The Intersection of Collaboration, Cooperation, and Coopetition Strategies and Strategic Management Models

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Abstract. This article starts from the strategic management models with their intersections between collaboration, cooperation and coopetition, within the perspective of strategy as practice. It is necessary to incorporate in its analyses elements of strategic thinking, given the relevance of identifying the perceptions of these organizational actors and the impact of these on the strategy formation process. The objective is to discuss the confluences between strategic management theories and the approach of alliances in creating value for companies. This is a theoretical essay constructed from theoretical considerations originating from the scientific production of the main authors in the field of strategy. Empirical articles were captured and discussed as a way to evidence the importance of strategic alliance models (collaboration, cooperation and coopetition) in the development of strategies that lead to value creation and competitive advantages in companies.

Keywords. Resource-Based View. Dynamic Capabilities. Strategic Alliances.

1. Introduction

Since the 1980s, the technological context has given prominence to the construct to explain business strategy considering what it was to compete and cooperate at the same time (RUSKO, 2011). Since then, studies on strategic alliances have expanded with a focus on theoretical issues such as definitions and conceptualizations, and expansions of the effects of alliances on the creation of competitive advantages, where the process of formation, maintenance, and use of alliances is discussed, with special emphasis on the industry environment (MESQUITA et al., 2017). In the context of interorganizational alliances, the valuation of the 3 Cs (competition, collaboration, and/or cooperation) results from the activities implemented by companies as responses to current challenges in business environments. According to Polenske (2004), business analysts realized that the competition for profit maximization was the ideal behavior of a company in the business game, however, cooperation and collaboration are necessary for the success of organizations. In the corporate world, alliances and partnerships are necessary for the success of a company, regardless of its niche. For this, organizational strategies are necessary for interorganizational or intraorganizational development. The strategic management literature presents at least two paths for a company to create advantages based on competitive strategies: Porter's (1986), which analyzes the behavior of products in the market (external factors), whose vision focuses on the company's positioning in the industry; the second, focuses on the resources and capabilities that companies hold (internal environment), as proposed by Barney (1991) and Teece et al. (1997). In both, the interaction strategies of companies or sectors within them are relevant aspects to expand competitive power (Gomes, 2016). There are two other approaches that elaborate, adopt, and restrict the use of a strategy. The first approach results from the alignment between practices, their development (praxis), and the authors of these practices (practitioners), as is the case in the approach of strategy as practice (VAARA and WHITTINGTON, 2012). The other approach is the Practice-Based View (PBV), which investigates how management practices influence and explain the performance differences between companies that may have access to the same resources (DE CARVALHO, et al., 2019). In this context of connections between theoretical approaches to management practices and the role of strategic alliances, this essay aims to discuss the confluences between strategic management theories and the approach of alliances in creating value for companies. The relevance of the study is justified, since the strategic management of organizations is necessary for both large and medium and small enterprises. Small and Medium Enterprises are considered more proactive and capable of conceiving strategies in which the participation of stakeholders is central to the success of the performance of tables, while large ones find barriers to defining and implementing successful strategies (DARNALL et al., 2010). If, on the one hand, SMEs have a greater barrier to implementing these actions due to financial limitations, knowledge, and capabilities; on the other hand, the intensity of relationships (collaboration, cooperation, and coopetition) of SMEs leads to knowledge gain, in addition to these organizations being more agile in responding to market changes (BUFFA, et al, 2018). These same authors point to the fact that SMEs informally resolve issues related to the application of sustainable practices. However, SMEs develop fewer voluntary environmental and social initiatives (UDAYASANKAR, 2008) due to lower visibility, scale of operations, and the low level of qualification of human resources.

2. Theories of Organizational Strategic Management

Strategy can be understood as the elaboration of a plan; a series of guidelines for negotiating a situation; a stratagem; a trick used with the intention of deceiving an opponent; the consistency of a behavior, whether intentional or not; the position of an organization in its environment, considering one or more competitors or the market in which that organization operates; the concept that governs the collective thinking and behavior of its members according to Mintzberg (1987). In this sense, strategy can be planned and implemented, and there are also emergent ones, in which patterns develop in the absence of intentions or despite intentions, and which arise due to various factors that the company has to experience.

The following presents approaches to strategic management based on positioning, resource endowment, practices, and those defined as emergent, highlighting the assumptions, conceptual differences, and complementarity between the approaches.

Theories for value creation based on resources and practices

Competitive strategy is related to the search for frequent changes in the company's position in its sector relative to competitors, and its formulation must consider the company and the industry in which it competes (PORTER, 1997). This theory is anchored in the assumptions of industrial organization theory, which explains the profitability of companies considering the structure of the market in which they compete according to the Structure-Conduct-Performance (SCP) analysis model.

In the 1930s, Mason (1939) investigated the relationship between the company's environment (structure), its behavior (conduct), and its performance. Bain (1956) carried out an in-depth discussion on the role of barriers to entry, expanding the range of factors evaluated by empirical research and presenting the theoretical-analytical SCP model (BARNEY, 1997). Porter's five forces model prioritizes the analysis of the nature of competition, while the SCP model prioritizes structure, conduct, and performance, and the focus of study is the competitive environment of companies.

Although static, Porter's model expands the set of factors observed in the structural analysis of the industry. However, it does not make explicit reference to the governance system (how companies relate to acquire inputs, technologies, production in cooperation, tied purchases, among other forms of relationship between companies in a production chain, an important condition for the good relationship of the links of the production chain). This, in part, occurs due to the basic characteristic of this model, which focuses on analyzing the product market and is concerned with barriers to entry and the evaluation of the company's positioning.

Porter and Kramer (2006) present the strategic approach of creating shared value, an advanced and outside-the-box thinking of the neoclassical economy that underpinned the models oriented by the school of industrial economics. In it, the authors are concerned with how society can be part of the process of creating value for products, that is, how to include them in the markets since part of the planet's population is excluded from productive processes or when they participate they receive paltry values compared to those perceived by large corporations, which disregard the interdependence between the business of companies and society. In this strategic approach to value creation, there is the formation of a network of alliances that involves public agencies, research institutes, and manufacturing companies (GALLEAR et al, 2015), as shown in figure 01.

3. Figures

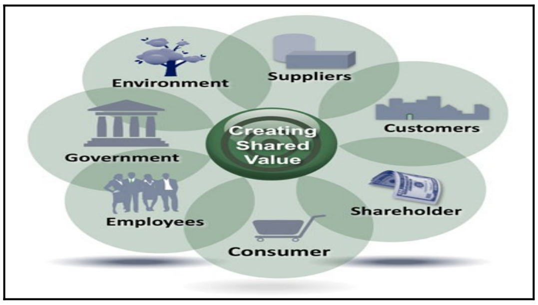

Fig. 1 - Figure Representation of factors in shared value creation.

Source: Samarth Dargan (2014). Retrieved from .

Shared value creation can be understood as a strategic management approach where trust-based relationships extend beyond the transactional environment and contribute to the formation of alliances through collaboration, cooperation, or coopetition. However, this approach has been criticized for being a vague concept, lacking a clear operationalization and suffering from inconsistencies in its definition and implementation. Some argue that the term is more of a buzzword or jargon than a concrete concept (DEMBEK, et al., 2016).

Shared value creation generates a competitive advantage and reduces disadvantages by establishing trust-based relationships that extend beyond the transactional scope. Advantages arise naturally as process actors perceive themselves as part of an integrated value chain (NETO; NEIS; PEREIRA, 2016). In opposition to the model focused on the industry structures in which a company competes, starting in the 1980s, an alternative view emerged that shifted the focus of research from the sources of competitive advantage to the company's internal environment, providing a more technical approach to competitive advantages (VASCONCELLOS AND BRITO, 2004).

Dentifying the sources and mechanisms for maintaining competitive advantages is the foundation of the Resource-Based View (RBV). The analytical logic is that the resources and capabilities controlled by a company serve as sources of competitive advantage. These resources are considered strengths or weaknesses of the company (WERNERFELT, 1984; BARNEY, 1991). Resources are defined as tangible and intangible assets controlled by the company and used to create and implement strategies. Capability is understood as a subset of a company's resources used to coordinate and exploit other resources it controls (BARNEY, 1996).

These resources can be classified into financial – money that companies can use to conceive and implement strategies; physical – production plants, equipment, geographic location, and access to raw materials; human – referring to the company's human capital, their experiences, specialties, relationships, and managers' perceptions; and organizational – a collective attribute of individuals and requiring an administrative framework, planning, systematic coordination, and informal relationships (PENROSE, 1959; BARNEY, 1996).

The two fundamental premises of RBV regarding the resources and capabilities a firm can control are resource heterogeneity and immobility. The first premise posits that firms differ in their possession of distinct bundles of resources and capabilities. The second assumes that these resource and capability differences are costly due to the difficulty of transferring these resources (BARNEY, 1996, 2011).

The theoretical construction of RBV is based on three perspectives that discuss the importance of internal resources considering the weaknesses and strengths in developing strategies with the objective of creating and maintaining sustainable competitive advantages: the emphasis on firms' distinct competencies; the economic principle of land with different levels of fertility, conceived by David Ricardo in 1817, which helps explain heterogeneity and the difficulty of imitation; and the theory of firm growth developed by Edith Penrose in 1959 (BARNEY, 1996).

According to Barney (1996), studies on distinctive firm competencies and their relationship to superior performance were developed at the Harvard Business School in the first decade of the 20th century, assuming a causal relationship between managerial decisions and their effects on performance. Institutional leadership helps create a vision in the organization around which its members can unite to organize and structure the company. The organizational vision combined with the organizational structure contributes to defining the firm's distinct competencies, which are those that it does better than any of its competitors (BARNEY, 1996).

The view of the firm as a broad set of productive resources was introduced by Penrose (1959), with the aim of understanding the process through which firms grow and the limits of that growth. The central argument is that firms should be analyzed as an administrative structure that interconnects and coordinates the activities of numerous individuals and groups, that is, the firm should be understood as a bundle of productive resources. In this sense, Teece (2007) states that an organization's capabilities adapt a company's resource base to the evolution of customer demands and market trends, and allow the company to shape its environment through innovation and collaboration with its customers and other key players (TEECE, 2007), which can be achieved through shared processes.

Interorganizational Strategies through Alliances (Collaboration, Cooperation, and Coopetition)

Interorganizational strategies involve the performance of common tasks or activities among two or more companies, whether they operate in the same organizational environment or in a different one. According to Winckler and Molinari (2011), collaboration and cooperation are two different concepts, with the same strategic objective of creating competitive advantages.

The main interest of alliances is to achieve common, rather than individual, objectives through collective actions. Through strategic alliances, networks, and other partnerships, companies seek to improve their performance, as resources, capabilities, and risks can be shared (GNYAWALI AND PARK, 2011). The intersection between intra-organizational relationships seeks success among the economic activities of cooperation, collaboration, and coopetition in pursuit of new challenges, qualifying the service or product in the link between companies within a value chain. In this sense, it can be inferred that this triad between collaboration, cooperation, and coopetition has always existed among companies.

Interorganizational collaboration plays a prominent role in corporate strategies in the face of accelerated change and high business uncertainty in a globalized market, where the level of competition transcends territories, types of organizations, and products consumed by citizens and companies operating in the most diverse economic segments.

For Crowley and Karim (1995), partnership means solving interorganizational problems considering attributes such as trust, shared vision, and long-term commitment; and by the process in which the partnership continues to be seen as a verb, as the development of a mission. Thus, companies do not survive and thrive solely through their own individual efforts, as performance improvement depends, to a large extent, on the performance of other companies, the nature, and the quality of the direct and indirect relationships they develop (WILKINSON AND YOUNG, 2002).

There is a great similarity between collaboration and cooperation, both referring to relationships between actors in the public or private sectors, which may or may not have competitive ends, with varying durations, and which depend on the context in which they are inserted, but there is a difference between the concepts, according to Polenske (2004).

One of the greatest challenges in the field of modern social sciences is to understand the origin and evolution of cooperative behavior. Among various theories such as multilevel selection, reciprocity, cultural group selection, kin selection, game theory is the most relevant of these theories, in which agents are based on simulations, assuming, as a rule, a simple structure of returns and a small set of possible strategies (BURTSEV AND TURCHIN, 2006).

There is a cooperative relationship when two or more actors agree, through formal or informal arrangements, to share information, define managerial support and technical training, supply capital and/or provide market information. The relationships between actors are generally external and horizontal, for example, actors do not work together in the design, production and/or commercialization of a product or process (POLENSKE, 2004).

Between cooperation and collaboration, it is considered that there are differences, that in cooperation there is a difference in the purpose of the action, without benefits for both, without framing and without a sense of reciprocity. Collaboration generates the benefit for one of the partners, or as a hierarchical relationship being a vertical hierarchy. The issue of verticality and horizontality within strategies, according to Polenske (2004), are differential aspects between collaboration and cooperation. Verticality is seen in collaboration actions and horizontality is seen in cooperation actions. Cooperation is based on a horizontal level, with similar or different motivations among partners, which generates mutual benefits with reciprocity and positive results for the partners.

The theory of coopetition is an emerging strategy regarding the behavior of competitive cooperation between companies, that is, they cooperate to achieve a certain goal and compete when it comes to dividing the gains. (NALEBUFF AND BRANDENBURGUER, 1996). Examples: the coopetition between Finnish and Swedish industries (BENGTSSON AND KOCK, 2000), the analysis of intra-organizational coopetition in multinational firms (TSAI, 2002), the typology of coopetition based on inter-firm dynamics for value creation (DAGNINO AND PADULA, 2002) and the identification of critical success factors in coopetition strategies in Hong Kong (CHIN, et al., 2008).

The coopetition strategy was strongly used in the 1990s and returned in the first two decades of the 2000s, several authors are based on economic dimensions, cost theory and transaction (RITALA AND HURMELINNA-LAUKKANEN, 2009), institutional economics (MIONE, 2009), game theory (RITALA AND HURMELINNA-LAUKKANEN, 2009; RITALA 2012) and the resource-based view (MENTION 2011; RITALA AND SAINIO 2014), as well as the theory of dynamic capabilities (M' CHIRGUI, 2005), organizational theories with organization, learning and strategy (EG LUO et al. 2006; MARIANI 2007) and social network theory (TSAI 2002; GNYAWALI et al. 2006).

4. Tables

Table 1 summarizes the dimensions of the strategy addressed in this essay, consumer behavior, meaning and objectives presented by Winckler and Molinari (2011).

Tab. 1 - Table 1 – Attributes of Competition, Cooperation, Collaboration, and Competition Strategies.

Strategy	Actor Behavior	Direction	Objectives
Competition	Competition/ Rivalry	Horizontal	Individual gains
Cooperation	Reciprocity	Horizontal	Shared gains
Collaboration	Support	Horizontal or vertical	Individual gains

Coopetition	Competition + Cooperation	Horizontal	Shared gains

Source: Winckler and Molinari (2011)

In interorganizational strategies, there are difficulties, with opportunism, lack of communication, effort, and commitment on both sides of the transaction, both internally and externally, causing a negative effect of coopetition on performance and innovation.

For example, Fujifilm and Kodak competed with each other but cooperated to solve the problem of disposing of disposable camera waste, accepting each other's cameras. This helps reduce the collection cost for each organization and expand the market for disposable cameras. Both compete for the product or service with the highest quality and greater added value.

Another example was the shortage of microchips for cars during the Covid-19 pandemic, which Taiwan could not produce due to a lack of water, one of the components that make up the microchip, and the pandemic further exacerbated the shortage in the world market. Faced with this situation, China joined the World Trade Organization and opened its markets to foreign countries (DANGAYACH AND DESHMUKH, 2001).

5. Discussion

The set of theoretical approaches to strategies for creating value and competitive advantage is anchored in different approaches, including strategies based on the company's position in the market, developed by Porter (1986) and expanding the analysis factors of structures from the five forces model for companies to maintain or gain market share through cost leadership or product differentiation, different from the initial model of the theory of industrial organization economics, in which the analysis of competition and leadership position is formulated from the causal relationship between Structure, Conduct, and Performance (SCP) developed by Mason (1939) and Bain (1956), in which Gomes (2003) proposes a systemic analysis of competitiveness, integrating the SCP models and the five forces.

It should be emphasized that these models have as common assumptions the homogeneity among companies in an industry and incorporate the analysis of the relationship between companies as emphasized by Gomes (2003) in the proposal of the systemic analysis model of competitiveness, which analyzes factors at the micro, meso, macro, and meta levels, and points to technological cooperation as a factor to be considered to assess the company's insertion condition in the market, especially the external one. In the study on the Industrial Structure and Competitiveness of Wood Companies in the State of Pará, 2001, the author states that interorganizational cooperation in the timber industry raises the level of collective learning, knowledge in the industry, technological innovation and, finally, states that micro and small enterprises are the most threatened in this industry due to the low level of cooperation between these companies and medium and large ones, in which the latter are the ones that benefit the most from interorganizational cooperation.

In 1986, Porter focused his gaze as an academic researcher and business consultant on the company's environment and shed light on the value system of each link in a production chain, defined as a company's value chain, which shows the process of creating a competitive advantage. In this system, the author argues that the company maintains relationships with other companies that have the potential to increase the degree of benefit perceived by consumers through the identification of resources, competences, capabilities, and thus, the increase in the company's profitability. For Porter (1985), one way to improve a company's position is to employ strategies based on increasing the quality of raw materials, low-cost and sustainable logistics, and relationships based on trust and reciprocity obtained from collaboration and cooperation strategies.

The instability present in strategic alliances is largely due to the occurrence of fraud, unpredictable behaviors, and weak stability, warning that the structure is directly linked to performance. With the combination of results with the process, a new structure or another dimension of analysis is developed linking practice, praxis, and practitioners with the organization's results.

De Souza (2021), when investigating the construction of dynamic capabilities in hospitality organizations in the context of the COVID-19 pandemic, identified, from structured interviews, that companies in the restaurant segment built processes that led to the creation of new knowledge, such as the implementation of new services that are present in other economic activities and that had to adapt internal procedures to meet the sanitary requirements of the COVID-19 pandemic to ensure customer confidence. In this process, the exchange of experiences with competing companies was essential to establish informal relationships that contributed to the company's ability to make the necessary adjustments to form adaptive capacities.

De Souza et al. (2021), analyzed the production processes, product quality, and environmental preservation developed by small producers associated with Cooperativa D'Irituia, in the municipality of Irituia (PA), to include themselves as suppliers of Tucumã (Astrocaryum Vulgare Mart.), an input commercialized with the cosmetics company Natura. In the light of the shared value chain approach, it was possible to observe that the cooperation between the actors in the process enabled the transfer of knowledge and technology that resulted in the standardization of processes and the practice of maintaining the forest and ecosystems.

Given the foregoing, it is possible to show the confluences between the strategies of collaboration, cooperation, and coopetition and the traditional models of strategic management, in which these emerging models of strategic alliances potentiate the structuring of the analysis models to find answers to the main question of the strategic management area, of why similar companies in the same sector present different performances?

6. Conclusion

The strategic management approaches incorporate collaboration, cooperation, and coopetition strategies as mechanisms used to break down barriers to entry into economic sectors through technology transfer or innovative management processes necessary for the creation of new resources and capbilities, through learning mechanisms and transformation of company routines.

Alliances enable the adoption of resource-based strategies and the development of shared chains that execute inclusive processes, in which medium and large companies benefit the most, despite the difficulty of executing these cooperations or coopetitions to create competitive advantages.

The dynamism of some markets imposes on companies the development of new routines, competences, and capabilities obtained from processes of adaptation, reconfiguration, and integration carried out by companies. This shows the importance and necessity for companies to establish alliances as a way to leverage their possibilities of creating competitive advantages.

The proposal of this theoretical essay invites a reflection on the confluences between strategic management theories and the approach of alliances in creating value for companies, highlighting the importance of strategic alliance models (collaboration, cooperation, and coopetition) in the development of strategies that lead to the creation of value and competitive advantages in companies. Understanding that the topic is of great relevance for understanding and building organizational strategies

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