

# Coopetition through Multisided Platforms Business Model: A Case Study of FEBRAFAR Value Cycle

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## ABSTRACT

**Objective:** comprehend the challenges and solutions faced by a non-technological and non-profit organization, acting within a cooperative environment, in the construction of a multisided platform business model. **Method:** utilizing a qualitative case study approach, we investigated FEBRAFAR, a multisided platform of drugstore retailers, manufacturers, and service providers. Data collection and analysis was based on the following categories: (a) the methods through which the platform generates value for its diverse customer segments, (b) the intricate contours of its value configuration endeavor, and (c) its strategies for value appropriation to ensure both sustainability and growth. **Results:** the challenges in establishing an efficiently functioning multisided platform business model included: getting resources; member's attraction; and resistance to adopting best management practices. The solutions contained the development of value creation techniques for its varied customer segments by reducing transactional friction with customers and suppliers, a comprehensive value configuration process, and value appropriation that promote sustainability and growth to these drugstore chains. **Conclusion:** the paper shows how FEBRAFAR got the solution of value creation and appropriation of the platform business model by orchestrating the interactions of competing entities within the stakeholder ecosystem that engage in collaboration. By establishing clear rules and interaction protocols, a multisided platform can facilitate coordination among competing entities, thereby enabling collaborative value co-creation for all involved stakeholders. This finding contributes to the broader understanding of strategic management in multisided platforms, particularly in non-technology contexts.



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## INTRODUCTION

A business model comprises several components, including the value proposition and the organizational and technological architecture that enables the value creation and appropriation among diverse stakeholders through a specific configuration of activities. A company's business model encapsulates all endeavors to address the challenges of value creation, configuration, and appropriation (Foss & Saebi, 2017, p. 61; Osterwalder & Pigneur, 2010; Wirtz et al., 2016). Nevertheless, it is impossible to generate value without the company having secured a viable business model. Moreover, firms frequently lack insights into how to configure or appropriate value (Teece, 2010).

Companies consistently engage in experimentation to discover a suitable business model, particularly evident in open business models like alliances (Hagiu & Wright, 2015; Kortmann & Piller, 2016) or service ecosystems (Frow et al., 2014).

A business ecosystem is a space of interdependencies between a multilateral set of actors from various industries (suppliers, customers, competitors, and complementors). Firms that operate in a business ecosystem by a platform business model have come to dominate the world today, in terms of both scale and performance (market capitalization). Some popular examples include Airbnb, Uber, Facebook, Amazon, and Google (Srinivasan, 2021). For that reason, incumbent firms must make alliances with these platforms to create value collaboratively, while also striving to maintain competitiveness. Nevertheless, given their nature as value networks (Stabell & Fjeldstad, 1998), multisided platforms entail coordination challenges (Evans & Schmalensee, 2013).

With such scenario in mind, some questions are prone to appear, e.g., how to implement a coopetitive strategy on a multisided platform business model? How does a platform harmonize the actions of various participants through technologies, products, and services?

Numerous scientific studies delve into the success of major multilateral platforms, which predominantly belong to the technology sector. Nonetheless, the scientific literature presents a notable scarcity of concrete examples of multilateral platforms operating in traditional markets outside the realm of technology firms, particularly in sectors like pharmaceutical retail, as presented here in this paper.

Can a non-technological multilateral platform serve as a viable solution for value creation among diverse actors within a coopetitive environment, in traditional industries, such as retail?

To answer this question, this study specifically investigates the distinct challenges faced by FEBRAFAR (Brazilian Federation of Independent Drugstore Chains), a non-technological, non-profit organization, in the development and maintenance of an effective and valuable multisided business model.

Established in February 2000, FEBRAFAR is a multisided platform encompassing drugstore retailers, manufacturers, and service providers in Brazil. Currently, it supports 58 small and medium-sized drugstore chains, comprising approximately 14,000 stores serving all Brazilian states in 2,832 cities and generating a combined revenue of around US\$ 32 billion annually – an impactful figure in the Brazilian market.

Despite currently presenting relevant and even superlative numbers for the Brazilian market, arriving at the current highly refined and well-oiled business model constituted a journey of several years of intense intellectual and practical effort that is worth analyzing.

## THEORETICAL REVIEW

### Multisided platforms as a coopetition organizational form to cocreate value

According to Cozzolino et al. (2017), coopetition is a strategic choice. It emphasizes the integration of competition and cooperation as a method to enhance innovative capabilities, to leverage complementary assets being beneficial for sharing the risks and costs, especially when it comes to innovation activities. These authors also state that coopetition also leads to increased innovation outputs, as it enables firms to find new combinations of knowledge and capabilities that might not be possible in purely competitive or cooperative scenarios.

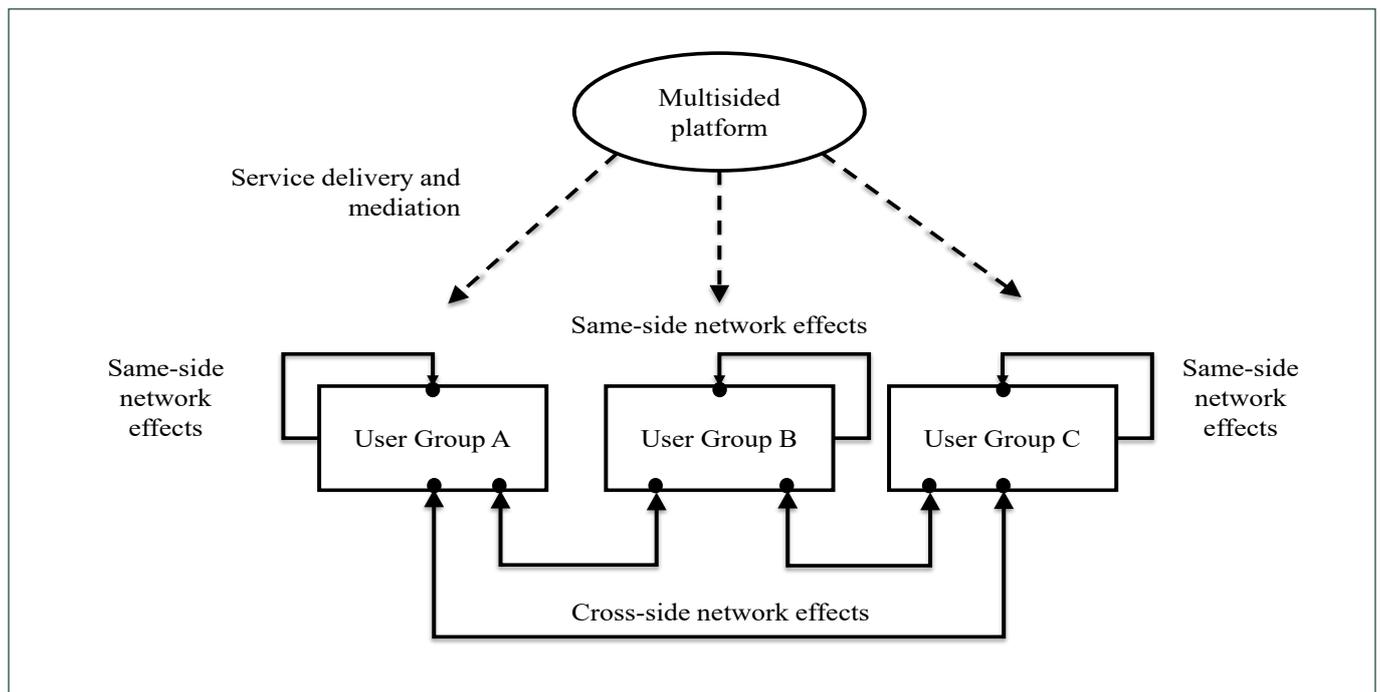
Platforms have transformed how companies generate value for customers and compete in the market. Cennamo (2021) highlights this evolution, emphasizing the role of platforms in altering traditional business dynamics and, consequently, value creation.

The recent trends of business toward digital platform-based ecosystems show how cooperation and competition is a solution to gain competitive advantage. These multisided platforms have had a significant impact on the strategic approach of firms in various domains, such as social networks, internet marketplaces, and media (Cozzolino et al., 2021). These platforms act as intermediaries, facilitating compatibility and interaction in B2B and BTC contexts. They serve as a bridge between two or more 'sides' that otherwise would not be able to easily engage with each other (Cusumano et al., 2020; Hagiu, 2014; McIntyre & Srinivasan, 2017; Rochet & Tirole, 2003; Thomas et al., 2014).

Multisided platforms, as [Evans and Schmalensee \(2013\)](#) explain, orchestrate demand among various interdependent customer groups, forming ecosystems for value co-creation. These ecosystems typically comprise a variety of stakeholders, including demand-side participants, suppliers, and governance entities, which collectively facilitate the creation of value for all members.

An important aspect of multisided platforms is that no side of the platform will join without the other or others ([Hagiu, 2014](#)). As a result, it is common that

most multisided platforms subsidize at least one side of their platform (demand side) to attract other participants (supply side). Multisided platforms also encounter transversal network effects ([Carrillo & Tan, 2021](#)), where demand from one side boosts participation from the other. Network effect refers to the phenomenon where the value of a product or service increases as more people use it ([Granfeldt & Nyqvist, 2019](#)). Figure 1, below, shows the possible network effects on a three-sided platform ([Øverby & Audestad, 2021](#), p. 6).



Source: [Øverby, H., & Audestad, J. A. \(2021\). Multisided platforms: Classification and analysis. \*Systems\*, 9\(85\), 1-23. <https://doi.org/10.3390/systems>.](#)

**Figure 1.** A multisided platform featuring three user groups (A, B, and C) and the potential network effects.

Although platforms have been the subject of research for some time, the presence of several typologies and taxonomies indicates that platforms represent a phenomenon that calls for better in-depth investigation (refer to Table 1).

The evolving dynamics of competitive strategy in the context of platform adoption, and understanding the ramifications of scaling on competition, necessitate further investigation. Managing interactions and dependencies among diverse groups on multisided platforms is essential for sustaining a balanced ecosystem that benefits all participants and maintains network effects, even when one side comprises solely competitors.

Research efforts also need to address how technology can overcome existing architectural and governance obstacles, transform current value-creating interactions, rectify misaligned incentive structures, and tackle various labor issues that multisided platforms introduce ([Constantinides et al., 2018](#)).

Additionally, scholarship should delineate clear methods to address inherent issues within multisided platforms, such as selecting the primary stakeholders of the platform, resolving the 'chicken-or-egg' problem to initiate crucial network effects for growth and sustainability, formulating a sustainable business model, and establishing and upholding rules to prevent misuse, thereby ensuring an effective and well-governed platform ecosystem ([Cusumano et al., 2020](#)).

**Table 1.** Platforms typologies and taxonomies examples

Authors	Classification subject	Classes
Blaschke et al. (2019)	Classification of digital platforms based on their structural design.	Orchestration platform (coopetitive and inclusive). Amalgamation platform (monopolistic and assimilative). Innovation platform (hybrid and open).
Cennamo (2021)	Platform markets typology.	Multisided transaction market. Complementary innovation market. Information market.
Derave et al. (2021)	Platforms taxonomy.	Sharing economy platform. On-demand platform. Second-hand P2P (peer-to-peer) platform. Crowdfunding platform. P2P (peer-to-peer) sharing. Consumer-to-consumer platform. Digital marketplace. Multisided transaction. Investment platform.
Evans and Schmalensee (2013)	Classification of businesses serving two separate customer groups with at least a one-way indirect network effect, viewed from an industrial organization standpoint.	Market makers (enabling members of distinct groups to transact with each other), audience makers (matching advertisers to audiences). Demand coordinators (making goods and services that generate indirect network effects across two or more groups, e.g., software platforms).
Holland and Gutiérrez-Leefmans (2018)	Classification system for small and medium-sized e-commerce platforms.	Information laggards. Basic networking. Advanced networking. Mature advanced networking. Social media markets.
Kaplan and Sawhney (2000)	Classification of business-to-business (B2B) marketplaces.	Maintenance, repair, and operations (MRO) hubs: platforms that streamline the procurement of everyday, non-strategic items like office supplies and maintenance materials for businesses, often using aggregated catalogs from multiple suppliers. Catalog hubs: centralized platforms for listing and purchasing standardized goods, offering a wide range of industry-specific products, and simplifying product search and comparison for businesses. Yield managers: marketplaces that dynamically adjust prices for perishable inventory, like hotel rooms or flight seats, aiming to maximize revenue by selling at optimal prices based on demand and time factors. Exchanges: platforms for trading goods, services, or commodities in specific industries like energy or agriculture, supporting both spot buying and future contracts, with prices set by market supply and demand dynamics.
Kaplan and Sawhney (2000)	Classification of different types of social media platforms.	Blogs. Social networking sites. Virtual social worlds. Collaborative projects. Content communities. Virtual game worlds.
Kim and Min (2019)	Classification of platform-based business models.	Supplier. Tailor. Facilitator.
McIntyre et al. (2021)	Business models for platforms, analyzed from three angles: the platform itself, the firm, and the ecosystem.	Innovation platforms. Transaction platforms. Integration platforms. Social media platforms. Marketplaces. Payment platforms. Service platforms. Content platforms. Development platforms. Communication platforms.
Perren and Kozinets (2018)	Classification of lateral exchange markets, which are created via a mediating technology platform that enables exchange activities among a network of similarly situated economic participants.	Forums. Matchmakers. Enablers. Hubs.
Perscheid et al. (2020)	Classification of platforms based on their level of centralization.	Centralized. Semi-centralized. Decentralized.
Porter (2006)	Classification of different types of virtual communities.	Social. Professional. Commercial. Nonprofit. Government communities.
Wirtz et al. (2019)	Typology of platforms.	Four types resulting from the binary nature of ownership versus access-based dimensions.

Continues

Table 1 (continued)

Authors	Classification subject	Classes
Reimers et al. (2018)	Classification of two-sided markets viewed through the lens of New Institutional Economics.	Private exchanges. Hybrid. Hierarchy.
Rodríguez-López and Diz-Comesaña (2016)	Classification of Lego communities on Facebook.	Groups managed by the company. Groups operated by members with an informational/social objective. Groups managed by members with a generic objective. Groups managed by members with the intention of buying or selling.
Sibai et al. (2015)	Classification of different types of online consumer communities.	Market (typical multisided platforms with social control exerted through economic mechanisms). Hierarchy (users possess a range of abilities depending on their status, e.g., as founders). Clan (self-governance based on traditions, understood as standards that emerge from repetitive behaviors and define group behavior).
Staub et al. (2021)	Classification of digital platforms based on their business model.	Business/consumer innovation platform. Business/consumer exchange platform.
Tauscher and Laudien (2018)	Taxonomy of marketplaces.	Efficient product transactions. Digital product community. Product aficionados. On-demand offline services. Online services. Peer-to-peer offline services.

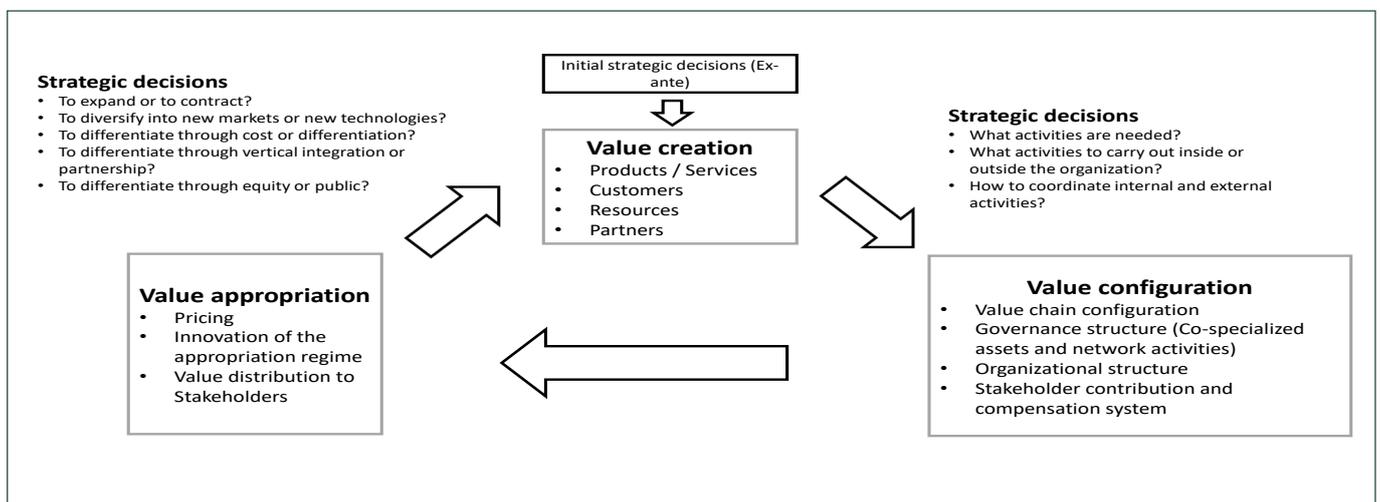
**Note.** Developed by the authors, partially based on Doligalski, T. (2023). *Common typology of multi-sided platforms and virtual communities: Analysis of business models using qualitative system dynamics. Electronic Commerce Research.* <https://doi.org/10.1007/s10660-023-09700-w>

## The cycle of value in multisided platforms business model

Multisided platform is a business model that can serve as a solution to the intricate challenge related to value creation, configuration, and appropriation within an ecosystem characterized by multifaceted services and diverse value perspectives from various stakeholders. Within a multisided platform, each group of participants constitutes a substantial customer (Hagiu, 2014), actively involved in value co-creation processes (Oliveira & Cortimiglia, 2017). At the same time, participant firms on a multisided platform may be able to capture value through knowledge produced by other participants of the platform. Nevertheless, the journey toward a value-centric multisided platform is replete with intricacies and challenges, particularly in deciphering the

accurate mechanisms of governance in value configuration and also of value appropriation.

According to Meirelles (2019), the construction of a business model derives from entrepreneurs' interconnections as they navigate through the intricacies of value creation, configuration, and appropriation predicaments (refer to Figure 2). These interconnections fundamentally embody a dialectical process (Van de Ven, 2007) rooted in the internal quandaries that arise amongst stakeholders — whether internal among members and partners or external between the company and the market. This process-oriented approach harmonizes seamlessly with the coopetition observed within the context of multisided platforms business model, since the inherent tensions and conflicts are intricately linked to the paradoxical nature of 'coopetitive' strategies.



**Figure 2.** The cycle of value creation, configuration, and appropriation.

Coopetition' is a concept that embodies the simultaneous occurrence of cooperation and competition between firms (Bengtsson & Johansson, 2014; Jakobsen, 2020; Raza-Ullah, 2018; Raza-Ullah et al., 2014; Seepana et al., 2020). This paradoxical relationship arises from the coexistence of collective interests to create greater value (cooperation aspect) alongside the pursuit of private gains from the value created (competition aspect). This dynamic leads to the creation and appropriation of value in various contexts (Oliveira-Ribeiro & Chim-Miki, 2022).

The comprehension of the mechanisms of coopetition involves the analysis of the trade-offs between joint value creation and firm value creation (Gnyawali & Charleton, 2018).

Precisely because coopetition is characterized by the coexistence of convergent interests (favorable to cooperation) and divergent interests (inducing competition), it brings tensions and ambiguities that call for solutions. Mohamed et al. (2023) point out that ambiguities and tensions may arise from unbalanced leadership power, which may impede the establishment of collective governance agreements, especially when incumbents in a coopetition setting impose its governance to maintain market dominance and prevent sudden competition. Ambiguities and tensions may also stem from the multi-layered nature of coopetition, knowledge sharing, and when the balance between complementarity and competition among platforms is unclear, leading to potential conflicts.

One of the biggest challenges on a multisided platform is to overcome the resistance and conflicting interests among potential constituents. Tensions may arise in such situation due to disputes regarding who has produced the knowledge and who gets the actual benefits of it (Chanal & Caron-Fasan, 2010, p. 318). Another tricky issue is that the customers of a multisided platform should be complementary to avoid conflicts of interest (Carrillo & Tan, 2021; Evans & Schmalensee, 2013), no side will engage without the presence of others.

Other tensions may arise from the lack of trust between competing firms, opportunistic behavior, knowledge exposure, and cultural gaps, and the scope and timeframe of the coopetition, when clearly delimited, can lead to tensions regarding the distribution of responsibilities and benefits (Kalanit et al. 2022). Despite the coopetition advantages, the similarity in resource and knowledge domains between competitors in a 'coopetitive' relationship can pose challenges (Cozzolino et al., 2017). Another important aspect that may bring tensions is related to the need to balance

the positive and negative interdependencies with key actors in the ecosystem (Cozzolino et al., 2021).

Despite these problems, several authors explain that platforms constitute an effective coopetitive mechanism to create value. Mohamed et al. (2023) and Yoo et al. (2022) highlight balancing cooperation and competition in platform ecosystems, managing tensions and enhancing relationships among firms. Czakon and Rogalski (2014) explain that coopetition creates value by enabling firms to pool resources, to develop complementary activities, and share risks to achieve competitive advantage over other market actors. Ritala and Sainio (2014) complement the previous authors exploring how coopetition creates value, particularly in the context of radical innovation, a context that enables firms to combine their similar and complementary resources for joint value creation, thereby sharing risks and costs of innovation activities.

The functionality of multisided platforms revolves around three key aspects: the interdependence of various customer groups, their facilitated interactions, and the reliance on the platform to catalyze mutually beneficial interactions. Such platforms generate value through network externalities, stemming from network effects or side effects. The value of a product or service on these platforms increases with user participation, underlining the importance of understanding network.

Stabell and Fjeldstad (1998) compare a platform's function to a value network, coordinating stakeholders through various interventions. The platform's effectiveness hinges on addressing coordination and transaction costs, where each customer group's welfare impacts the others (Evans & Schmalensee, 2013). Ceccagnoli et al. (2012) stress the importance of compatibility, avoiding investment duplication, and robust intellectual property rights in enabling efficient value co-creation within these ecosystems.

Rochet and Tirole (2003; 2006) suggest a combined membership and usage fee model to resolve property rights issues, aligning with Coase's theorem (Coase, 1960). However, this perspective may not fully capture the dynamic nature of platform evolution and competition, as noted by Gawer (2014). Gawer (2014) also critiques the technological view of platforms, proposing a resilient architecture that innovates through modules and interfaces, adapting to customer needs. Platform coordinators should facilitate rather than intervene in negotiations to maintain neutrality and maximize value realization. The platform's success depends on its liquidity, influencing its attractiveness to buyers and sellers (Evans & Schmalensee, 2013).

In innovative ecosystems, anchor tenants like universities and public research organizations (Clarysse et

al., 2014) play a pivotal role in nurturing new knowledge and technologies, fostering economic growth through enhanced connections and field formation. As demonstrated next, this is exemplified by FEBRAFAR, operating within the fiercely competitive market of drugstore chains.

## METHOD

This is a case study paper of FEBRAFAR, a multisided platform that interconnects various stakeholders (retailers, manufacturers, dealers, and service providers) within the Brazilian drugstore retail industry. Employing Yin's (2008) protocol, the research leveraged primary and secondary data sources (refer to Table 2).

Primary data collection was conducted through in-depth semi-structured interviews with three executives, including the CEO himself and two directors of the organization, and one lawyer. Field observations were conducted through participation at two conferences where we had conversations with approximately 20 employees from the general staff, including managers, coordinators, and analysts. The total amount of interviews and filed observa-

tions is approximately 50 hours spent on a dozen on-site visits over a period of about 12 months. The interviews and meetings were conducted through in-person visits to the organization, the use of video conferences, and telephone calls.

The secondary data sources encompassed a published historical account of the organization (Tamascia & Corbó, 2016) and its official website, including FARMARCAS website, a spin-off from FEBRAFAR. In addition, various documents were consulted, such as institutional videos, videos from the FEBRAFAR channel on the YouTube website, and drugstore management artifacts, such as electronic spreadsheets and information systems.

The technique deployed to analyze data is narrative (Feldman et al., 2004), facilitating the identification of problems and solutions to value configuration, creation, and appropriation (Meirelles & Thomaz, 2018). Data analysis was performed with the assistance of NVivo 11 software for data coding and analysis. No artificial intelligence resources were used in this study except for a spelling and grammar checker (Grammarly) to enhance the text quality.

**Table 2.** Sources of data and their utilization in analysis.

Data source	Type of data	Use in analysis
(1) Primary data (interviews and field observations)	<ul style="list-style-type: none"> <li>Five interviews (approximately 25 hours): four at FEBRAFAR (CEO, two directors, and a manager) and one lawyer hired to solve legal issues.</li> <li>Two conferences held on FEBRAFAR (registered in video, each lasting approximately 2 hours) to discuss the company's business model.</li> </ul>	<ul style="list-style-type: none"> <li>Search for information about FEBRAFAR's business model, how the organization works and issues regarding its operations.</li> <li>Gaining insights into how FEBRAFAR can foster collaboration among competitors, including drugstore chains, manufacturers, product distributors, and service providers.</li> </ul>
(2) Secondary data (archival)	<p>Websites:</p> <ul style="list-style-type: none"> <li>FEBRAFAR</li> <li>FARMARCAS</li> </ul> <p>Videos:</p> <ul style="list-style-type: none"> <li>25 videos published on the internet totaling about 30 hours of recording.</li> </ul> <p>Press coverage:</p> <ul style="list-style-type: none"> <li>14 articles covering the period of 2017 to 2022 published by newspapers, business magazines, and internet news portals (O Estado de S. Paulo Newspaper, Exame Magazine, Época Negócios Magazine, Saúde Digital News, and Ascoferj)</li> <li>Book documenting the history of FEBRAFAR, with 137 pages (Tamascia &amp; Corbó, 2016).</li> </ul>	<ul style="list-style-type: none"> <li>Obtaining initial knowledge about FEBRAFAR and its spin-off FARMARCAS.</li> <li>Understanding the drugstore chains associated with FEBRAFAR.</li> <li>Understanding the benefits that FEBRAFAR provides to pharmacy chains.</li> <li>Understanding FEBRAFAR's origins, trajectory, and the evolution of its business model and portfolio of services.</li> </ul>

Note. Developed by the authors.

## DATA ANALYSIS

Using a value cycle perspective, as proposed by Meirelles (2019), to comprehensively examine the construction of business models within this multisided platform context, data analysis here presented encompass key categories aligned with the value creation, configuration, and appropriation strategies – probing into inquiries encompassing (a) the methods through which the platform generates value for its diverse customer segments, (b) the intricate contours of its value configuration endeavors, and (c)

its strategies for value appropriation to ensure both sustainability and growth.

FEBRAFAR encountered a series of challenges encompassing value creation, configuration, and appropriation in its endeavor to establish an efficiently functioning multisided platform (refer to Table 3). Notably, the endeavor to enhance value creation and appropriation for every cohort of participating constituents resulted in value configuration changes through a more active coordination by FEBRAFAR. This iterative process engenders a dynamic cycle

of value creation, configuration, and appropriation (Meirelles, 2019) reverberating to the platform itself.

From its inception, the organization has assumed a role extending beyond just being a consortium of drugstores with significant negotiating power in commercial transactions, giving rise to a network effect (Evans & Schmalensee, 2013; Hagiu, 2014). The platform fundamentally embodies the identification of value-creation opportunities (Meirelles, 2019). Its core mission has consistently involved sharing successful experiences, disseminating relevant information, acting as a foundation for strategic planning, and providing unique services to its members.

As defined by Meirelles (2019), value configuration entails the process of operationalizing opportunities by orchestrating resources and activities both internally and externally, thereby pursuing a dynamic and streamlined value framework in alignment with the organization's evolutionary trajectory. Furthermore, value configuration entails an ongoing enhancement of the quality of interactions among participants within the multisided platform. These connections serve as conduits for the involved parties to uncover optimal solutions tailored to their respective needs (Evans & Schmalensee, 2013, p. 8).

The initial hurdle was securing essential resources. One manufacturer, Eurofarma, notably exhibited keen interest in spearheading a novel entity with nationwide coverage. As a result, garnering resources found an early resolution through the patronage extended by drug manufacturers. However, this marked just the inception of the journey toward cultivating an integrated network. It was, therefore, imperative to bridge both platform facets: uniting entrepreneurs affiliated with small and medium-sized drugstore chains alongside manufacturers and dealers. The groundwork for a solution was laid with a convergence-driven meeting orchestrated to align diverse interests. This gathering facilitated the engagement of CEOs and directors from associated drugstore chains, fostering negotiations that involved manufacturers and distributors.

The inaugural event encompassed deliberations and presentations addressing topics such as generic drugs. The triumph of this occasion effectively charted the course for FEBRAFAR: disseminating pertinent market insights to its members to preempt trends and sustain competitiveness, even amidst transformative shifts. The efficacy of this model proved so

substantial that it continues to be embraced to this day, materializing in biennial convention cycles.

A larger influx of buyers inherently draws in a more significant number of suppliers and vice versa, amplifying the intrinsic worth of the platform. When constructive feedback loops emerge amongst the diverse customer categories within the platform, heightened demand from each group contributes to elevating the platform's value. Consequently, fostering these favorable feedback loops becomes a crucial facet of value configuration, achieved through the unwavering commitment to customer contentment. Initiatives such as implementing best management practices manifest in augmented sales and revenue alongside mitigated financial losses, encompassing aspects like lessening tax burden. Nevertheless, a challenge emerged as resistance toward embracing optimal management practices.

The initiative to introduce these practices was set in motion during an event focused on outlining the future activities of the 'Brazil Farma' Committee. Tamascia, the head of FEBRAFAR, engaged in a collaborative session orchestrated by management specialists, and the outcome generated substantial interest, prompting him to introduce the methodology to fellow FEBRAFAR members. Notably, Tamascia authored a comprehensive document addressing all participating drugstore chains, underscoring the requisite managerial modifications imperative for realizing the targeted objectives. Each drugstore chain received this document, culminating in a subsequent meeting convened to approve these proposed changes. Subsequently, the drugstore chains acquired a definitive guiding compass (Tamascia & Corbó, 2016).

Nonetheless, effecting the diffusion of novel practices was not a straightforward endeavor. Generally characterized as family-run businesses established among acquaintances, small and medium-sized drugstore chains encountered initial reservations toward embracing the management practices endorsed by FEBRAFAR. The provision of these services required a focused effort toward legitimization, which included developing research initiatives and engaging in collaborative ventures with respected institutions, as well as conducting audits. These efforts were directed toward validating and demonstrating the effectiveness of the provided administrative methods and tools, using empirical data and statistical evidence.

**Table 3.** Challenges and resolutions concerning value creation, configuration, and appropriation.

Challenges	Solution
Getting resources	Sponsorship from drug manufacturers
Member's attraction	Conventions and meetings to provide information regarding consumer trends. Market research. Lectures by specialists, full of innovative techniques.
Resistance to adopting best management practices	Research development by renowned institutes to prove effectiveness. Establishment of a novel drugstore chain (FARMARCAS), where associated drugstores must adopt the tools, methodologies, and best practices prescribed by FARMARCAS. Training and group dynamics (testimony of certified members).
Small business competitive disadvantage	Adoption of well-established management methods used by major drugstore chains. Implementation of customer loyalty programs. Warnings on regulatory issues. Law approvals to benefit small drugstore entrepreneurs.
Intermediation activity implementation	Digital transformation of drugstores. Use of information technology tools for data collection. Professionalization. Structuration of commercial department. Adoption of information systems.

Note. Developed by the authors.

An alternative strategy to enhance adherence to more effective management practices at drugstores entailed establishing a new drugstore chain, FARMARCAS, which demonstrated consistently superior performance compared to its competitors. Joining this network requires drugstore owners to comply with the tools and best practices provided by FEBRAFAR. Additionally, pursuing optimal management practices engenders an ongoing commitment to training. In this regard, FEBRAFAR gave rise to the IFEPEC (Institute for Research and Continuing Education), a dedicated arena designed to cater to the perennial demand for enhancing drugstore entrepreneurs' qualifications and professional competence. Through a series of business management education initiatives, the institute stands resolute in its mission to disseminate expertise about the paramount management practices (Tamascia & Corbó, 2016, p. 121).

A constellation of dilemmas concerning competitive circumstances was equally a notable challenge regarding value appropriation, which includes pricing strategies (Meirelles, 2019). Small and medium-sized drugstore chains lack the competitive leverage wielded by their larger counterparts to engage in price negotiations with manufacturers. In response, FEBRAFAR instituted an initiative called Fonte Saúde (Health Source), aimed at engendering more favorable negotiation dynamics. Furthermore, as part of its commitment to the holistic well-being of all stakeholders, FEBRAFAR extends support to transactions executed between drugstores and manufacturers. Operating on a dual-front approach, FEBRAFAR aggregates the cumulative product demands voiced by drugstore chains, subsequently sharing this consolidated data with manufacturers and dealers. In parallel, the platform compiles and compares the quotations submitted by manufacturers and dealers, furnishing the drugstores with the most ad-

vantageous terms. Simultaneously, manufacturers and dealers proffer appreciable discounts to drugstores, who reciprocate by furnishing strategic insights on product sales, thus engendering a symbiotic exchange (Tamascia & Corbó, 2016, p. 46).

The operationalization of this initiative demanded the digitalization of drugstore operations. The sales data reports produced by drugstores, a predominantly manual undertaking, culminated in a voluminous accumulation extending to hundreds of pages. "We could not present the data in that format to drug manufacturers. Nobody would buy it" (Tamascia & Corbó, 2016, p. 49). To render this endeavor viable, a company named BRASFANTA undertook the sponsorship of procuring hundreds of computers. In the nascent stages, a manual procedure was employed to consolidate the final tallies, involving the utilization of Excel spreadsheets for each merchandise item.

Notably, the endeavor to enhance value appropriation for FEBRAFAR's constituents exerted a discernible influence on the platform's value configuration. This service provision engendered the establishment of a dedicated commercial division, entrusted with the responsibility of orchestrating price negotiations and fostering the engagement of novel suppliers.

In 2007, the Brazilian drugstore retail sector experienced a swift shift toward professionalization, leading to a demand for efficient management in drugstores, supported by solid data and efficient operational software. Cognizant of this void, the affiliated drugstore chains petitioned FEBRAFAR to devise an operational system that would centralize the procurement and sales data of all drugstore chains. In response to this entreaty, a software system was developed, denoted as the Business Indicators Measurement System. Harnessing the insights furnished by this system's data, FEBRAFAR acquired the capacity to, for instance, mit-

igate tax liabilities. “We realized that several drugstores were overpaying taxes, not due to an excessive tax burden, but because of inaccuracies in accounting procedures. Armed with the data gleaned from the Indicators Measurement System, FEBRAFAR identified these discrepancies and dispensed appropriate guidance. Several retailers were able to save up to R\$ 9,000.00 per month” (Tamascia & Corbó, 2016, p. 89).

This endeavor marked the initiation of advancements in digital transformation. A strategic competitive initiative known as the Competitive Strategic Program introduced an information system catering to both established players and fresh entrants. Within this framework, the drugstore manager populates a comprehensive database encompassing diverse variables, including payroll outlays, operational expenditures, and tax disbursements. Leveraging this data repository, the system enables a comparative analysis of the drugstore’s performance vis-à-vis its peers within the same cohort. The juxtaposition of revenues, expenditures, and resultant outcomes engenders valuable insights germane to decision-making and strategic reassessment.

With the internal framework effectively in place, there emerged a need to appoint a manager to oversee the management platform. At this point, an individual with the necessary qualifications and ability to assume this additional role was notably lacking. Consequently, FEBRAFAR embarked on a search to find an appropriate professional from within its network of associated drugstore chains (Tamascia & Corbó, 2016, pp. 88-89).

After addressing the initial challenges in creating and appropriating value for both sides of the platform, FEBRAFAR has successfully evolved into a well-structured multisided platform. This evolution is supported by various funding sources, including monthly association fees and marketing promotion fees. Participants, including dealers, manufacturers, and service providers, can choose from three distinct membership tiers: Level 1, offering access to two annual national conferences; Level 2, which includes monthly webinars in addition to the two annual conferences; Level 3, providing monthly webinars, two annual national conferences, and an annual market research report customized for each member.

As per the encompassed literature, the utilization of exclusive contracts emerges as a viable strategy to bind customers (Meirelles, 2019), particularly in the presence of competing multisided platforms. This maneuver extends benefits not solely to the clientele under the purview of the exclusivity agreement but also reverberates positively onto clients belonging to other participant groups within the multisided platform (Evans & Schmalensee, 2013, p. 30). However, despite FEBRAFAR’s status as a de facto monopoly, it abstains from imposing

exclusivity contracts. Consequently, customers retain the capacity to access value without necessarily tethering themselves to FEBRAFAR’s multisided platform. Notably, facilitating value appropriation becomes less noticeable when opting for FEBRAFAR’s multisided platform. Without this multisided platform, the avenues for value capture among the network’s clientele would be severely constrained or potentially absent altogether.

When a platform eclipses its rivals in attractiveness, it consequently garners a more extensive customer base and accrues more excellent value for its proprietors, establishing a quasi-monopoly that curtails competitive forces (Evans & Schmalensee, 2013, p. 13). FEBRAFAR effectively stands as a multisided platform monopoly, catering to the needs of small and medium-sized drugstore chains within the Brazilian market. Notably, the authors of this paper did not unearth any analogous multisided platforms operating within the same market niche as FEBRAFAR, specifically targeting small and medium-sized chains of drugstores. In fact, there is another multisided platform within the Brazilian drugstore domain: ABRAFARMA (Brazilian Association of Drugstore Chains). However, it is pertinent to note that this entity does not vie with FEBRAFAR. ABRAFARMA serves as an organization that advocates for the interests of major nationwide drugstore chains in Brazil, including industry giants like Extrafarma, Pague Menos, Raia Drogasil, and DPSP (Drogarias São Paulo and Drogarias Pacheco), collectively amassing about 58% of the Brazilian drugstore market share. While ABRAFARMA stands as a formidable contender for drugstore chains, it remains distinct from FEBRAFAR’s sphere of competition.

It is equally imperative to underscore that strategic determinations wielding an impact on the value appropriation of distinct customer cohorts inevitably yield ramifications for the capacity to extract value via the platform (Evans & Schmalensee, 2013, p. 11). Throughout its 15 years of operation, FEBRAFAR has cultivated the capability to engage with a myriad of drugstores nationwide, thereby enhancing value creation and appropriation for all its stakeholders. The initial challenges of resource acquisition and intermediation have now become historical artifacts. Presently, manufacturers frequently allocate funds to facilitate the promotion of their products at point-of-sale locations. In its intermediary role, FEBRAFAR orchestrates promotion of these products within the drugstores affiliated with its chains. Consequently, the association accrues remuneration for enabling such promotional endeavors. Furthermore, these initiatives facilitate marketing activities at the point of sale without imposing financial burdens on the drugstores, amplifying the potential for value appropriation. The outcomes of these initiatives have proven decid-

edly positive. Results were quantified across product categories. Those categories previously overlooked or underutilized experienced sales growth up to 300% (Tamascia & Corbó, 2016, p. 77).

Aligning complementary demands across all customer segments is a persistent value configuration endeavor. FEBRAFAR consistently seeks fresh liquidity providers (drugstore chains) for its customer base, thereby ensuring a substantial clientele that upholds its monopolistic stance in catering to the requirements of small and medium-sized drugstore chains within the Brazilian market.

A multisided platform stands poised to bolster profits by aggregating customers capable of amplifying sales volumes (Evans & Schmalensee, 2013, p. 14). This theoretical tenet finds its resonance within the context of FEBRAFAR. An exemplification of this is evident in the incorporation of payment service providers into the roster of FEBRAFAR's clientele. Services centered on payment methods, such as the processing of credit card transactions, inherently demonstrate a high degree of scalability, given their indispensable nature to every drugstore.

## DISCUSSION

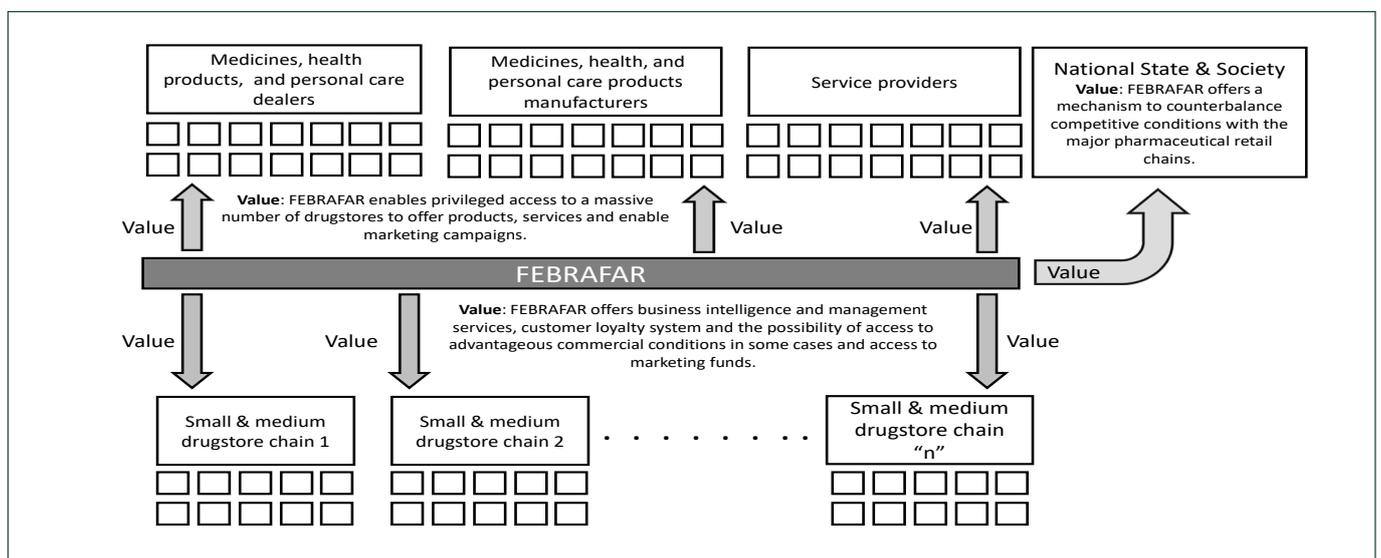
FEBRAFAR operates on a business model that engenders value across an intricate web of stakeholders encompassing drugstore proprietors, drugstore chains, customers, employees, dealers, manufacturers, service providers, governmental entities, and FEBRAFAR itself. A comprehensive analysis of the stakeholder ecosystem within the platform (refer to Figure 3) reveals the distinct value propositions directed at each of these constituents.

On one platform facet, stakeholders include suppliers, dealers, manufacturers, and service providers. The value proposition offers them privileged access to an exten-

sive network of drugstores, facilitating the provisioning of products and services. Conversely, on the opposite side, there are drugstore retailers, predominantly comprising small and medium-sized chains. The value proposition for these retailers encompasses the facilitation of proficient drugstore management based on business intelligence, leveraging established methodologies, and cultivating competitive edges via initiatives like product sales campaigns and market research. In return, the drugstores furnish manufacturers and distributors with pertinent information.

It should be noted that FEBRAFAR is not a digital platform akin to a website where drugstore networks create accounts to become affiliates. Nor is it a digital multilateral platform similar to social networks like Facebook or B2B digital platforms such as Alibaba, Amazon Business, or ThomasNet. FEBRAFAR does maintain an institutional website and various computerized systems to support its operations, which clients access for certain services. However, its primary services are rendered through directly facilitating advantageous offers for its participants, via negotiations between drugstore networks and its suppliers, processing and analyzing drugstore performance data, and continuously promoting virtual and in-person meetings for the exchange of experiences and best practices among drugstore chains and its product and service providers.

This finding not only contributes to the theoretical understanding of multisided platforms but also offers practical insights, from a managerial perspective, into the establishment of a multilateral platform business model. It elucidates how such a platform can facilitate the creation and appropriation of value by orchestrating the interactions of competing entities that engage in collaboration within this business model.



**Figure 3.** Value cycle of FEBRAFAR's multisided platform.

This research highlights the strategic considerations necessary for effectively managing coopetition and fostering a mutually beneficial environment among competitors in a multisided platform context. To consistently align small and medium-sized regional drugstore chains with the prevailing landscape and market dynamics, this multisided platform systematically seeks out advice from researchers and market analyses concerning optimal strategies, emerging business prospects, novel technologies, products, and services, as well as collaborative networks. Teece (2017) presented a comprehensive four-stage framework (birth, expansion, leadership, and self-renewal) designed to illuminate the essential considerations for nurturing the evolution of a platform throughout its distinct life cycle phases. Drawing from this perspective, it becomes evident that the trajectory of FEBRAFAR is characterized by an ongoing stream of emerging challenges.

Despite the accomplishments inherent to FEBRAFAR's business model, it confronts persistent challenges. As pointed out by Mercado & Consumo (2020), "with an index of 32%, the Brazilian pharmaceutical retail is one of the least concentrated in the sector in the Americas." Nevertheless, a discernible growth trajectory characterizes the Brazilian drugstore retail sector (Vito, 2021). Noteworthy is the entry of the North American company CVS into the Brazilian market through the acquisition of the drugstore chain Onofre between 2013 and 2019. Although CVS subsequently exited the Brazilian market in 2019 (Estadão, 2019) this acquisition underscored the allure of the Brazilian drugstore retail sector to foreign corporations. The potential advent of other foreign entrants in the Brazilian market could exert heightened pressure on FEBRAFAR and its associated stakeholders.

FEBRAFAR's predominant stance engenders challenges for prospective competitors in the multisided platform landscape. The CEO of the organization acknowledges that endeavors to establish rival platforms have been undertaken. Nevertheless, these endeavors have thus far met with limited success. This predicament stems from the network's cascading effects — a manifestation wherein a surge in participants' interest to join gains momentum. This phenomenon is compounded by the existing plethora of participants on the platform. Consequently, this dynamic substantiates a formidable entry impediment for prospective multisided platforms (Evans & Schmalensee, 2013, p. 19).

Another pertinent consideration involves the phenomenon of multi-homing. This phenomenon emerges when a multisided platform does not maintain a monopoly. Multi-homing denotes the practice of customers utilizing more than one platform. Consequently,

the platform necessitates differentiating its array of products and services (Evans & Schmalensee, 2013, p. 19). Despite FEBRAFAR's monopolistic standing within its market segment (small and medium-sized drugstore chains), the potential for multi-homing cannot be discounted if another platform were to successfully penetrate the Brazilian market, offering enhanced services and a larger customer base. Hence, FEBRAFAR's enduring existence within its monopolistic context attests to the robustness of its business model. An exemplar of this accomplishment is INTERPLAYERS, a spin-off originating from a drugstore chain nurtured under FEBRAFAR's auspices. This entity devised a data consolidation solution, employed by select drugstore retail chains affiliated with FEBRAFAR.

Finally, it is imperative to underscore the significance of governance mechanisms in curbing opportunistic behavior. Scholars such as Evans (2012) and Hagiu (2009) elucidate the necessity of a robust governance framework to mitigate opportunistic conduct among the platform's clientele. Such behavior not only erodes the platform's credibility but also diminishes the potential for value capture, both for the multisided platform and its customers. A multisided platform should facilitate direct interaction among its participants (Hagiu, 2014). Nonetheless, the role of the multisided platform coordinator should strictly be that of a facilitator, refraining from intervening in negotiations. Since transactions occur directly between suppliers and buyers, FEBRAFAR has not established a distinct governance framework aimed at preventing opportunistic behavior across all customer groups. To date, the need for such a governance structure has not arisen.

The bedrock of FEBRAFAR's achievements is undeniably the foresight and capabilities of its CEO, Edison Tamascia. Nonetheless, in the coming years, the organization will inevitably face the challenge of leadership transition. Navigating the succession of an immensely successful CEO is a complex undertaking.

Another FEBRAFAR'S challenge lies in achieving growth and diversification in a cohesive manner. Despite the backing of FEBRAFAR, not all drugstore chains can achieve uniform expansion across Brazil. As attested by one of FEBRAFAR's directors, certain regions, such as the southern part of Brazil, display resistance to the entry of drugstore chains originating from other regions of the country.

The FARMARCAS spin-off constitutes another drugstore chain within the ecosystem nurtured by FEBRAFAR. Notably, FARMARCAS is demonstrating a more rapid growth trajectory compared to the other drugstore chains that benefit from FEBRAFAR's support. It is noteworthy that both FEBRAFAR and FARMARCAS

are overseen by the same executive team, led by CEO Edison Tamascia. As the expansion of FARMARCAS gains momentum, FEBRAFAR's executives will need to allocate their attention between these two distinct entities. Existing scholarly literature underscores that in a multisided platform, the collective well-being of all participants is a pivotal factor for its triumph (Evans & Schmalensee, 2013, p. 11). Nevertheless, if FARMARCAS continues its current growth trajectory, there exists a potential risk of the executive team's attention becoming disproportionately skewed toward this new venture at the expense of other FEBRAFAR's stakeholders.

## CONCLUSIONS

This study elucidates how FEBRAFAR surmounted challenges to establish a thriving multisided platform within the Brazilian drugstore retail sector. Functioning as a multisided platform, FEBRAFAR's value proposition enhances the economic and financial outcomes of small and medium-sized drugstore chains, while simultaneously facilitating lucrative interactions for distributors, manufacturers, and service providers. Furthermore, the platform fosters improved price negotiation and payment terms, a benefit extended to dealers and manufacturers due to the extensive network of drugstores it encompasses. The outcome is a mutually beneficial situation for competing drugstore chains that engage in 'coopetition' within the platform.

By establishing clear rules and interaction protocols, a multisided platform can facilitate coordination among competing entities, thereby enabling collaborative value co-creation for all involved stakeholders. This finding contributes to the broader understanding of strategic management in multisided platforms, particularly in non-technology contexts. Even in the absence of a technological foundation, operating outside the information technology sector, a multisided platform can effectively navigate the complexities of value creation in a cooperative environment.

While the FEBRAFAR business model has demonstrated considerable efficacy within the retail drugstore sector, its principles, at least theoretically, hold potential for broader applicability. The replicability of the FEBRAFAR model is particularly fitted to contexts where smaller entities form a significant portion of the demand side for services and products, and where there exists a corresponding supply side comprising diverse product and service providers. This includes a range of retail and service provider establishments, like beauty clinics, bakeries, restaurants, and retail in general.

This study presents an evident limitation: it is a case study focused solely on the experience of a single and unique organization operating within the Brazilian

business environment. The research does not encompass information on other types of businesses beyond drugstore chains and their suppliers of products and services. Additionally, the study does not address multilateral platforms in other countries. While the focal multilateral platform may potentially be effective in other business sectors and national contexts, it is clear that the specific characteristics of each market could influence the effectiveness of a multilateral platform like the one described. Therefore, it is evident that the results of this research cannot be generalized.

In terms of future research directions concerning multilateral platforms, there are numerous possibilities. Proposed areas for future investigation on multisided platforms akin to FEBRAFAR include, but are not limited to, the following:

FEBRAFAR is a multilateral platform that leverages technology to support its operations and those of its participants. However, FEBRAFAR is not a digital platform per se. Despite this fact, one can envision a transition of the FEBRAFAR platform toward a more digital format, with increased service automation and a more automated process for affiliating drugstore chains (demand side) and suppliers (supply side). This could be particularly important in economic sectors where demand-side players are simpler entities unable to afford significant platform fees. In this context, digitalization of the platform may present an attractive option. In such context, identifying the critical success factors for creating a more digitally inclined platform is a crucial task.

The study did not identify issues regarding opportunistic behavior within the FEBRAFAR's multisided platform, nor did it detect sophisticated formal mechanisms for dispute resolution among participants. However, this does not imply that such issues should not be addressed through rigorous scientific analysis to get to a better understanding on how to prevent conflicts.

A crucial aspect underlying FEBRAFAR's success is its knowledge regarding drugstore management, product distribution, and service provision. With the emergence of new artificial intelligence technologies, the role of this new technology will be an undeniably important research topic.

Currently, FEBRAFAR operates nearly as a monopoly within its market niche, facing minimal competition. However, as one of FEBRAFAR's directors has indicated, initiatives for similar platforms are emerging.

This suggests that future competition is likely, rendering the study of competition among similar platforms a compelling area for research.

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