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Research article

Organizational innovation capabilities. Empirical evidence from B2B contexts

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Abstract
The aim of the article is to explore organizational innovation capability variables that could have an impact on performance in business to business (B2B) context. This work used systematic analysis of the literature supported through bibliometric analysis indicating the following organizational innovative capabilities: innovation strategy and management projects, collaborative networks and market orientation. The authors propose an explanatory model and provide empirical evidence from B2B sector in Chile, surveying 242 senior executives. The best position was the mining sector. However, all the sectors studied need more emphasis on market orientation, value co-creation and innovation to obtain better and more sustainable results.

Keywords: organizational innovation capabilities; market orientation; collaborative networks; innovation strategy; management projects.

Capacidades de innovación organizacional. Evidencia empírica en contextos B2B

Resumen
El objetivo del artículo fue explorar los efectos de las capacidades de innovación organizacional que podrían afectar el desempeño en un contexto business-to-business o B2B. Se realizó un análisis sistemático de la literatura utilizando un análisis bibliométrico sobre las siguientes capacidades de innovación organizacional: estrategia de innovación y proyectos de gestión, redes colaborativas y orientación al mercado. Los autores proponen un modelo explicativo y proporcionan evidencia empírica desde el contexto B2B en Chile, a partir de 242 encuestas realizadas a altos ejecutivos. La mejor posición fue la del sector minero. Sin embargo, todos los sectores estudiados necesitan más énfasis en la orientación al mercado, la co-creación de valor y la innovación para obtener mejores resultados sostenibles.

Palabras clave: capacidades organizacionales de innovación; orientación al mercado; redes colaborativas; estrategia de innovación; proyectos de gestión.

Capacidades de inovação organizacional. Evidência empírica em contextos B2B

Resumo
O objetivo do artigo era explorar os efeitos das capacidades de inovação organizacional que podem afetar o desempenho em um contexto *business-to-business* ou B2B. Foi realizada uma análise sistemática da literatura por meio de uma análise bibliométrica sobre as seguintes capacidades de inovação organizacional: estratégia de inovação e projetos de gestão, redes colaborativas e orientação para o mercado. Os autores propõem um modelo explicativo e fornecem evidências empíricas do contexto B2B no Chile, com base em 242 pesquisas realizadas com executivos seniores. A melhor posição foi a do setor de mineração. No entanto, todos os setores estudados precisam de mais ênfase na orientação para o mercado, cocriação de valor e inovação para melhores resultados sustentáveis.

Palavras-chave: capacidades de inovação organizacional; orientação de mercado; redes colaborativas; estratégia de inovação; projetos de gestão.

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1. Introduction

Organizational Innovation Capabilities in Business to Business (B2B) contexts focuses on developing strong innovation strategies as well as creating sustainable competitive advantages (Schmidt, Sarangee, & Montoya, 2009). Even so, to profit from innovation, business pioneers need to understand business design options as well as customer needs and technological trajectories.

Without a well-developed business model, innovators fail to capture value from their innovations, and studies claim that planning and controlling business models will be determined by the capabilities of the company (Teece, 2010). In this context, the B2B sector in Chile has not exploited innovation to its full. Although Chile remains the most innovative economy in Latin America (LATAM) according to Global Innovation Index (GII) it went from being 44th globally in 2016, to 46th in 2017. The positions of Latin American countries do not vary over time, versus other areas where there is greater dynamism. In fact, the Global Innovation Index (2019) again declared Chile as the most innovative country in Latin America, despite having fallen 4 positions from 47th in 2018 to 51st in 2019. This time, our country stood out as a regional leader, followed by Costa Rica (56), Mexico (57), Uruguay (62), Brazil (66), Colombia (67), Peru (69) and Argentina (73).

Consequently, the purpose of this research is firstly, to explore the variables of organizational innovation capabilities associated with better performance. Secondly, to analyze the impact of these variables on organizational innovation. Thirdly, to validate if there is any significant relationship between the variables and the outcomes of innovation processes and performance through empirical evidence from the B2B contexts in Chile.

The main contributions are: 1) To propose a conceptual model that includes three main constructs related with organizational innovation capabilities (valid and reliable variables) and 2) provide empirical evidence regarding the B2B sector in Chile. Thus, this work will provide a diagnosis about organizational innovation capabilities in order to guide future research and organizational developments in marketing innovation processes for different industrial sectors.

Therefore, the research is as follows: The first section illustrates a theoretical framework through systematic content analysis, as proposed by Becheikh, Landry, and Amara (2006), and present the literature review about the relevant variable of proposal model and hypothesis. The second section describes the methodology used in the study. The third section shows the principal results. Finally, in the last section, the most relevant conclusions and future research are presented.

2. Theoretical framework

The main role of innovation is to contribute to business survival, stimulate the growth of new job opportunities, improve business competitiveness, and contribute to the growth and productivity of the company (Pino, Felzensztein, Zwerg-Villegas, & Arias-Bolzmann, 2016). In fact, the design and development of successful business models come from diverse and powerful capabilities, and innovation is one of these core dynamic organizational capabilities (Teece, Pisano, & Shuen, 1997; Sanchez, 2004).

For Wang and Cheng (2013), organizational innovation capabilities are described as the capabilities to generate changes to reinforce existing services or products to innovate changes that could significantly transform the organization. Therefore, "soft innovation" is seen as an increasingly significant element in the service sector in modern economies. Currently, its contribution is recognized in organizational and marketing innovation and in different industries (Nicolas, Rojas-Mora, & Valenzuela-Fernández, 2020).

According to Tuominen and Hyvönen (2004), organizational innovation capability is composed of managerial innovation and technological innovation. Managerial innovation involves the development of new strategies and business forms, while technological innovation pertains to the development of products, services and processes interrelated with these business activities (Damanpour, 1991; Tuominen & Hyvönen, 2004). Both capacities have been shown to have different impacts on organizational performance and competitive superiority (Sanchez, 1995). Thus, technological capabilities are essential to add value for the client and management capabilities for the value appropriation process (value for the organization itself) (Mizik & Jacobson, 2003; Tuominen & Hyvönen, 2004).

Then a firm with strong organizational innovation capacity means it will have superior ability (compared to competitors) to combine, increase, and transform internal competencies to achieve changes in its business environment, creating and capturing value for the company and its clients (Teece, 2007).

In this way, a superior capacity for organizational innovation implies the existence of skills that should improve the performance of an innovation project (Srivastava, Fahey, & Christensen et al., 2001; Tuominen & Hyvönen, 2004; Zhao, Jiang, Peng, & Hong, 2021). In fact, the degree of a firm's capacity to innovate is measured by the performance of its innovation projects: development superior skills, successful financial performance and value adding performance (Srivastava et al., 2001; Tuominen & Hyvönen, 2004; Ernst, Kahle, Dubiel, Prabhu, & Subramaniam, 2014). In highly dynamic markets, the integration of these capabilities optimizes the production and efficiency of the company and allows it

to achieve higher performance of innovation due to the synergy between them (Salim, Ab Rahman, & Wahab, 2019).

Thus, to benefit from innovation in management and marketing, business pioneers must develop their organizational innovation capabilities to generate business models according to the client's needs and reality of the firm (Teece, 2010; Tuominen & Hyvönen, 2004), clearly define what they are main constructs related with these capabilities. These constructs should be multi-areas and will be a key factor in the creation and improvement of sustainable strategies, development of competitive advantages and the success of the organization (Teece, 2007; Teece, 2017).

On the one hand, literature shows that the innovation process requires the business model to create a system where innovation goes hand in hand with correct use and exploitation of knowhow and different (tangible as well as intangible) assets (Teece, 2017; Mousavi, Bossink, & Vliet, 2018). Besides, the new paradigm in business models follows the creation and capture of value for the firm and the customer (market orientation) and raises the need for structural reconfiguration of companies (Spieth, Schneckenberg, & Ricart, 2014). Such reconfiguration requires companies to develop the capacity for innovation through a collaborative process, to work and compete with government agencies and other companies (Brenes, Camacho, Ciravegna, & Pichardo, 2016).

In this scenario, this study postulates that innovation performance is related to the organizational innovation capability, which is a result of the decisions and objectives in relation to innovation strategy & management projects, collaborative networks, and market orientation. Other research highlights that these three factors are somewhat complementary and that by working together, the company could promote sustainability in its business models and its innovation projects (Bocken & Geradts, 2020).

2.1 Innovation strategy & management projects

The main objective of company operation is to achieve its objectives by using its own resources and capabilities to overcome challenges and difficulties, as well as, take advantage of opportunities that arise along the way. This way, the firm will try to ensure that its actions and decisions are carried out in the most adequate way to create value and profit (Amat, 1996; Djumanazarovna, 2020) through a defined appropriate strategy.

Strategic Project Management allows the organization to make decisions about designating resources for the central actions to evolve, where the efficiency of the operation will be influenced by those decisions and by the goals set. The strategy could be described as a logical combination of multiple elements, actors, components, and actions built as the optimal combination of factors, to work with a specific goal in a situation (Borges-Andrade, Escobar, Palomino, Saldaña, & Souza-Silva, 1995).

Hence, managing an innovation project in marketing today means much more than planning a sequential and interrelated set of activities. To implement such projects requires actions even before the formal phase of project development, linked to creating a favorable environment (Koen et al., 2001). Then, we can define strategic project management as a set of steps organized and adjusted to the requirements of the markets that allow orienting business action plans, and try to anticipate foreseeable events that could affect or impact the organization (Muralidharan, 2020; Hernández, Cardona, & Del Rio, 2017; Reid & Brentani, 2004).

For innovation to be successful, accurate diagnosis of the company's current situation is required to establish a realistic contribution that innovation can make in the organization (Hernández et al., 2017). With this objective, the capacity of management and strategic project development in companies play a fundamental role as this allows innovation to be managed through market surveillance, competitive and prospective intelligence, transforming the information obtained into useful input for decision-making (Aguirre, 2015; Hnatenko, Orlova-Kurilova, Shtuler, Serzhanov, & Rubezhanska, 2020).

Holtzman (2014) highlights the importance of promoting continuous innovation in the organization to create value by developing a portfolio of innovation capabilities. If a company aims to achieve a sustainable advantage through innovation, it is necessary to create an "internal DNA of innovation". On the other hand, Mazzucchelli, Chierici, Abbate, and Fontana (2019) point out that firms should focus on creating new programs and training employees to improve their creativity and attention on developing innovation capabilities for the organization.

Thus, the effectiveness of innovation strategies will be influenced by the capacity of the firm to be able to progressively build, allocate and replenish resources, develop and update them as necessary to innovate and respond to changes in the market (Teece, 2017). Snihur and Wiklund (2019) analyze the different types of innovation and search behavior in order to provide a better understanding of why managers must consider learning about the extensive diversity of innovation strategies across different industries and organizations. Therefore, it is possible to establish the following hypothesis:

- H1: Organizational innovation capabilities are positive and significantly related to innovation and strategic management projects.

2.2 Collaborative networks

A collaboration or association is the continual search for interactions between actors to maintain strong relationships, seek mutual benefits that could be economical or social links (Zaefarian, Henneberg, & Naudé, 2011). In this scenario, companies tend to integrate various groups of interest taking their needs into account for innovation and in corporate decisions (Baker, Grinstein, & Harmancioglu, 2015; West & Bogers, 2014; Balka, Raasch, & Herstatt, 2013; Scott, Hughes, & Hughes, 2016; Hienerth, Lettl, & Keinz, 2013). Thus, management competence and abilities in the association is the principal root of income and opportunities to increase profitability.

Organizations can relate in such a way that, without ceasing to compete, they consider cooperation as part of their strategy to achieve better performance, constituting the so-called knowledge networks (Becerra & Álvarez, 2011). Thus, successful collaboration can accelerate innovation processes or produce considerable business change (Diener & Piller, 2010).

Interactions founded on collaborations between parties conform extensive exchanges of resources and knowledge, which assume a collaborative position through strategies developed jointly among the participants (Hadjikhani & LaPlaca, 2013). Using networking capability, firms combine their abilities and resources (Mu, Thomas, Peng, & Di Benedetto, 2017). The value and capacity of a company as a collaborator is linked to its own assets, the association contributes and strengthens those internal competences as well (Valenzuela-Fernández & Peñaloza-Briones, 2019). The organizations intensify their ability to collaborate by constantly improving routines to generate a synergistic association (Nelson, 1990).

In this way, the notion of networks underlines two critical remarks. On the one hand, intra- and inter-organizational collaborations are not just a way of compensation of lack of internal skills and, secondly, they should not be considered as a sequence of discrete transactions.

This is especially relevant in B2B contexts. In the industrial sector, the vision of a relationship is oriented towards a longer term than the B2C sector (Barroso & Martín, 1999). B2B companies seek to generate stable relationships through superior value delivery, satisfying the needs of customers in all areas, which requires the integration of all units of an organization around a common goal: to deliver a product and/or service that attracts, and retains customers (Quesada & Ruiz, 2007). Thus, inter-organizational collaborations, where information and resources are exchanged, allow companies to benefit from the advantages of both knowledge integration and specialization, and subsequent innovation performance (Ritala, Olander, Michailova, & Husted, 2015). Therefore, the following hypothesis is deduced by this study:

- H2: Organizational innovation capabilities are positively and significantly related to the ability to generate collaborative networks (with agents of interest: customers and other stakeholders).

2.3 Market orientation

The nature of the environment where a firm operates, impacts the benefits and costs of innovation (Lavie, Stettner, & Tushman, 2010). In this sense, strategic marketing literature posits that market orientation contributes to developing the capacity to detect the market, a proactive disposition towards customer satisfaction, better management of knowledge, greater reception of ideas and a deeper level of connection that leads to superior organizational performance, being therefore, crucial to the success of organizational processes (Im & Workman, 2004).

This includes the perception of market orientation as an organizational culture approach or as a central part of the mission, vision, and values of the firm (Narver & Slater, 1990) and a point of view of the idea of creating intelligence, which identifies a succession of actions around information (Kohli & Jaworski, 1990). Therefore, the strategic orientation will contemplate the firm's philosophy in terms of business administration through several core values and beliefs that guide the firm's attempt to accomplish greater performance (Kirca, Jayachandran & Bearden, 2005). These core values and beliefs will determine the resources used by the firm, the outstanding individual capacities and resources and capacity to achieve cohesive whole (Day, 1994).

Therefore, market orientation is the principal cultural foundation of organizational capability of learning (Slater & Narver, 1995). Acquiring and sharing knowledge related to clients and competitors within a firm puts it in a good position to develop organizational learning. Ramirez, Parra-Requena, Ruiz-Ortega, and Garcia-Villaverde (2018) suggest that both external information and organizational innovation, could lead companies to take advantage and improve their marketing innovation. Moreover, this approach encourages a culture of experimentation and focus on constantly improving the firm's process and systems (Kumar, Jones, Venkatesan, & Leone, 2011).

The result of this learning should be to obtain improved capabilities to adapt to alterations in the nature/conditions of the business and develop abilities in the decision-making process resulting in competitive advantages (Sinkula, Baker, & Noordewier, 1997; Calantone, Cavusgil, & Zhao, 2002; Westerlund & Rajala, 2010). The analysis of dynamic innovation

capabilities indicates that more than just creating a sustainable advantage, they could also help companies to cope with challenges, difficulties or opportunities of an uncertain and constantly changing environment. These capabilities are crucial to support the adjustment of the firm's innovation strategies (Wang, Cao, Qin, Zhang, Feng, & Feng, 2019). A portfolio of innovation capabilities should have a healthy mix of disruptive innovations which are difficult to imitate in order to sustain an advantage in the long term (Holtzman, 2014). In this sense, a firm learns to assimilate, absorb, and deepen new and important information and abilities to continue competitive in the market (Kohli & Jaworski, 1990; Slater & Narver, 1999; Grinstein, 2008; Paladino, 2008). Thus, the following hypothesis is presented in this study:

- H3: Organizational innovation capabilities are positive and significantly related to the degree of market orientation that companies present.

Following, figure 1 presents the proposal of the conceptual model for this study and table 1 reveals information regarding the variables evaluated.

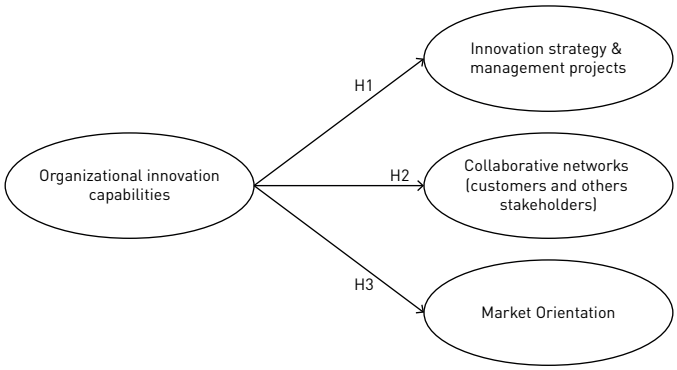

Figure 1. Explanatory conceptual model
Source: own elaboration.

3. Methodology

To find key factors of organizational innovation capabilities, the method of systematic analysis proposed by Becheikh, Landry and Amara (2006) is used in this study, which we use in this research to determine the relevant variables of organizational innovation capabilities. Additionally, the study is based on bibiometric studies in diverse areas of management (Podsakoff, MacKenzie, Podsakoff & Bachrach, 2008); innovation (Fagerberg, Fosaas, & Sapprasert, 2012); market orientation (Valenzuela-Fernández, Merigó & Nicolas, 2017) presented leading scholars and institutions in marketing journals (Chan, Lai & Liano, 2012); analysis of the journals in marketing and management which have stood out in the topic of innovation (Cancino, Merigó & Palacios-Marqués, 2015); marketing B2B (Valenzuela Fernández, Nicolas, Merigó, & Arroyo-Cañada, 2019) and the recognition of particular milestones in the lifetime of the journal to be showcased quantitavely (Martínez-López, Merigó, Valenzuela-Fernández & Nicolas, 2018; Valenzuela-Fernández, Merigó, Lichtenthal & Nicolas, 2019). In addition, the last criteria for the journals is that they must have at least 100 publications filtered by "marketing" and "innovation". This means that the journals had to be a good representation of innovation focused on management and/or marketing. To establish this distinction, the journals were ranked based on their H-index, from highest to lowest. This index was used not only because of its superior nature compared to other systems to evaluate scientific production, but also since the H-index is an easily calculable global impact (in terms of quality) indicator of a researcher's work (Martínez, Herrera, López-Gijn & Herrera-Viedma, 2014). To mention that the impact of a journal differs in the sub-areas they cover in marketing discipline, as a journal can be highly influential in one area, and less in another. Therefore, this ranking is only valid for the topic of innovation focused on management and/or marketing and cannot be extrapolated to other sub-areas (Baumgartner & Pieters, 2003). After that, we select a number of articles that cite these dimensions according to the top 5 journals, as shown in table 2.

To obtain empirical evidence from the B2B sector in Chile, this non-probability study used a self-administered structured questionnaire to collect data with closed questions using a Likert scale and Qualtrics software. 242 senior executives in Chile responded, most of them in managerial positions (56.2%) from Iron and Steel Industry (15.7%), Distribution (Supply) (15.3%), Mining (14.9%), Financial (14%) and Agroindustry (12.8%).

4. Results

Content validity was evaluated with scales validated for: market orientation (Narver & Slater, 1990; Kohli & Jaworski, 1990), collaborative networks (Faems et al., 2005; Christensen & Overdorf, 2000) and management and strategic project development (Adams et al., 2006; Artto et al., 2008; Stevens & Burley, 2003). Moreover, review of items by a panel of experts: researchers from the faculty of Economics and Business of the University of Chile and researchers from the Ibero-American Program of Science and Technology for Development (CYTED).

Exploratory factor analysis (EFA) in order to evaluate convergent validity. All standardized loads and k standardized coefficients were > 0.7. The results for α Cronbach's were > 0. 9 and explained variance > 60%. Average extracted variance (AVE = 0.613) and Compound reliability = 0.980. Divergent validity was corroborated by Difference Test x^2 significant and Interval of confidence. Following, table 3 reveals information regarding the variables evaluated.

Table 1. Variables of proposal model

Variable	Definition	Latent variable	Item	
Organizational innovation capabilities	Organizational innovation capabilities are described as the capabilities to generate changes to reinforce existing services or products and generate changes that could significantly transform the organization (Wang & Cheng, 2013; Nicolas, Rojas & Valenzuela, 2020; Tuominen & Hyvönen, 2004)			
Innovation strategy & management project	The ability to make decisions regarding the resources to be allocated for the main actions to take place, where the effectiveness will be influenced by such decisions and their objectives (Reid & Brentani, 2004).	Innovation strategy (Adams, Bessant, & Phelps, 2006; Merchant, 1985; Trott, 2002; Zien & Buckler, 1997; Bonner, Ruekert, & Walker Jr., 2002)	Str1	Consider innovation in long-term strategic planning
			Str2	View innovation as a key to competitiveness
			Str3	Communicate internally (workers, shareholders) issues of innovation
			Str4	Communicate externally (suppliers, customers) issues of innovation
		Management project (Simons, 1995; Artto, Martinsuo, Dietrich, & Kujala, 2008; Bonner et al., 2002; Adams et al., 2006)	MP1	Consider expected cost of innovation
			MP2	Consider a control system
			MP3	Encourage multi-area participation
			MP4	Plan the allocation of resources for innovation
Collaborative networks	The ability to collaborate inter-organizationally, share risks, resources and competences, unify skills, foster joint solutions, co-create value and others (Vargo & Lusch, 2010, Uzzi, 1997).	Customer collaboration networks (Faems, Van Looy, & Debackere, 2005; Christensen and Overdorf, 2000)	Cus1	Contact with clients for innovation
			Cus2	Cooperate with clients to innovate
			Cus3	Maintains permanent openness to know the evaluation of customers
		Stakeholder collaboration networks (Faems et al., 2005; Damanpour & Wischnevsky, 2006)	Sta1	Establish contact with suppliers to develop activities to develop innovation
			Sta2	Contact educational institutions to innovate
			Sta3	Cooperate with suppliers to innovate
Market Orientation	Market detection capacity, better reception of ideas and superior performance (Im & Workman 2004).	(Narver & Slater, 1990; Kohli y Jaworski, 1990; Ruekert, 1992)	MO1	Identify their knowledge and key competences
			MO2	Manage knowledge transfer internally
			MO3	Identify current and future customer needs
			MO4	Identify competitor innovation

Source: own elaboration.

Table 2. Number of articles in journal leaders (according H-index) that have mentioned the dimensions

Journal	Innovation strategy and Management Projects	Collaborative networks	Market Orientation
Strategic Management Journal	11	9	16
Journal of Marketing	10	8	11
Management Science	5	9	12
Organization Science	10	6	16
Journal of Product Innovation Management	7	3	11
Total	43	35	66

Source: own elaboration.

Comment: Values significant at 0.001. Therefore, the hypothesis of this study has been verified by this sample. α: *Cronbach's Alpha* $-$ σ: *Standard deviation*

Based on correlation results, H1 is verified, that is, Organizational innovation capabilities are positive and significantly related to innovation strategy & management projects (β1=0.92; p<0.01). The most common incidence variables are related to establishing clear objectives about the innovation project and encouraging the involvement of various functional areas of the firm in strategic projects. H2 was also supported, that is, organizational innovation capabilities are positive and significantly related to the ability to generate collaborative networks (with agents of interest: customers and other stakeholders) (β 2=0.843; p<0.01). The role of customers and suppliers is highlighted above other agents of interest (NGOs, public institutions, other companies, among others). Finally, H3 was also corroborated, that is, organizational innovation capabilities are positive and significantly related to the degree of market orientation that companies present (β3=0.869; p<0.01). The most common incidence variables correspond to recognizing the client's present and future needs. In general terms, collaboration is the least common incidence variable from the respondents' perspective. Although, it is observed that all the variables are related to establishing relationships. However, the long-term focus is lost in terms of a joint collaborative development and focus on the most direct agents (workers, customers and suppliers).

Table 3. Main results order by standardized coefficient

Variable	α-σ	Standardized coefficient	R square
Innovation strategy & management project	α:0.920 σ:0.48	0.968	0.937
Market Orientation	α:0.869 σ:0.63	0.950	0.903
Collaborative networks	α:0.843 σ:0.46	0.611	0.373
Variable		Standardized coefficient	R square
Customer collaboration networks		0.922	0.850
Management project		0.908	0.824
Stakeholder collaboration networks		0.903	0.815
Innovation strategy		0.841	0.707
Variable	Item	Standardized coefficient	R square
Innovation strategy	Str4	0.878	0.771
	Str2	0.871	0.759
	Str1	0.706	0.498
	Str3	0.803	0.645
Management project	MP3	0.913	0.834
	MP2	0.857	0.734
	MP1	0.843	0.711
	MP4	0.77	0.593
Customer collaboration networks	Cus3	0.656	0.430
	Cus1	0.652	0.425
	Cus2	0.520	0.270
Stakeholder collaboration networks	Sta1	0.804	0.646
	Sta2	0.768	0.590
	Sta3	0.711	0.506
Market Orientation	MO3	0.913	0.834
	MO2	0.857	0.734
	MO1	0.843	0.711
	MO4	0.770	0.593

Source: own elaboration.

Table 4 shows an average evaluation of the three dimensions for each sector. For instance, collaboration networks are measured as the least perfected capability, and management and strategic project development the most developed. The mining sector exhibit the best evaluation, while agroindustry the lowest, followed by the Finance sector.

Table 4. Organizational innovation capability index

Industry sector	Project development	Collaboration networks	Market orientation
Mining	6.9	6.1	7
Iron and steel	6.5	5.8	6.9
Distribution	6.5	5.5	6.5
Finance	5.6	6.3	6.2
Agroindustry	6.7	5	5.3
Other	6.9	5.9	6.7
Average	6.5	5.8	6.4
Standard deviation	0.48	0.46	0.63

Source: own elaboration.

In summary, this study highlights the role of market orientation, collaborative networks, and innovation strategy & management projects in organizational innovation capabilities. There is an exploration of the central variables related to innovation in management and/or marketing. A significant and positive impact of each of the variables found in the systematic analysis of the literature was detected, affecting the results of the innovation. Thus, the factors allow companies to reconfigure their assets and compete in current businesses.

5. Conclusions and future research

In general, this study evidences that it is the mining sector that presents the best evaluation in terms of innovation capabilities in management. This is even more outstanding when we consider innovation in long term strategic planning. However, there is still a way to go in terms of collaboration. On the other hand, the

Agroindustry sector has the lowest level, followed by the financial sector. In this sense, companies require greater focus on external analysis of clients and competitors that allows companies to increase the efficiency and effectiveness of their projects in this area. The mining sector has the best results in every variable.

Regarding variables, the most common variable is management and strategic project development and the least common incidence variable was collaboration networks, which is also true at a global level. It is also interesting to observe how companies have better results in areas related to client networks as compared to other agents; this shows a short-term perspective. In fact, the main motivators of innovation are still with a short-term view (sales), while the main inhibitors highlight the lack of cooperation and funds.

Through this work, a better understanding of the opportunities and challenges in the area has been provided (Van Raam, 1996), which allows specific issues to be identified and developed at a national and company level that can be used as a guide for any interested person -businessman, politician, scholar- (Kirca et al., 2005).Therefore, this research contributes to the growth of knowledge in terms of organizational innovation capabilities, by opening new research ideas.

Nevertheless, it should be noted that the sample is small compared to the reality in the Chilean industrial sector. However, the sample used in this work covers the central regions of our country to a greater extent and leaves out some important sectors of the Chilean economy, such as fishing and electricity. It establishes the need to research if the results are evident in other sectors, countries and regions. Also, the present declarative study is from a supplier's perspective.

Conflict of interest

The authors declare no conflict of interest.

Note

Part of this research was presented at CLADEA conference, 2017, organized by California State University, USA. And published in process 77 entitled "Overcoming the paradigms prevailing in innovation: case applied to the B2B sector in Chile" in number Innovation and Innovation Management, April 2018.

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