Jullien, 2019).

Among the studies collected, the centrality of **participation** as a driving element in the strategy of digital platforms is highlighted. Participation is presented as vital for a deeper engagement between digital platforms and their users (Kathuria, Karhade, & Konsynski, 2020). Thus, interaction and engagement by participants emerge as key elements for the success of digital platforms that, therefore, should be mindful of encouraging participation (Libert, Beck, & Wind, 2016).

It is understood that, for the provider platform, user participation is a necessary condition for achieving a critical mass, which will enable it to tip the market in the platform’s favor and potentially establish a competitive advantage. Moreover, without the involvement of the people who use them, digital platforms prove to be unable to cultivate network effects, nor collect data as valuable assets to boost the user effects of their goods and services (Hracs & Webster, 2021).

Regarding the focus on network effects, as well as interaction and engagement among value network participants, the notion that network effects tend to lead to increasing returns to scale can be highlighted (Eisenmann, Parker, & Van Alstyne, 2009). However, such returns to scale can result in a concentrated, monopolistic structure in a “winner takes all” dynamic (Gawer, 2021).

4.1.3 Group 3 - Innovation and decisions regarding participation

The highlighted group on the *Innovation* theme, consisting of 11 articles, presented a focus on **decisions regarding stakeholder participation** within the platform. The act of participating in the digital platform being presented as a deliberate and endogenous choice made by independent providers, limited, but not isomorphic, by other strategic choices of the providers (Kenney et al., 2019). In this sense, unlike the understanding surrounding the strategies through which platform owners can increase the size of their installed base, including those identified in Group 2 as previously stated, here participation focuses on the perceived need to understand the factors that lead to the choice of suppliers and users to participate, or not, in a specific platform (Kathuria, Karhade, & Konsynski, 2020; Kenney et al., 2019).

When the digital platform attracts consumers, it is to be expected that suppliers will also tend to join the platform. However, from the suppliers’ point of view, their participation proves to be a complex process and requires a strategic choice. Market access is a potential advantage, where participation in the platform can potentially connect a supplier to other consumers (Veisdal, 2020; Hilbolling et al.,

2021; Cenamor, 2021). The role of digital platforms is to encourage consumers to participate, however, on the other hand, there are also appropriate incentives and contingencies for suppliers to exercise their strategic choice of participation. Thus, these platforms, like “hungry ghosts”, are unable to satiate their own growth cravings due to the constraint imposed by insufficient supplier participation (Kathuria, Karhade, & Konsynski, 2020; Kenney et al., 2019).

Under this scenario, certain strategies adopted by suppliers to decide their participation have been identified, the highlights being: (i) monetary incentives, regarding discounted platform access and subsidized product development; (ii) marketing activities; and (iii) technological interventions associated with customized platform resources, complementary tools, and governance (Kathuria, Karhade, & Konsynski, 2020).

With that said, considering that participation in the digital platform depends on a variety of constructs at the supplier level, there may be a reluctance to use the platform if they cannot envision obtaining any direct financial benefit. In this way, technology-savvy suppliers may be more willing to participate in a platform-based event than their non-expert peers (Kenney et al., 2019).

In light of this, the **obstacles and drivers** for the participation of these suppliers are highlighted. Among these obstacles are the threats of expropriation or imitation by the platform owner. Therefore, security tools for intellectual property, rights, and data exchange capabilities are treated as important for suppliers to resist possible threats. On the other hand, compatibility is found to be a prominent aspect that drives platform participation. Such a driver is grounded in its ability to lower switching costs associated with migrating to a new platform or upgrading to a new generation of the platform (Cenamor, 2021; Hilbolling et al., 2021).

Still, even though digital technologies provide almost unlimited opportunities for innovation, this attribute can result in low quality of complements. Therefore, the large number of third parties as complement providers (i.e., complementors) emerges as a significant challenge for platform owners (Hein et al., 2020; Kenney et al., 2019).

Furthermore, to enable cooperation with complementors, the platform owner can use an open source license limit feature to open and share the platform’s core resources. However, opening up the platform and its shared resources too widely renders the platform and its shared resources vulnerable to strategic exploitation. This prominent form of strategic exploitation is shown to be conceptualized as “platform forking”, where a hostile company, i.e., a fork, ignores the host’s controlling boundary resources and exploits the shared resources of the platform, core, and complements, to create a competitive platform business (Hein et al. 2020).

Thus, while a platform strategy may benefit a company by leveraging a wider range of complementors, it may also allow competitors to adopt its tactics. The competing platform will seek to copy, adapt, and re-engineer a platform to replicate it and benefit from the complementing business built on top of the original platform (Hein et al. 2020).

Such aspects end up highlighting the modular nature of these platforms, which presents itself as a pathway to a distributed approach to innovation, connecting platform owners to a large number of heterogeneous complementors and end users (Bogers et al., 2017). In this paradigm, greater emphasis is identified on aspects such as ecosystem governance and persuasion of external partners, rather than product optimization and internal employee control (Parker, Van Alstyne, & Choudary, 2019). Therefore, managers need to be aware of interactions, participant access, and new performance metrics for digital platforms (Van Alstyne, Parker, & Choudary, 2016).

4.2 Synthesis of the competitiveness scenario in the platforms in light of the studies analyzed

The approaches of competitive positioning and sustainable competitive advantage have consolidated a lens capable of explaining competition in traditional industries, where a relatively predictable, but not static, competitive environment requires a company to implement classical strategies based on economies of scale and use of limited key resources (Grundy, 2006). However, bringing to the surface the apparent elements that guide competitive advantage based in the context of digital platforms, a multilayered perspective on competition and certain shifts in approaches are observed. In this sense, Figure 5 presents the main elements manifested through the identification and analysis of the highlighted thematic domains.

Figure 5

Elements that define competitive advantage

Competitive dispositions	
<i>Traditional Companies (pipelines)</i>	<i>Business models based on Digital Platforms</i>
Resource optimization	Ecosystem governance
Unidirectional flow	Network structure
Customer-directed value	Value spread to the ecosystem
Internal optimization	External interaction
Maximizing value for the individual customer	Maximization of the integral value for stakeholders
Customer attraction	Interaction among users
Linear value creation process	Feedback-driven value creation
Slow technological change	Dynamic technological changes
Low data loads	Large data loads
Focus on content and price	Focus on generating engaging experiences
Supply-side scale	Demand-side scale
Control of internal employees	Persuasion of external partners

Source: Developed by the authors.

Most notably, it is noted that on digital platforms, value creation takes place in the ease of interactions between external producers and consumers that the platform provides. Thanks to this external orientation, variable production costs are mostly dropped. The emphasis shifts from dictating processes to persuading participants and governance of the ecosystem as essential elements (Gawer & Cusumano, 2014; Muzellec, Ronteau, & Lambkin, 2015). Also noteworthy is the fact that the ability to orchestrate competition and cooperation strategically between market segments, technologies, and user groups has become a distinctive factor in the competitive advantages between platforms and traditional companies.

The competitive advantage of digital platforms, in this sense, emphasizes maximizing the integral value of an ecosystem that expands in a circular, interactive, and feedback-driven process (Gawer & Cusumano, 2014). Sometimes this requires subsidizing one type of consumer to attract another type. In this way, a platform becomes stronger as it adds complementary products, services, and innovations to the ecosystem (Tiger & Pinheiro, 2019). In digital platforms, the main source of competitive advantage comes from the focus on exchanges between producers and consumers, the number of interactions, and the associated network effects (Rochet & Tirole, 2003).

Thus, in the scope of this study it was found that digital platforms are restructuring the workforce and redefining the scope of competition (Kenney et al., 2019). As discussed throughout the study, the underlying logic of the platforms model, where what is perceived is that network effects have substantially elevated the market value of companies, and the communities in which these platforms participate have generated substantial financial returns. However, what has made the difference in these trades is not the size of the structure, but rather the size of the community around these ventures that promote exponential network effects (Van Alstyne, Parker, & Choudary, 2016).

In summary, interdependencies among ecosystem stakeholders are an important source of competitive advantage for the platform. Interdependencies between three main types of stakeholders have been identified, namely: platform owners, suppliers (complementors), and end users (Cenamo & Santaló, 2019; Eisenmann, Parker, & Van Alstyne, 2006; Gawer, 2014; Tiwana, 2015). It has been observed that there is a focus on how platform ecosystems are centered on the role of platform owners, seeking to attract a large installed base of end users and complementors in order to drive network effects and thus influence the adoption of their platform and make it more competitive (McIntyre & Srinivasan, 2017).

Another important point is how the dynamics of the ecosystem lead to new possibilities for complements, failures in their operation, and their obsolescence. When it comes to a platform complement (e.g., a third-party application), quality presents itself as a key factor in how well it interoperates with the core platform and the additional functionality it provides. When analyzing digital platforms, what the studies indicate is that the quality of the complement is not fixed, that is, it varies according to the evolution of the platform and the ecosystem over time.

Therefore, to sustain quality, platform owners depend on the efforts of complementors and other ecosystem stakeholders such as users, over whom platform owners have limited or even no control at all. Therefore, to maintain the platform's competitive advantage and its competitive ecosystem, platform owners must not only be concerned with attracting new complementors, but rather ensure that these complementors remain engaged over time.

4.3 Trends and proposed research agenda

It can be noted that the understanding of digital platforms and their rise in the market tends to be traditionally explained by the competitive advantage provided by technology, highlighting the support of different stakeholders (van de Kaa et al., 2011). Soon, it is perceived that different stakeholders of digital platforms depend on and affect each other (De Reuver et al., 2018; Tigre & Pinheiro, 2019). Furthermore, it can be noted that some studies have been discussing how competition in complementary product markets is increasingly intense and rapidly changing, which is leading to an increased complexity in designing strategies to achieve competitive advantage.

However, it is necessary to go beyond the analysis of the stakeholders in the business game and the dynamics of interdependence between them. As proposed by the value network approach of Nalebuff & Brandenburger (1997), it is necessary to understand the dynamics and maintenance of the engagement of these stakeholders. Given this scenario, several studies have emphasized the interdependence of ecosystem members - the triad of platform owners, complementors, and users, highlighting the importance of studies aimed at investigating and understanding how the relationships and roles of ecosystem stakeholders influence the dynamics of the platform, as well as its strategies and competitive advantage (Ricart et al., 2020).

Most notably, considering the value network perspective, a broad front of studies have been highlighting the need for research that defines and explores the governance conditions that orchestrate the different stakeholders within platforms (Libert, Beck, & Wind, 2016).

Another recurring demand corresponds to the need for research that moves towards a more specific analysis of the suppliers (complementors), because traditionally complementors are viewed implicitly as a relatively homogeneous group of companies that react as a whole to the decisions of the platform owners, so their particularities and individual dynamics need to be adequately recognized and considered within the ecosystem.

Moreover, digital platforms have been recognized by consumers, in terms of benefits, mostly because platforms make information more accessible and streamlined and communication easier, generating new business opportunities and increasing the choice of products and services. Their development has made people's lives easier in many ways, from shopping to social interactions.

However, digital platforms significantly control consumer data and, from a competition and law of competitiveness perspective, have achieved significant market power, generating concerns not only

regarding the competitive context, but also regarding consumer protection and privacy, and the regulation of platforms, as well as questions concerning labor legislation and the precarization of jobs, in the so-called “uberization” phenomenon. In this field, the focus is drawn on a movement of studies on the negative effects of the market power of these platforms, in order to find ways to address the new challenges stemming from “platformization” (Eleodor, 2019).

5 Concluding remarks

Traditional concepts of competition, which have dominated business mindsets for decades, do not explain the changing competition and the new competitive battle by themselves (Parker, Alstyn & Choudary, 2018). There is no cohesive view of how competitive dynamics play out in a technology and digitization-based scenario in which digital platforms operate. As noted, this gap is reflected in theory, management guidelines, and academic curricula for teaching Strategic Management. Therefore, the aim of this study was to analyze what the prevailing competitive dispositions are in digital platforms.

That said, what can be noted stems from the fact that companies in the industrial age were driven by economies of supply scale, aiming for productive efficiency with high volumes and low costs; or pursuing, at times, unsustainable differentiation. For more than three decades, the approaches of Positioning and Sustainable Competitive Advantages have been dominant in explaining what competitive advantage is, after all, in the case of pipelines the “external forces”, with which organizations must deal with, are depletive (extract value from the company). On the other hand, in digital platforms, the external forces can be accretive, that is, they can add value to the platform-type business.

Returning to the objective that underlies this study, in the new organizational architecture based on digital platforms, the power of consumers and suppliers which is a threat in the pipeline business universe, can be viewed as an asset in platforms; therefore, understanding when external forces are able to add or extract value from an ecosystem is essential for the digital platform strategy (Parker & Van Alstyn, 2018), which starts to pursue a competitive cooperation strategy rather than pure competition (Kovalenko, 2017). The importance of traditional competitive advantage approaches does not fit the reality of platforms, as they no longer holistically encompass competitive advantage. The forces of competition themselves no longer affect innovation markets and technology industries, especially regarding platforms (Rochet & Tirole, 2003).

The core competitive advantage and core value, respectively, flowed into other elements of the business model (Muzellec, Ronteau, & Lambkin, 2015). It can be said that a successful digital platform is distinguished from an unsuccessful one by its competency in accounting, analytics, information processing, and decision making based on large data loads. It is in these competencies that lies great potential for value creation (Kovalenko, 2017; Libert, Beck, & Wind, 2016).

This study highlights an important principle for the operation of multilateral digital platforms, namely ecosystems, which are built as a community of innovation bringing forward the ecosystem concept of “open innovation”, which implies sharing technologies. In this aspect, while the first digital platforms have been disruptive for sectors such as retail, tourism, and mobility, companies with a more analog and traditional nature must rethink their strategies in order to enter the digital ecosystems to create value and remain competitive, taking advantage of the network effects.

In terms of contribution, the systematization through groupings into clusters helped in illustrating an overview of digital platforms and competitiveness studies, and in identifying the current research scenario. The results provided a solid script for further research on the topic. In addition, this study expands into a discussion related to the different strategies that digital platform entrepreneurs and managers have implemented to foster innovation and the continued growth of their businesses, based on network externalities.

The limitations of this research, which is based on a sample that considers a range of different cases, including various types of platforms, from bilateral to multifaceted platforms, are highlighted. These limitations can be the starting point for future research, (in addition to those already mentioned in topic 4.3: Trends and Research Agenda), and it is recommended to conduct a more in-depth case study, on a specific platform, highlighting the unexplored dimensions of a strategy, in order to identify and clarify the opportunities and challenges involved in the generation, implementation, and monitoring of such strategies and their results for competitive advantages. No article analyzed in the review referred to the Brazilian context; in this sense, the relevance of analyzing competitive behavior in the national scenario is perceived, since such strategy and competitiveness criteria may occur differently, presenting new strategies resulting from the context in question.

Referências

- Abdalla, M. M., Conejero, M. A., & Oliveira, M. A. (2019). *Administração estratégica: da teoria à prática no Brasil*. São Paulo: Atlas.
- Adner, R., Puranam, P., & Zhu, F. (2019). What is different about digital strategy? From quantitative to qualitative change. *Strategy Science*, 4(4), 253-261. <https://doi.org/10.1287/stsc.2019.0099>
- Autio, E., Nambisan, S., Thomas, L. D., & Wright, M. (2018). Digital affordances, spatial affordances, and the genesis of entrepreneurial ecosystems. *Strategic Entrepreneurship Journal*, 12(1), 72-95. <https://doi.org/10.1002/sej.1266>
- Baldwin, C. Y., & Woodard, C. J. (2009). The architecture of platforms: A unified view. In: Gawer, A. (Ed.). *Platforms, markets and innovation*, 32, [S.I]: Edward Elgar Publishing, 19-44. <https://doi.org/10.4337/9781849803311>
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120. <https://doi.org/10.1177/014920639101700108>

- Barney, J., & Hesterly, W. (2011). *Administração estratégica e vantagem competitiva: conceitos e casos*. Trad. Midori Yamamoto.
- Bogers, M., Zobel, A. K., Afuah, A., Almirall, E., Brunswicker, S., Dahlander, L., ... & Ter Wal, A. L. (2017). The open innovation research landscape: Established perspectives and emerging themes across different levels of analysis. *Industry and Innovation*, 24(1), 8-40. <https://doi.org/10.1080/13662716.2016.1240068>
- Bogusz, C.I., Teigland, R., & Vaast, E. (2019). Designed entrepreneurial legitimacy: the case of a Swedish crowdfunding platform. *European Journal of Information Systems*, 28(3), 318-335. <https://doi.org/10.1080/0960085X.2018.1534039>
- Borgatti, S. P., & Halgin, D. S. (2011). On network theory. *Organization science*, 22(5), 1168-1181. <https://doi.org/10.1287/orsc.1100.0641>
- Botelho, T. L. (2018). Here's an opportunity: Knowledge sharing among competitors as a response to buy-in uncertainty. *Organization Science*, 29(6), 1033-1055. <https://doi.org/10.1287/orsc.2018.1214>
- Cassiman, B., Ricart, J. E., & Valentini, G. (2022). Commitment and Competitive Advantage in a Digital World. *Strategy Science*, 7(2), 130-137. <https://doi.org/10.1287/stsc.2022.0164>
- Cenamor, J. (2021). Complementor competitive advantage: A framework for strategic decisions. *Journal of Business Research*, 122, 335-343. <https://doi.org/10.1016/j.jbusres.2020.09.016>
- Cennamo, C., & Santaló, J. (2019). Generativity tension and value creation in platform ecosystems. *Organization Science*, 30(3), 617-641. <https://doi.org/10.1287/orsc.2018.1270>
- Constantinides, P., Henfridsson, O., & Parker, G. G. (2018). Introduction - platforms and infrastructures in the digital age. *Information Systems Research*, 29(2), 381-400. <https://doi.org/10.1287/isre.2018.0794>
- Crainer, S., & Dearlove, D. (2014). *Estratégia: arte e ciência na criação e execução*. Bookman Editora.
- Crossan, M. M., & Apaydin, M. (2010). A multi-dimensional framework of organizational innovation: A systematic review of the literature. *Journal of management studies*, 47(6), 1154-1191. <https://doi.org/10.1111/j.1467-6486.2009.00880.x>
- Cusumano, M. A., Gawer, A., & Yoffie, D. B. (2019). *The business of platforms: Strategy in the age of digital competition, innovation, and power*. New York: Harper Business.
- De Reuver, M., Sørensen, C., & Basole, RC (2018). The digital platform: a research agenda. *Journal of Information Technology*, 33 (2), 124-135. <https://doi.org/10.1057/s41265-016-0033-3>
- Eisenmann, T. R., Parker, G. G., & Van Alstyne, M. W. (2006). Strategies for two-sided markets. *Harvard business review*, 84(10), 92. <https://hbr.org/2006/10/strategies-for-two-sided-markets>
- Eisenmann, T. R., Parker, G. G., & Van Alstyne, M. W. (2009). Opening platforms: how, when and why?. *Platforms, markets and innovation*, 6, 131-162. <https://doi.org/10.4337/9781849803311>

- Eleodor, D. (2019). Big Tech, Big Competition Problem? *Calitatea*, 20(S3), 49-57.
https://www.srac.ro/calitatea/en/arhiva/supliment/2019/Q-asContents_Vol.20_S3_October-2019.pdf#page=41
- Evans, D. S., & Schmalensee, R. (2016). *Matchmakers: The new economics of multisided platforms*. Harvard Business Review Press.
- Furr, N., & Shipilov, A. (2019). Digital doesn't have to be disruptive: the best results can come from adaptation rather than reinvention. *Harvard Business Review*, 97(4), 94-104.
<https://go.gale.com/ps/i.do?id=GALE%7CA592569971&sid=googleScholar&v=2.1&it=r&linkaccess=abs&issn=00178012&p=AONE&sw=w>
- Furr, N. (2021). Technology entrepreneurship, technology strategy, and uncertainty, in *Strategic Management: State of the Field and Its Future*, 205-220.
- Gawer, A. (2009). Platforms, markets and innovation: an introduction. In: Gawer, A. *Platforms, markets and innovation*. [S.l.]: Edward Elgar Publishing.
<https://doi.org/10.4337/9781849803311>
- Gawer, A., & Cusumano, M. A. (2014). Industry platforms and ecosystem innovation. *Journal of product innovation management*, 31(3), 417-433. <https://doi.org/10.1111/jpim.12105>
- Gawer, A. (2021). Digital platforms' boundaries: The interplay of firm scope, platform sides, and digital interfaces. *Long Range Planning*, 54(5), 102045.
<https://doi.org/10.1016/j.lrp.2020.102045>
- Grácio, M. C. C. (2016). Acoplamento bibliográfico e análise de cocitação: revisão teórico-conceitual. *Encontros Bibli: revista eletrônica de biblioteconomia e ciência da informação*, 21(47), 82-99.
<https://doi.org/10.5007/1518-2924.2016v21n47p82>
- Grundy, T. (2006). Rethinking and reinventing Michael Porter's five forces model. *Strategic change*, 15(5), 213-229. <https://doi.org/10.1002/jsc.764>
- Hänninen, M., & Paavola, L. (2020). Digital platforms and industry change. In: Lehtimäki, H., Uusikylä, P., Smedlund, A. (eds). *Society as an Interaction Space*, 22, 213-226.
https://doi.org/10.1007/978-981-15-0069-5_10
- Hein, A., Schrieck, M., Riasanow, T., Setzke, D. S., Wiesche, M., Böhm, M., & Krcmar, H. (2020). Digital platform ecosystems. *Electronic Markets*, 30(1), 87-98.
<https://doi.org/10.1007/s12525-019-00377-4>
- Helfat, C. E., & Raubitschek, R. S. (2018). Dynamic and integrative capabilities for profiting from innovation in digital platform-based ecosystems. *Research policy*, 47(8), 1391-1399.
<https://doi.org/10.1016/j.respol.2018.01.019>
- Hilbolling, S., Berends, H., Deken, F., & Tuertscher, P. (2021). Sustaining complement quality for digital product platforms: A case study of the Philips Hue ecosystem. *Journal of Product Innovation Management*, 38(1), 21-48. <https://doi.org/10.1111/jpim.12555>
- Hitt, M. A., Ireland, R. D., & Hoskisson, R. E. (2002). *Administração estratégica*. São Paulo: Pioneira Thomson Learning.
- Hracs, B. J., & Webster, J. (2021). From selling songs to engineering experiences: exploring the competitive strategies of music streaming platforms. *Journal of Cultural Economy*, 14(2), 240-257. <https://doi.org/10.1080/17530350.2020.1819374>

- Karhu, K., Gustafsson, R., & Lyytinen, K. (2018). Exploiting and defending open digital platforms with boundary resources: Android's five platform forks. *Information Systems Research*, 29(2), 479-497. <https://doi.org/10.1287/isre.2018.0786>
- Kathuria, A., Karhade, P.P., & Konsynski, B.R. (2020). In the realm of hungry ghosts: multi-level theory for supplier participation on digital platforms. *Journal of Management Information Systems*, 37 (2), 396-430. <https://doi.org/10.1080/07421222.2020.1759349>
- Khanagha, S., Ansari, S., Paroutis, S., & Oviedo, L. (2020). Mutualism and the dynamics of new platform creation: A study of Cisco and fog computing. *Strategic Management Journal*, 1-31. <https://doi.org/10.1002/smj.3147>
- Kenney, M., Rouvinen, P., Seppälä, T., & Zysman, J. (2019). Platforms and industrial change. *Industry and Innovation*, 26(8), 871-879. <https://doi.org/10.1080/13662716.2019.1602514>
- Kovalenko, A. (2017). Multi-Sided Platform as a Value-Creating Network. *Upravlenets-The Manager*, (4), 39-42. <http://dx.doi.org/10.29141/2218-5003-2017-6-4-5>
- Lee, Y. Y., & Falahat, M. (2019). The impact of digitalization and resources on gaining competitive advantage in international markets: Mediating role of marketing, innovation and learning capabilities. *Technology Innovation Management Review*, 9(11). <http://doi.org/10.22215/timreview/1281>
- Libert, B., Beck, M., & Wind, J. (2016). Network Revolution: Creating Value Through Platforms. Disponível em: <https://knowledge.wharton.upenn.edu/article/the-network-revolution-creating-value-through-platforms-people-and-digital-technology/>
- Mahesh, V.J., & Hari, P. (2020). Customer's perception towards DUNZO delivery service. *Journal of Contemporary Issues in Business and Government*, 26(2), 1080-1086. <http://dx.doi.org/10.47750/cibg.2020.26.02.152>
- Mayorov, S. (2020). Digital Transformation of Capital Market Infrastructure. *Economic Policy, Russian Presidential Academy of National Economy and Public Administration*, 5, 8-31. <http://dx.doi.org/10.18288/1994-5124-2020-5-8-31>
- McGrath, R. (2013). *O fim da vantagem competitiva: um novo modelo de competição para mercados dinâmicos*. Rio de Janeiro: Elsevier Brasil.
- McIntyre, D. P., & Srinivasan, A. (2017). Networks, platforms, and strategy: Emerging views and next steps. *Strategic management journal*, 38(1), 141-160. <https://doi.org/10.1002/smj.2596>
- Montalban, M., Frigant, V., & Jullien, B. (2019). Platform economy as a new form of capitalism: a Régulationist research programme. *Cambridge Journal of Economics*, 43(4), 805-824. <https://doi.org/10.1093/cje/bez017>
- Muzellec, L., Ronteau, S., & Lambkin, M. (2015). Two-sided Internet platforms: A business model lifecycle perspective. *Industrial Marketing Management*, 45, 139-150. <https://doi.org/10.1016/j.indmarman.2015.02.012>
- Nalebuff, B. J., & Brandenburger, A. M. (1997). Co-opetition: Competitive and cooperative business strategies for the digital economy. *Strategy & leadership*, 25(6), 28-33. <https://doi.org/10.1108/eb054655>

- Nambisan, S., Siegel, D., & Kenney, M. (2018). On open innovation, platforms, and entrepreneurship. *Strategic Entrepreneurship Journal*, 12(3), 354-368. <https://doi.org/10.1002/sej.1300>
- Parker, G. G., & Van Alstyne, M. W. (2018). Innovation, openness, and platform control. *Management Science*, 64(7), 3015-3032. <https://doi.org/10.1287/mnsc.2017.2757>
- Parker, G. G., Van Alstyne, M. W., & Choudary, S. P. (2019). *Plataforma: a revolução da estratégia*. Alta Books.
- Peteraf, M. A. (1993). The cornerstones of competitive advantage: a resource-based view. *Strategic management journal*, 14(3), 179-191. <https://doi.org/10.1002/smj.4250140303>
- Porter, M. E. (1985). *Competitive advantage, creating and sustaining superior performance*. New York: The Free Press.
- Ribeiro, N. C., Antonialli, L. M., & Zambalde, A. L. (2015). Análise sociométrica da estrutura da rede de propriedade intelectual de uma universidade pública. *Perspectivas em Gestão & Conhecimento*, 5, 127-146. <https://dialnet.unirioja.es/descarga/articulo/5213847.pdf>
- Ricart, J. E., Snihur, Y., Carrasco-Farré, C., & Berrone, P. (2020). Grassroots resistance to digital platforms and relational business model design to overcome it: A conceptual framework. *Strategy Science*, 5(3), 271-291. <https://doi.org/10.1287/stsc.2020.0104>
- Rochet, J. C., & Tirole, J. (2003). Platform competition in two-sided markets. *Journal of the european economic association*, 1(4), 990-1029. <https://doi.org/10.1162/154247603322493212>
- Rogers, D. (2017). *Transformação digital: repensando o seu negócio para a era digital*. Tradução Afonso Celso da Cunha Serra. São Paulo: Autêntica Business.
- Scaringella, L., & Radziwon, A. (2018). Innovation, entrepreneurial, knowledge, and business ecosystems: Old wine in new bottles?. *Technological Forecasting and Social Change*, 136, 59-87. <https://doi.org/10.1016/j.techfore.2017.09.023>
- Steur, A. J. (2018). When a New Platform Enters a Market, What Is the Impact on Incumbents?. *Technology Innovation Management Review*, 8(10). <http://doi.org/10.22215/timreview/1192>
- Tigre, P. B., & Pinheiro, A. M. (2019). *Inovação em serviços e a economia do compartilhamento*. Saraiva Educação SA.
- Tiwana, A. (2015). Evolutionary competition in platform ecosystems. *Information Systems Research*, 26(2), 266-281. <https://doi.org/10.1287/isre.2015.0573>
- Trabucchi, D., & Buganza, T. (2020). Fostering digital platform innovation: From two to multi-sided platforms. *Creativity and Innovation Management*, 29(2), 345-358. <https://doi.org/10.1111/caim.12320>
- Treacy, M., & Wiersema, F. (1995). *As disciplinas dos líderes de mercado: escolha seus clientes, direcione seu foco, domine seu mercado*. 3ª. Edição, RJ: Rocco.
- Van Alstyne, M. W., Parker, G. G., & Choudary, S. P. (2016). Reasons platforms fail. *Harvard business review*, 31(6), 2-6. <https://hbr.org/2016/03/6-reasons-platforms-fail>

Van Alstyne, M., & Parker, G. G. (2017). Platform business: from resources to relationships. *NIM Marketing Intelligence Review*, 9(1), 24-29. <https://doi.org/10.1515/gfkmir-2017-0004>

Van de Kaa, G., van den Ende, J., De Vries, H. J., & van Heck, E. (2011). Factors for winning interface format battles: A review and synthesis of the literature. *Technological Forecasting and Social Change*, 78(8), 1397-1411. <https://doi.org/10.1016/j.techfore.2011.03.011>

Weisdal, J. (2020). The dynamics of entry for digital platforms in two-sided markets: a multi-case study. *Electronic Markets*, 30(3), 539-556. <https://doi.org/10.1007/s12525-020-00409-4>

Xie, K., Wu, Y., Xiao, J., & Hu, Q. (2016). Value co-creation between firms and customers: The role of big data-based cooperative assets. *Information & Management*, 53(8), 1034-1048. <https://doi.org/10.1016/j.im.2016.06.003>

Zhu, F., & Furr, N. (2016). Products to platforms: Making the leap. *Harvard Business Review*, 94(4), 51-57. <https://hbr.org/2016/04/products-to-platforms-making-the-leap>

Apêndice

Relação dos artigos resultantes da busca

(*) Não foram incluídos na análise.

ID	Autores	Título	Journal	Ano	DOI
1	Cozzolino, A; Corbo, L; Aversa, P	Digital platform-based ecosystems: The evolution of collaboration and competition between incumbent producers and entrant platforms	JOURNAL OF BUSINESS RESEARCH	2021	10.1016/j.jbusres.2020.12.058
2	Floetgen, RJ; Strauss, J; Weking, J; Hein, A; Urmetzter, F; Bohm, M; Krcmar, H	Introducing platform ecosystem resilience: leveraging mobility platforms and their ecosystems for the new normal during COVID-19	EUROPEAN JOURNAL OF INFORMATION SYSTEMS	Early	10.1080/0960085X.2021.1884009
3	Poniatowski, M; Luttenberg, H; Beverungen, D; Kundisch, D	Three layers of abstraction: a conceptual framework for theorizing digital multi-sided platforms	INFORMATION SYSTEMS AND E-BUSINESS MANAGEMENT	Early	10.1007/s10257-021-00513-8
4	Mathews, S; Prentice, C; Tsou, A; Weeks, C; Tam, L; Luck, E	Managing eWOM for hotel performance	JOURNAL OF GLOBAL SCHOLARS OF MARKETING SCIENCE	Early	10.1080/21639159.2020.1808844
5	Cenamor, J	Complementor competitive advantage: A framework for strategic decisions	JOURNAL OF BUSINESS RESEARCH	2021	10.1016/j.jbusres.2020.09.016
6	Thomas, M; Le Masson, P; Weil, B; Legrand, J	The future of digital platforms: Conditions of platform overthrow	CREATIVITY AND INNOVATION MANAGEMENT	2021	10.1111/caim.12422
7*	Kelly, SJ; Van der Leij, D	A new frontier: alcohol sponsorship activation through esports	MARKETING INTELLIGENCE & PLANNING	Early	10.1108/MIP-03-2020-0101

ID	Autores	Título	Journal	Ano	DOI
8*	Franc, S	COMPETITION POLICY IN THE DIGITAL ECONOMY	EKONOMSKA MISAO I PRAKSA-ECONOMIC THOUGHT AND PRACTICE	2020	10.17818/EMIP/2020/2.9
9	Trabucchi, D; Sanasi, S; Ghezzi, A; Buganza, T	Idle Asset Hunters-The Secret of Multi-sided Platforms	RESEARCH-TECHNOLOGY MANAGEMENT	2020	10.1080/08956308.2021.1842677
10	Dell'Era, C; Trabucchi, D; Magistretti, S	Exploiting incumbents' potentialities: From linear value chains to multisided platforms	CREATIVITY AND INNOVATION MANAGEMENT	2021	10.1111/caim.12413
11	Hilbolling, S; Berends, H; Deken, F; Tuertscher, P	Sustaining Complement Quality for Digital Product Platforms: A Case Study of the Philips Hue Ecosystem	JOURNAL OF PRODUCT INNOVATION MANAGEMENT	2021	10.1111/jpim.12555
12*	Moral, AM; Jurado, EB; Ucles, DF; Viruel, MJM; Poyatos, RP	Second degree cooperativism and ICT adoption	CIRIEC-ESPANA REVISTA DE ECONOMIA PUBLICA SOCIAL Y COOPERATIVA	2020	10.7203/CIRIEC-E.100.17712
13	Mayorov, SI	Digital Transformation of Capital Market Infrastructure	EKONOMICHESKAYA POLITIKA	2020	10.18288/1994-5124-2020-5-8-31
14	Schmidt, MC; Veile, JW; Muller, JM; Voigt, KI	Ecosystems 4.0: redesigning global value chains	INTERNATIONAL JOURNAL OF LOGISTICS MANAGEMENT	Early	10.1108/IJLM-03-2020-0145
15	Hracs, BJ; Webster, J	From selling songs to engineering experiences: exploring the competitive strategies of music streaming platforms	JOURNAL OF CULTURAL ECONOMY	2021	10.1080/17530350.2020.1819374
16	Rietveld, J; Ploog, JN; Nieborg, DB	COEVOLUTION OF PLATFORM DOMINANCE AND GOVERNANCE STRATEGIES: EFFECTS ON COMPLEMENTOR PERFORMANCE OUTCOMES	ACADEMY OF MANAGEMENT DISCOVERIES	2020	10.5465/amd.2019.0064
17	Bazarhanova, A; Yli-Huumo, J; Smolander, K	From platform dominance to weakened ownership: how external regulation changed Finnish e-identification	ELECTRONIC MARKETS	2020	10.1007/s12525-019-00331-4
18	Ricart, JE; Snihur, Y; Carrasco-Farre, C; Berrone, P	Grassroots Resistance to Digital Platforms and Relational Business Model Design to Overcome It: A Conceptual Framework	STRATEGY SCIENCE	2020	10.1287/stsc.2020.0104
19	Sanchez-Cartas, JM	Intellectual property and taxation of digital platforms	JOURNAL OF ECONOMICS	2021	10.1007/s00712-020-00717-5
20	Trabucchi, D; Buganza, T; Verganti, R	Quantity or quality? Value creation in two-sided platforms	TECHNOLOGY ANALYSIS & STRATEGIC MANAGEMENT	2021	10.1080/09537325.2020.1804057

ID	Autores	Título	Journal	Ano	DOI
21*	Secundo, G; Rippa, P; Meoli, M	Digital transformation in entrepreneurship education centres: preliminary evidence from the Italian Contamination Labs network	INTERNATIONAL JOURNAL OF ENTREPRENEURIAL BEHAVIOR & RESEARCH	2020	10.1108/IJEBR-11-2019-0618
22	Karhu, K; Gustafsson, R; Eaton, B; Henfridsson, O; Sorensen, C	Four Tactics for Implementing a Balanced Digital Platform Strategy	MIS QUARTERLY EXECUTIVE	2020	10.17705/2msqe.00027
23	Portuese, A	Beyond antitrust populism: Towards robust antitrust	ECONOMIC AFFAIRS	2020	10.1111/ecaf.12401
24	Shastitko, AE; Markova, OA	An old friend is better than two new ones? Approaches to market research in the context of digital transformation for the antitrust laws enforcement	VOPROSY EKONOMIKI	2020	10.32609/0042-8736-2020-6-37-55
25	Trabucchi, D; Buganza, T	Fostering digital platform innovation: From two to multi-sided platforms	CREATIVITY AND INNOVATION MANAGEMENT	2020	10.1111/caim.12320
26	Wells, P; Wang, XB; Wang, LQ; Liu, HK; Orsato, R	More friends than foes? The impact of automobility-as-a-service on the incumbent automotive industry	TECHNOLOGICAL FORECASTING AND SOCIAL CHANGE	2020	10.1016/j.techfore.2020.119975
27	Garud, R; Kumaraswamy, A; Roberts, A; Xu, L	Liminal movement by digital platform-based sharing economy ventures: The case of Uber Technologies	STRATEGIC MANAGEMENT JOURNAL		10.1002/smj.3148
28	Kathuria, A; Karahde, PP; Konsynski, BR	In the Realm of Hungry Ghosts: Multi-Level Theory for Supplier Participation on Digital Platforms	JOURNAL OF MANAGEMENT INFORMATION SYSTEMS	2020	10.1080/07421222.2020.1759349
29	Khanagha, S; Ansari, S; Paroutis, S; Oviedo, L	Mutualism and the dynamics of new platform creation: A study of cisco and fog computing	STRATEGIC MANAGEMENT JOURNAL		10.1002/smj.3147
30	Veisdal, J	The dynamics of entry for digital platforms in two-sided markets: a multi-case study	ELECTRONIC MARKETS	2020	10.1007/s12525-020-00409-4
31	Mahesh, VJ; Hari, P	Customer's perception towards DUNZO delivery service	JOURNAL OF CONTEMPORARY ISSUES IN BUSINESS AND GOVERNMENT	2020	10.47750/cibg.2020.26.02.152
32	Smirnov, EN; Lukyanov, SA	Imperatives of global digital platform management	UPRAVLENETS-THE MANAGER	2020	10.29141/2218-5003-2020-11-4-5
33	Wang, RD; Miller, CD	Complementors' engagement in an ecosystem: A study of publishers' e-book offerings on Amazon Kindle	STRATEGIC MANAGEMENT JOURNAL	2020	10.1002/smj.3076

ID	Autores	Título	Journal	Ano	DOI
34	Peticca-Harris, A; deGama, N; Ravishankar, MN	Postcapitalist precarious work and those in the 'drivers' seat: Exploring the motivations and lived experiences of Uber drivers in Canada	ORGANIZATION	2020	10.1177/1350508418757332
35	Jean, RJ; Kim, D; Cavusgil, E	Antecedents and outcomes of digital platform risk for international new ventures' internationalization	JOURNAL OF WORLD BUSINESS	2020	10.1016/j.jwb.2019.101021
36	Baber, WW; Ojala, A; Martinez, R	Effectuation logic in digital business model transformation Insights from Japanese high-tech innovators	JOURNAL OF SMALL BUSINESS AND ENTERPRISE DEVELOPMENT	2019	10.1108/JSBED-04-2019-0139
37	Li, T; Chan, YE	Dynamic information technology capability: Concept definition and framework development	JOURNAL OF STRATEGIC INFORMATION SYSTEMS	2019	10.1016/j.jsis.2019.101575
38	Fuerstenau, D; Auschra, C; Klein, S; Gersch, M	A process perspective on platform design and management: evidence from a digital platform in health care	ELECTRONIC MARKETS	2019	10.1007/s12525-018-0323-4
39	Li, JT; Chen, L; Yi, JT; Mao, JY; Liao, JW	Ecosystem-specific advantages in international digital commerce	JOURNAL OF INTERNATIONAL BUSINESS STUDIES	2019	10.1057/s41267-019-00263-3
40	Hein, A; Schreieck, M; Riasanow, T; Setzke, DS; Wiesche, M; Bohm, M; Krcmar, H	Digital platform ecosystems	ELECTRONIC MARKETS	2020	10.1007/s12525-019-00377-4
41	Lee, YY; Falahat, M	The Impact of Digitalization and Resources on Gaining Competitive Advantage in International Markets: The Mediating Role of Marketing, Innovation and Learning Capabilities	TECHNOLOGY INNOVATION MANAGEMENT REVIEW	2019	10.22215/timreview/1281
42	Trabucchi, D; Muzellec, L; Ronteau, S	Sharing economy: seeing through the fog	INTERNET RESEARCH	2019	10.1108/INTR-03-2018-0113
43	Eleodor, D	BIG TECH, BIG COMPETITION PROBLEM?	QUALITY-ACCESS TO SUCCESS	2019	
44	Miric, M; Boudreau, KJ; Jeppesen, LB	Protecting their digital assets: The use of formal & informal appropriability strategies by App developers	RESEARCH POLICY	2019	10.1016/j.respol.2019.01.012
45	Saadatmand, F; Lindgren, R; Schultze, U	Configurations of platform organizations: Implications for complementor engagement	RESEARCH POLICY	2019	10.1016/j.respol.2019.03.015

ID	Autores	Título	Journal	Ano	DOI
46	Rodima-Taylor, D; Grimes, WW	International remittance rails as infrastructures: embeddedness, innovation and financial access in developing economies	REVIEW OF INTERNATIONAL POLITICAL ECONOMY	2019	10.1080/09692290.2019.1607766
47	Foros, O; Kind, HJ; Wyndham, T	Tax-free digital news?	INTERNATIONAL JOURNAL OF INDUSTRIAL ORGANIZATION	2019	10.1016/j.ijindorg.2018.05.006
48	Eckhardt, GM; Houston, MB; Jiang, BJ; Lamberton, C; Rindfleisch, A; Zervas, G	Marketing in the Sharing Economy	JOURNAL OF MARKETING	2019	10.1177/0022242919861929
49	Montalban, M; Frigant, V; Jullien, B	Platform economy as a new form of capitalism: a Regulationist research programme	CAMBRIDGE JOURNAL OF ECONOMICS	2019	10.1093/cje/bez017
50	Barbe, AS; Hussler, C	The war of the worlds won't occur: Decentralized evaluation systems and orders of worth in market organizations of the sharing economy	TECHNOLOGICAL FORECASTING AND SOCIAL CHANGE	2019	10.1016/j.techfore.2019.02.011
51	Nuccio, M; Guerzoni, M	Big data: Hell or heaven? Digital platforms and market power in the data-driven economy	COMPETITION & CHANGE	2019	10.1177/1024529418816525
52	Bogusz, CI; Teigland, R; Vaast, E	Designed entrepreneurial legitimacy: the case of a Swedish crowdfunding platform	EUROPEAN JOURNAL OF INFORMATION SYSTEMS	2019	10.1080/0960085X.2018.1534039
53	Kenney, M; Rouvinen, P; Seppala, T; Zysman, J	Platforms and industrial change	INDUSTRY AND INNOVATION	2019	10.1080/13662716.2019.1602514
54	Chen, L; Shaheer, N; Yi, JT; Li, SL	The international penetration of ibusiness firms: Network effects, liabilities of outsidership and country clout	JOURNAL OF INTERNATIONAL BUSINESS STUDIES	2019	10.1057/s41267-018-0176-2
55	Limba, T; Stankevicius, A; Andrulevicius, A	INDUSTRY 4.0 AND NATIONAL SECURITY: THE PHENOMENON OF DISRUPTIVE TECHNOLOGY	ENTREPRENEURSHIP AND SUSTAINABILITY ISSUES	2019	10.9770/jssi.2019.6.3(33)
56	Ryden, P; El Sawy, OA	How Managers Perceive Real-Time Management: Thinking Fast & Flow	CALIFORNIA MANAGEMENT REVIEW	2019	10.1177/0008125618818840
57	Avdasheva, SB; Korneeva, DV	DOES COMPETITION ENFORCEMENT PREVENT COMPETITIVE STRATEGIES OF DIGITAL PLATFORMS: EVIDENCE FROM BRICS	ROSSIISKII ZHURNAL MENEDZHMENTA- RUSSIAN MANAGEMENT JOURNAL	2019	10.21638/spbu18.2019.408

ID	Autores	Título	Journal	Ano	DOI
58	Kumar, N; Qiu, LF; Kumar, S	Exit, Voice, and Response on Digital Platforms: An Empirical Investigation of Online Management Response Strategies	INFORMATION SYSTEMS RESEARCH	2018	10.1287/isre.2017.0749
59	Botelho, TL	Here's an Opportunity: Knowledge Sharing Among Competitors as a Response to Buy-in Uncertainty	ORGANIZATION SCIENCE	2018	10.1287/orsc.2018.1214
60	Cozzolino, A; Verona, G; Rothaermel, FT	Unpacking the Disruption Process: New Technology, Business Models, and Incumbent Adaptation	JOURNAL OF MANAGEMENT STUDIES	2018	10.1111/joms.12352
61	Ojala, A; Evers, N; Rialp, A	Extending the international new venture phenomenon to digital platform providers: A longitudinal case study	JOURNAL OF WORLD BUSINESS	2018	10.1016/j.jwb.2018.05.001
62	Helfat, CE; Raubitschek, RS	Dynamic and integrative capabilities for profiting from innovation in digital platform-based ecosystems	RESEARCH POLICY	2018	10.1016/j.respol.2018.01.019
63	Steur, AJ	When a New Platform Enters a Market, What Is the Impact on Incumbents ?	TECHNOLOGY INNOVATION MANAGEMENT REVIEW	2018	10.22215/timreview/1192
64	Sheikh, AA; Rana, NA; Inam, A; Shahzad, A; Awan, HM	Is e-marketing a source of sustainable business performance? Predicting the role of top management support with various interaction factors	COGENT BUSINESS & MANAGEMENT	2018	10.1080/23311975.2018.1516487
65	Viglia, G; Pera, R; Bigne, E	The determinants of stakeholder engagement in digital platforms	JOURNAL OF BUSINESS RESEARCH	2018	10.1016/j.jbusres.2017.12.029
66	Mahgoub, Y; Arvidsson, N; Uruena, A	Emergence of a Digital Platform Based Disruptive Mobile Payments Service	INTERNATIONAL JOURNAL OF E-BUSINESS RESEARCH	2018	10.4018/IJEER.2018070101
67	Geliskhanov, IZ; Yudina, TN	DIGITAL PLATFORM: A NEW ECONOMIC INSTITUTION	QUALITY-ACCESS TO SUCCESS	2018	
68	Rolland, KH; Mathiassen, L; Rai, A	Managing Digital Platforms in User Organizations: The Interactions Between Digital Options and Digital Debt	INFORMATION SYSTEMS RESEARCH	2018	10.1287/isre.2018.0788
69	Karhu, K; Gustafsson, R; Lyytinen, K	Exploiting and Defending Open Digital Platforms with Boundary Resources: Android's Five Platform Forks	INFORMATION SYSTEMS RESEARCH	2018	10.1287/isre.2018.0786
70	Rajala, R; Hakanen, E; Mattila, J; Seppala, T; Westerlund, M	How Do Intelligent Goods Shape Closed-Loop Systems?	CALIFORNIA MANAGEMENT REVIEW	2018	10.1177/0008125618759685

ID	Autores	Título	Journal	Ano	DOI
71	Goldbach, K; Rotaru, AM; Reichert, S; Stiff, G; Golz, S	Which digital energy services improve energy efficiency? A multi-criteria investigation with European experts	ENERGY POLICY	2018	10.1016/j.enpol.2017.12.036
72	Ravichandran, T	Exploring the relationships between IT competence, innovation capacity and organizational agility	JOURNAL OF STRATEGIC INFORMATION SYSTEMS	2018	10.1016/j.jsis.2017.07.002
73	Srinivasan, A; Venkatraman, N	Entrepreneurship in digital platforms: A network-centric view	STRATEGIC ENTREPRENEURSHIP JOURNAL	2018	10.1002/sej.1272
74	Hanninen, M; Smedlund, A; Mitronen, L	Digitalization in retailing: multi-sided platforms as drivers of industry transformation	BALTIC JOURNAL OF MANAGEMENT	2018	10.1108/BJM-04-2017-0109
75	Kazan, E; Tan, CW; Lim, ETK; Sorensen, C; Damsgaard, J	Disentangling Digital Platform Competition: The Case of UK Mobile Payment Platforms	JOURNAL OF MANAGEMENT INFORMATION SYSTEMS	2018	10.1080/07421222.2018.1440772
76	Van Doorn, N; Velthuis, O	A good hustle: the moral economy of market competition in adult webcam modeling	JOURNAL OF CULTURAL ECONOMY	2018	10.1080/17530350.2018.1446183
77	Holland, CP; Gutierrez-Leefmans, M	A Taxonomy of SME E-Commerce Platforms Derived from a Market-Level Analysis	INTERNATIONAL JOURNAL OF ELECTRONIC COMMERCE	2018	10.1080/10864415.2017.1364114
78	Ferras-Hernandez, X; Tarrats-Pons, E; Arimany-Serrat, N	Disruption in the automotive industry: A Cambrian moment	BUSINESS HORIZONS	2017	10.1016/j.bushor.2017.07.011
79	Foros, O; Kind, HJ; Shaffer, G	Apple's agency model and the role of most-favored-nation clauses	RAND JOURNAL OF ECONOMICS	2017	10.1111/1756-2171.12195
80	Kovalenko, AI	Multi-Sided Platform as a Value-Creating Network	UPRAVLENETS-THE MANAGER	2017	
81	Coyle, D	PRECARIOUS AND PRODUCTIVE WORK IN THE DIGITAL ECONOMY	NATIONAL INSTITUTE ECONOMIC REVIEW	2017	10.1177/002795011724000110
82	Ruutu, S; Casey, T; Kotovirta, V	Development and competition of digital service platforms: A system dynamics approach	TECHNOLOGICAL FORECASTING AND SOCIAL CHANGE	2017	10.1016/j.techfore.2016.12.011
83	Teece, DJ	DYNAMIC CAPABILITIES AND (DIGITAL) PLATFORM LIFECYCLES	ENTREPRENEURSHIP, INNOVATION, AND PLATFORMS	2017	10.1108/S0742-332220170000037008
84	Korablinova, IA	Tendencies and features of development of companies in digital epoch	MARKETING AND MANAGEMENT OF INNOVATIONS	2017	10.21272/mmi.2017.1-26
85	Xie, K; Wu, Y; Xiao, JH; Hu, Q	Value co-creation between firms and customers: The role of big data-based cooperative assets	INFORMATION & MANAGEMENT	2016	10.1016/j.im.2016.06.003
86	Sanchez, RA	Colaborative economy: a new market for the social economy	CIRIEC-ESPANA REVISTA DE ECONOMIA PUBLICA SOCIAL Y COOPERATIVA	2016	-

ID	Autores	Título	Journal	Ano	DOI
87	Eriksson, CI; Akesson, M; Lund, J	Designing Ubiquitous Media Services - Exploring the Two-Sided Market of Newspapers	JOURNAL OF THEORETICAL AND APPLIED ELECTRONIC COMMERCE RESEARCH	2016	10.4067/S0718-18762016000300002
88	Kazan, E; Tan, CW; Lim, ETK	Towards a Framework of Digital Platform Competition: A Comparative Study of Monopolistic & Federated Mobile Payment Platforms	JOURNAL OF THEORETICAL AND APPLIED ELECTRONIC COMMERCE RESEARCH	2016	10.4067/S0718-18762016000300005
89	Sedera, D; Lokuge, S; Grover, V; Sarker, S; Sarker, S	Innovating with enterprise systems and digital platforms: A contingent resource-based theory view	INFORMATION & MANAGEMENT	2016	10.1016/j.im.2016.01.001
90	Ghazawneh, A; Henfridsson, O	A paradigmatic analysis of digital application marketplaces	JOURNAL OF INFORMATION TECHNOLOGY	2015	10.1057/jit.2015.16
91	Karimi, J; Walter, Z	The Role of Dynamic Capabilities in Responding to Digital Disruption: A Factor-Based Study of the Newspaper Industry	JOURNAL OF MANAGEMENT INFORMATION SYSTEMS	2015	10.1080/07421222.2015.1029380
92	Seethamraju, R	Enterprise systems and demand chain management: a cross-sectional field study	INFORMATION TECHNOLOGY & MANAGEMENT	2014	10.1007/s10799-014-0178-0
93	Chellappa, RK; Sambamurthy, V; Saraf, N	Competing in Crowded Markets: Multimarket Contact and the Nature of Competition in the Enterprise Systems Software Industry	INFORMATION SYSTEMS RESEARCH	2010	10.1287/isre.1100.0300