

Organizational Competitiveness: The Conceptualization and Its Evolution

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Abstract

The purpose of this article is to examine the conceptualization and evolution of the construct of Organizational Competitiveness. The present study analyzed the existing literature about Competitiveness between 2009 and 2018, starting with the theoretical proposals for the concept presenting the evolution during the last decade, variables affecting competitiveness both internal and external, dimensions and measurement proposal in order to study the progress of the construct of Organizational Competitiveness in different sectors. The analysis focused on recognized journals around the topic according to Scimago Journal & Country Rank (SJR) and the database of Scopus. The results of the present research show varied information about qualitative, quantitative and multidimensional approaches analyzed through the time, also the gaps around the topic, for promoting future research and a deeper consideration around a concept, that have an importance influence in the evolution of the companies.

Keywords: Organizational Competitiveness, Firm Competitiveness, Competitive advantage, Market Competition.

1. Introduction

The changeable environment, globalization and international competition demands complex requirements of companies. Competitiveness at the firm level, constitute an important matter for practitioners in order to create and develop abilities, a proper performance of resources and management of factors that influence the results in the market place. If a company wants to survive and being superior, obtaining sustainable competitive advantages and superior performance over competitors is crucial.

Different perspectives have analyzed the concept, but in general, studies can be divided into two major literature streams, the industry based perspective or the resource based approach. Based on the above, researches establishes competitiveness as a dynamic construct, which is influence by several factors. The factors could be controlled and non-controlled by the firm and represent the complexity of this construct. The challenge of companies is to identify the specific factors and to analyze how to manage them strategically (Camison & Fores, 2015). In literature, Organizational Competitiveness (OC) has been understood as a difficult construct for being measure, due to the lack of consensus in the method, several empirical researches consider OC as one-dimensional construct, while during the last decade, other authors understand OC as multidimensional concept.

In order to analyze the progress and nature of research in Organizational Competitiveness, and develop a study on the state of the matter, it has been realized a literature review of the 10 years (2009-2018) immediately prior to the development of this work. This paper aims to analyze the evolution of the construct during the last decade. Consequently, we have been able to verify publications in recognized journals in JCR about the research on this topic. The study used the electronic database Scopus, which is considered the largest database of abstracts and citation of scientific literature, and established three basic criteria: 1) the keywords used were “Organizational Competitiveness”,

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“Firm competitiveness”, “Competitiveness” and “Competitive advantages” which should be found in the title, summary or keywords of the publication. 2) The year publication should be between 2009 and 2018. 3) The subject areas in Business management and accounting, engineering, social sciences and economics, econometrics and finance. The search throw 119 articles fulfilling the criteria, but were excluded 25 articles for not finding the document.

The present article includes different sections; it will starts presenting some of the main definitions of the construct. Secondly, such conceptualization allows as identifying the different levels and approaches of competitiveness. Although competitiveness is a construct of different levels, the study focuses only on the firm level. Thirdly, the study analyze internal and external factors proposed by literature that mainly influence the development of this concept. Fourth, we analyze the main measurement proposals of the last ten years, including the description of the measurement, the variables, dimension and method used. Finally, comprehending the complexity of this concept, the authors present conclusions of the research.

2. Conceptualization of Organizational Competitiveness

Nowadays organizations face globalizations, faster environmental changes, higher competition and complex requirements of clients. This tendency of constant change, rivalry and open markets increase competitive pressure around all the firms that participate in the industry, introducing concepts such as innovation, flexibility and differentiation from competitors (Baker & Sinkula, 1999).

Academics and practitioners have studied competitiveness from different levels: National, regional or industry and firm level. The first level analyzed the competitiveness of a nation, which according to Porter (1980) focuses on the concept of productivity, with the objective of achieving a better level of life for residents of a nation. Another definition is proposed by the World Economic Forum (2017-2018), considering competitiveness at this level as a set of institutions, policies and determinants factors of productivity of a country. This level understands the construct from a macro-level. The second level, analyzed the Competitiveness as a region, industry or cluster, the objective is achieving a better performance and obtaining competitive advantages. These levels understand and analyze the importance of collective associations of people, companies and public institutions for developing competitiveness at this level (Ilpes, 2003).

Newbert (2008) defined competitive advantage as “*the implementation of a strategy not currently being implemented by other firms that facilitates the reduction of costs, the exploitation of market opportunities, and/ or the neutralization of competitive threats*” (p. 749). At this level competitiveness consider different factors that affects the results, such as innovation and technology (Kotler & Keller, 2009), Profitability, cost reduction and product differentiation (Camison & Fores, 2015; Kuo, Lin & Lu, 2017), among others. Below we present a timeline chart with some of the definitions proposed for the construct of organizational competitiveness.

Table 1: Conceptualization of Organizational Competitiveness (OC)

Proposal	Authors	Decade
For the author OC is having an advantage in market trends, managing better the supply chain according to trend in comparison with other competitors.	Ansoff (1965)	1960
OC is the capability to operate in the market in a strategic way based on the pressure of competition in the industry.	Porter (1980)	1980
The author considered OCas the capacity of design, produce and introduce products to international markets in competition with international firms.	Alic (1987)	
The authors affirmed that OC is the result of a better performance obtained through the organization capabilities and knowledge management.	Cohen & Levinthal (1990)	1990
OC depends of the ability to obtain sustained competitive advantages using different sources as capabilities, knowledge, processes, among	Barney (1991)	

Proposal	Authors	Decade
others.		
OC is the firm ability to compete successfully in global markets.	Kogut (1993)	
OC is a result of the performance of 5 factors: dependability, costs, flexibility, quality and speed. Achieving superior performance over the competitors in market.	Slack, Chambers & Johnston (1997)	
OC is a construct that leads to a competitive position through the relationship of the set of resources that a company may have.	Eisenhardt & Martin (2000)	2000
OC is a set of determinants that influence its performance. The determinants include: prices, costs, quality, technological and organizational improvements, efficiency, relationships among companies, public sector and academy, human capital and I+R+D.	Berumen (2006)	
The authors refer OC as having superior performance and capabilities in comparison with competitors.	Orozco, Serpell, Molenaar & Forcael (2014).	2010
OC refers to an ability of adapting to environmental factors while develop the company business successfully.	Sauka (2014)	
OC is an ability of a firm that keep or improve its competitive position and returns.	Camison & Fores (2015)	
OC is the ability of obtaining organizational value in the long term.	Zhu & Cheung (2017)	

2.1 Approaches of Organizational Competitiveness

Competitiveness is a complex concept that had called the attention of academics and practitioners due to the importance of developing this construct for survival to changeable environments and highly competition. In literature, there are different approaches for analyzing the competitiveness at the firm level; the industry-based perspective (Porter, 1980) and the Resource Based View (Barney, 1991) leads the main research streams in this topic.

The industry-based model analyzes the competitiveness at the firm level from the perspective of industry conditions that could generate competitive advantages and the Resource Based View examine competitiveness from the internal attributes and resources of a company as the way for achieving superior performances. Every stream research comprehends factors that may influence organizational competitiveness through the interaction with internal and external conditions.

Table 2: Approaches of Organizational Competitiveness

Model	Description	Attributes	Authors
Industry-based perspective	The model focuses on industry-base factors, analyzing how competitiveness is developed and strategically achieve. The model come from the traditional competitive analysis, which focus the attention to external factor or industry factors as a way of obtaining competitive advantages. Competitive strategies are the result of understanding the rules of competition of an industry.	Porter as one of the main contributors of this proposal. The author argued that competitiveness depends about the interaction of the five forces model. The five forces analyses external factors in the industry like entry barriers, power or influence of clients and supplies, rivalry among competitors or product substitutes. From the	Porter (1980, 1985); Bai & Sarkis, (2012); Bruno, Esposito, Genovese & Simpson,

Model	Description	Attributes	Authors
	In recent studies, focuses also in analyzing the value-chain (Bai & Sarkis, 2012; Bruno, Esposito, Genovese & Simpson, 2016), considering the importance of its management as a way to obtain competitive advantages in the industry.	value-chain is necessary to examine from the suppliers to the final client, in order to understand the value proposal. The model analyzes a position-based competition where competitiveness is led by the ability of maintaining and improving the position of the company from actual or potential competitors in the industry.	(2016).
A Resource-based approach	A resource based approach focus on internal recourses or attributes of a firm, and comprehends competitive positions as the efficacy on the use and interaction of specific capabilities or resources. From this approach is analyzed the firm's capital (Physic, human and organizational) which contributes as determinants of competitive advantages. According to Barney (1991, p.102) a firm have competitive advantages if <i>"it is implementing a value creating strategy not simultaneously being implemented by any current or potential competitors"</i> .	From the resource based approach, there are four attributes necessities for obtaining competitive advantages: *Valuable: Strategies implemented by the company needs to improve effectiveness. *Rare: Company resources that are not available to competitors. *Imperfectly imitable: it is difficult to imitate recourses of the company. *Non-substitutable: high difficulty for replacement. The model analyze the competitiveness form a possession-base competition where it depends of the possession of firm recourses.	Barney (1991)
Action-based perspective of competition	The action-based perspective analyzed the competitiveness from the entrepreneurial orientation and the agility that a firm may have, in order to respond and adapt faster to competitive and changing markets that makes competitive advantages obsolete. According to Madhok & Marques (2014) <i>"the ABP is instead value-driven in that the opportunities sensed and acted upon must offer a novel value proposition to the customer"</i> (p.78) For Eisenhardt and Martin, cited by Madhok & Marques (2014) <i>"Competing on action is more akin to the notion of dynamic capabilities"</i> (p.79)	This perspective analyzes competitiveness from a more dynamic nature, it does not focus on position in the industry of possession of recourses as a source of competitiveness, also does not focus on specific internal or external factors. The model is oriented to action, the agility of the strategy, if focuses on the activities that a company perform for creating value while assemble the recourses needed. Analyze the way company acts (activities and actions) where sense opportunities in a market.	Madhok & Marques (2014)
Game theoretic models	Some contemporary approaches analyses strategy from tactical plans, understanding the strategy of competition as a game.	These type of models do not focus on resources or industry factors as the previous approaches. Game theoretic models analyses the tactics used against competitors.	Veliyath & Fitzgerald, (2000)

2.2 Internal and external factors affecting Organizational Competitiveness

Organizational competitiveness is a complex construct, which can be influenced by several factors. Internal factors such as individual capabilities to operate strategically in a market derived from the pressure of competition from the industry (Porter, 1980). Also, by external factors that are not under the control of a company and that influence the way companies behave and operate in competitive markets (Kogut, 1993). In literature, it is found several propositions with the main factors of analysis, which lead to understand that:

“Competitive opportunities have been identified both inside firms (exploiting useful firm resources such as learning and knowledge of employees and speed and flexibility to carry out changes to adapt to the new environmental conditions; and decreasing costs) and beyond (securing a good reputation with stakeholders)” (Lopez-Gamero & Molina-Azorin, 2016, p.254)

2.2.1 Internal Factors of OC

Internal factors when analyzing organizational competitiveness, refers to processes, systems, human capital, structure, performance and organizational practices of every firm. Internal factors form an interaction of variables with the objective of being competitive through obtaining superior performance and sustainable competitive advantages. The internal factors evidenced in literature comprehends the factors of integration of supply chain, development of human capital, quality management, knowledge, financial and organizational management, sustainability, information and communication which constitute the base of any organization success. The way a company interacts with every factor inside the organization, influence the development of competitive advantages and performance, in comparison with the main competitors of the sector. Such factors become tools, paths, recourses and assets to be used strategically. Table 3, presents the internal factors that may influence OC.

Table 3: Internal Factors of OC

Factor	Variables	Description of Variables	Authors/Year
Integration	Supply Chain management	Some authors proposed that supply chain management influence organizational competitiveness based on the fact that supply chain performance activities that leads to value creation through different interactions until the product or service arrives to the client. A correct management of supply chain contribute to generate a superior performance and creates sustainable competitive advantages for improving the long-term position. Supplier selection as a part of the chain and value creation is crucial to enhance organizational competitiveness (Bruno, Esposito, Genovese & Simpson, 2016)	Ageron, Gunasekaran & Spalanzani (2012); Bai & Sarkis, (2012); Bruno, Esposito, Genovese & Simpson (2016).
	Managing Stakeholders	Stakeholders are a key element to achieve competitive advantages because they are a source of information that could be strategically used to obtain opportunities on the market, and helps to build a reputation of being a company that understand and value the stakeholders. A proper management of stakeholders can lead to a more competitive firm.	Harrison, Bose & Philips (2010)
Human Capital	Staff Performance	Human capital is an important factor that influence productivity and competitiveness of a company. Relationships inside the firm, training of high performance teams, enhancing different skills, abilities and involvement with activities and objectives contribute to value generation. Reducing the turnover rate, absenteeism and increasing job satisfaction impact cost (reductions), productivity at work, efficiency of process and positively influence organizational competitiveness.	Gil & Meyer (2013); Markova (2012); Porter (2003); Salem & Abdien (2017)

Factor	Variables	Description of Variables	Authors/Year
	Development of competencies	Some authors argue that organizational competitiveness can be achieved through the development of competencies, skills and abilities of employees. Companies should encourage a creation of a learning environment, in order to increase human resources performance as a way of obtaining competitive advantages in globalized markets. Implementing the correct strategy for development competencies of human capital impact in a significant way the organizational development.	Adhikari (2010)
	External Personal Networks	External personal networks are sources of unique knowledge about business, which become particularly important for organizational competitiveness, especially, for firms driven by technology.	Huber (2013)
Quality	Quality Management	Quality management is an approach that inspires high quality products, services and process, cost reductions, higher customer satisfaction, superior employee involvement in obtaining a better performance, and encourage the measurement of the results, influencing the sustainable competitiveness of a firm.	Ahuja, (2012); Vanichchinchai & Igel (2009); Yee & Eze (2012)
Knowledge	Knowledge Management	Knowledge is key for being a successful company. Different authors have argued that knowledge management influence positively organizational competitiveness through the ability to use knowledge for developing capabilities, innovation and offering superior added value to clients. A company that face competitive environments may exploit knowledge for meeting the market requirements, reducing risks, losses and obtaining superior performance than competitors. In order to endure, firms must continue to innovate and assimilate new knowledge so that the firm acquire competitive advantages and superior performance.	Chen & Lin, (2009); Setia & Patel (2013)
	Intellectual Capital	Intellectual Capital seen as the abilities, competences, know-how and knowledge of every person in the company, constitute the capital which can turn into competitive advantages contributing to superior performance and effectiveness in adapting and responding to environmental changes. Organization should inspire the knowledge development on their workers, as a force for building an intangible assets which leads to competitive advantages.	Vatamanescu, Andrei, Dimitri & Leovaridis (2016)
Financial Management	Reasonable and lower costs	In a determined market, a company could achieve superior performance over its competitors, thereby creating value and producing profitability for cost reduction or product differentiation.	Porter (1985); Kuo, Lin & Lu (2017)
	Profitability	A higher long-term performance and a sustained market share would be associated with the profitability that a company could achieve and could be a measure of its sustainable competitive advantages. Profitability plays a significant role in firm competitiveness with	Maury (2018); Voulgaris & Lemonakis (2014)

Factor	Variables	Description of Variables	Authors/Year
		companies from different sectors and sizes (Voulgaris and Lemonakis, 2014)	
	Financial capabilities	Financial capabilities integrate firm capabilities in order to deal with business activities and influence firm competitiveness. Based on the recourse view, financial capabilities allow access to key resources as equity capital, debt financing, corporate bond, funds, working capital necessary to enhance firm competitiveness. The access and correct management of recourse may produce advantages over competitors and helps companies to remain competitive in an industry.	Fonseka, Tian & Li (2014)
Organizational Management	Organizational Structure and strategy	The way an organization is structured should be a source of developing competitive advantages for companies. The design of process and structure characteristics aligned with the strategy of a company may lead to organizational competitiveness.	Hernaus, Aleksic, & Klindzic (2013)
	Organizational capabilities	The development and use of organizational capabilities should encourage and contribute to competitive advantages. Some authors have argued that learning orientation, knowledge derived from processes, innovation and strategy; influence the organizational competitiveness of the firm. The construction of those capabilities allows firms to obtain competitive advantages, which leads to superior performance in comparison with competitors. Kuo, Lin and Lu (2017) argued that organizations with dynamic capabilities could employ resources and integrated services in order to keep costs low and use assets to achieve competitiveness through viable advantages in a changing environment.	Torugsa, O'Donohue, & Hecker, (2012); Fraj, Matute & Melero (2015); Appiah-Adu, Okpattah & Amoako (2017); Kuo, Lin & Lu (2017); Schriber & Lowstedt (2015)
	Performance	One way to obtain or influence positively the competitiveness of a firm is increasing a company's performance. From the process view, it is seen that process structure creates capabilities leading to competitive advantages as a result of a value-added organizational performance (Saranga, George, Beine & Arnold, 2018). Others affirmed that higher long-term performance and a sustained market share would be associated with the profitability that a company could achieve and could be a measure of its sustainable competitive advantages.	Hinkkanen & Vaatanen (2011); Maury (2018); Saranga, George, Beine & Arnold, (2018)
	Productivity	An organization could improve its competitiveness by increasing productivity rapidly than competitors. Productivity is one of the goals that efficiency and efficacy of the processes developed by the firm, which enhance a better performance over the competitors.	Oral, Cinar and Chabchoub (1999); Eriksson & Lindgren (2009)
	Innovation and technology	Some authors have argued that innovation and technology have a positive effect on organizational performance. Empirical evidence has analyzed that innovation becomes strategic for achieving success, adapt and respond faster to environmental changes,	Al-Belushi, Stead, Burgess, 2015; Noble, Sinha, & Kumar, (2002); Fraj, Matute &

Factor	Variables	Description of Variables	Authors/Year
		developing new opportunities in competitive markets, and innovative for improving products, services, process, among others, increasing the level of competitiveness. Some authors have also argued that technology capability affects competitiveness of firms. The superiority on this capability leads to superior advantages. Innovation leading to reduction of materials or cost influence positively the firm's competitiveness (Ghisetti & Rennings, 2014). According to Kristianto, Ajmal, Tenkorang & Hussain (2012) a faster technology adoption generates flexibility (processes, product, operational and production) and upgrade operational competitiveness for creating entry barriers to competitors.	Melero (2015); Marques & Batista (2014); Appiah-Adu, Okpattah & Amoako (2017); Ghisetti & Rennings (2014); Kristianto, Ajmal, Tenkorang & Hussain (2012); Rodil, Vence, & Sanchez (2016)
Sustainability	Corporate environmental strategy and social responsibility	Some authors have argued that involving the company in reducing the impact on the environment through the use of different models, technologies and processes may lead to enhance profitability, competitive advantages and competitiveness of a firm. A sustainable business ecosystem could be a source of competitiveness through the social capital.	Chen, Wu & Wu (2015); Joo, Eom & Shin, (2017)
	Clean practices, products and technologies	Organizations face environments with higher requirements around the topic of sustainability. A firm that adapt clean practices and technologies successfully may obtain superior profitability and performance, influencing the organizational competitiveness. Products with a sustainable component, leads to the generation of added value which makes companies more competitive (Aschehoug & Boks, 2012)	Subramanian & Gunasekaran (2015); Aschehoug & Boks (2012); Tan, Ochoa, Langston & Shen (2015)
Information and Communication	Information Management and Systems	They way companies do business has changed by the access to information through technologies. The ability to use information technologies for managing organizational and operational knowledge may lead to organizational competitiveness.	Setia & Patel (2013); Wong, Lai & Cheng (2014); Durungo, Tiwari & Alcock (2013)

Factors inside the company, creates and develop capabilities that interact in a changeable environment. Concepts like the adaptability, flexibility, productivity and competitiveness become a necessity for the company survival, in order to obtain higher profitability, superior performance and competitive advantages as sustainable source. Competitiveness seen from the internal factors is achieved when a company develop superior performance while develop skills and different competences for the employees.

2.2.2 External factors of OC

Organizational competitiveness can be influence by external factors as well, based on the fact that firms are a part of an industry and works on different environments. Even if competitiveness is conceived at a firm level, continues to be an important concept for economic policy, government and every business in the industry. External variables may influence the competitive position of a firm by identifying and analyzing external recourses and capabilities that can be develop, in order to obtain competitive advantages that will enhance organizational competitiveness.

The efficiency of the industry, the resources and infrastructure and the links between the institutions participating in the competitive market influence the way a firm can achieve competitiveness. The development of an adequate space for creating a superior performance of the business activity may influence competitiveness, through the creation of comparative advantages of a firm (ex. Cost reductions) and the support of institutions and economic or industrial policies.

Table 4: External Factors of OC

Variables	Description	Authors
Regional or industry policies	Industry policies that focus on the creation of agglomeration of specialized skills, inter-connected knowledge, institutions and business may lead to a positive influence competitiveness of the firms, which benefits of the local environment and regional concentration.	Falck, Heblich & Kipar (2010).
Quality of infrastructure	Infrastructure is an important factor for economic development of regions; The quality of this factors influence firm competitiveness based on the accessibility to resources as public services, the impact on operational costs and productivity of companies.	Iimi (2011); Na-Allah (2012)
Industry conditions	Industry conditions influence the competitiveness of a firm, being the only way to survive in changeable environments with highly competition. As Porter (1979) argued, the analysis of the industry can be organized on five forces: competition in the market, which analyses the rivalry among companies, negotiation power of clients, the entrance of new competitors to the industry, negotiation power of suppliers and substitute products or services. Understanding the industry allows company to react strategically for been competitive.	Porter (1979); Bai & Sarkis, (2012)
Institutionality of the industry	The Institutionality of an industry may affects and influences the competitiveness of the companies participating of certain market, considering the influence of infrastructure, education, labor market, among others, which are important characteristics to encourage the development of organizational competitiveness. According to Eriksson & Lindgren (2009), one factor that influence to competitiveness is related to labor market externalities, which may contribute for the formation of agglomerations and interlinked economic activities.	Camison & Fores (2015); Eriksson & Lindgren (2009); Rodríguez-Pose & Hardy (2016).
Link between academia-government-firms	The intensity of the links and support between academia, government and firms enhance the improvement of organizational competitiveness constituting the base for networking, research and development, innovation and accessibility to private and public sources, laws and policies around developing economic activities and the support of the government to the firms of an industry.	Marek & Blazek (2016); Kveton & Horak (2018); Roxas, Chadee & Pacoy (2013)
Networking and cooperation between companies	Partnership and cooperation between companies offer strategic connections, alliances and relationships, being significant for developing organizational competitiveness. The network among the firms of an industry may lead to enhance organizational competitiveness focusing on core activities and opportunities that may be on the market. According to Mazzola, Bruccoleri & Perrone (2009) networking contribute to gain efficiency, knowledge and globalization.	Cao, Li, Wang, Luo & Tan, (2018); Buciuni, G., Coro, G., & Micelli, S (2013); Hinkkanenn & Vaatanen (2011); Mazzola, Bruccoleri & Perrone (2009)

3. Measurements variables and dimensions of OC

Several proposals found on literature show the lack of consensus around how to measure the competitiveness of a firm. Measurement models have included commonly economic and performance indicators (ex. Sales return, profitability, profits). However, competitiveness is a construct that receive influence of a combination of several factors (Sauka, 2014). It is also conceived as important including organizational factors (ex, human recourses, productivity, culture, innovation and technologies, even a sustainability concept that influence the performance of the organizational competitiveness) and external factors (ex. Networking, Institutionalality, industry conditions).

Organizational Competitiveness is a complex construct with a dynamic nature, which may involve different factors that could be control or non-controlled by the organization. Some of the proposal of measurement considered the arguments, considerations and methodologies of past studies, while others decided to build a measurement model using different techniques like focus groups or data envelopment analysis as way to obtain a consensus.

Most of the examined studies have in common the importance of analyzing financial performance in order to understand competitiveness at the firm level.

Researchers used qualitative and quantitative tools for developing a measure scale of the construct. Several of the analyzed studies have identified competitiveness as a one-dimensional construct, however in the last decade, the use of multidimensional approaches to measure the construct have increased.

During the analyzed period, empirical evidence has shown the complexity of measurement, considering multiple factors, both internal and external, which may influence the behavior of organizational competitiveness.

Some studies analyze organizational competitiveness based on a mix of internal and external factors (ex, Karabag, Lau & Suvankulov, 2013; Camison & Fores, 2015); while others comprehend the measurement model focusing on internal factors only (ex, Andreeva & Kianto, 2012; Fraj, Matute & Melero, 2015; Zhu & Cheung, 2017). It is also found that most of the methodologies used to measure the construct are quantitative using factor analysis, structural equation models and regression models.

Table 5: Quantifying the Organizational Competitiveness Construct

Author	Constructing OC Variables	Dimension	Methodology
Wagner (2009)	The construct of competitiveness at firm level is measure trough four dimensions identified in a factor analysis. The dimensions are related to market, satisfaction, profitability and financial risks. Every dimension have items related measured with a five-point scale.	Multi-dimensional	Multiple linear regression analysis
Laureti & Viviani (2011)	The authors used a DEA to create a firm competitiveness indicator, which is a weight average of the performance indicators. The indicator comprehends the following weight average performances: financial performance (return of sales, return of assets, and return on equity), labour productivity (using as control variables the age and legal status), the size of the firm and the economic activity, machinery and localization.	One-dimensional	Data Envelopment Analysis (DEA) approach, Tobit model and regression model
Andreeva & Kianto (2012)	The authors measured Organizational competitiveness as a One-dimensional construct, the scale was build according to the proposals of Deshpande et al. (1993) and Drew (1997). The scale has five items: successful of the organization, market share, growth, profitability and innovation. Every item is evaluated in comparison with the mean competitors.	One-dimensional	Exploratory and confirmatory analysis (SPSS and AMOS) and Structural Equation model (SEM)
Yang, Lu, Haider, Marlow	OC isconsidered a One-dimensional construct with three items: Service quality, profits and productivity.	One-dimensional	Confirmatory factor analysis (AMOS)

Author	Constructing OC Variables	Dimension	Methodology
(2013)	The authors argued that the item with a higher factor loading for measurement is productivity.		and Structural Equation model (SEM)
Karabag, Lau, & Suvankulov (2014)	Comprehends organizational competitiveness as a multidimensional construct. The measurement model used focus groups as a strategy for agreeing in measurement variables; the variables are grouped through factor analysis in eight factors: Quality management, focus on the foreign market, licensing and non-tariff restriction, reliable access to inputs, focus on domestic markets, networking, product differentiation and state support.	Multi-dimensional	Focus groups, Exploratory factor analysis and paired-samples t-test.
Mellat-Parast & Spillan (2015)	The authors analyzed the organizational competitiveness in comparison with main competitors. The construct comprehends four variables: the company respond to the change of needs of costumer or suppliers; the respond to changes of competitor's strategies; the development of new products; and the competitive position in the market.	One-dimensional	Kolmogorov-Smirnov test of normality, Confirmatory factor analysis (AMOS), Structural equation model.
Fraj, Matute & Melero (2015)	The author analyzed organizational competitiveness from four items in comparison with their main competitors. The analyzed variables were current profitability, five-year profitability, gross profit, and the ability to achieve economic objectives. The variables considered have a base of previous research as (González-Benito & González-Benito, 2005; Sharma & Vredenburg, 1998).	One-dimensional	Structural Equation model (SEM) and Partial least squares (PLS) with SMARTPLS Software.
Camison & Fores (2015)	The present study analyzes competitiveness from different levels: Firms global competition (analyzing the strength to competition). Country effect (time to respond, hostility, diversity, novelty of changes and demands, quality and services, costs and general risks). Industry effect (Sales, purchase behavior, technologies, competitors, suppliers, commercialization, substitute products, cost savings). Tourist district effect (Knowledge, flow of information, communication, cooperation and R+D). Distinctive capabilities effect (innovation and technology, managerial capacity, human resources, Marketing and quality). Finally, the financial resources effect (financial cost and capacity).	Multi-dimensional	Multiple linear regression analysis
Papalia, Calia & Filippucci (2015)	The authors proposed a multivariate index approach focusing at the micro level. They understand firm competitiveness as a multidimensional concept, analyzing three dimensions: Efficiency (measured through productivity), effectiveness (measured trough profitability) and a growth indicator of the competitive progress.	Multi-dimensional	Multivariate inequality measures

Author	Constructing OC Variables	Dimension	Methodology
Yang, Zhang, Jiang & Sun (2015)	OC is considered as a One-dimensional construct that needs to be measure in comparison with the main competition. It consider 5 items: defeating competitors in marketplace, quality of products and services, respond to market demands, respond to environmental changes, and networking.	One-dimensional	Multiple linear regression analysis
Zhao, Zhao, Zeng & Zhang (2015)	The authors used five items to measure OC as a one-dimensional construct. This measurement includes production cost reduction, compliance cost reduction, product image, corporate image and relationship with government	One-dimensional	Structural Equational Model (SEM)
Ling & Li (2016)	Authors comprehends organizational competitiveness as the market position in comparison with principal competitor. The OC is determined as a one-dimensional construct. The measurement is compose by win projects, high-value projects, profitability, product-service quality, client satisfaction, good public image, and speed of product/service delivery.	One-dimensional	T- test, ANOVA and Pearson's correlation
Mendieta-Peñalver, Perles-Ribes, Ramon-Rodriguez & Such-Devesa, (2016)	The measurement of OC for the hotel industry in this study contains two measures. The firs is an indicator of global market share (revenue) and the second is a composite indicator (based on occupancy rates, global present of the company, revenue per room an total revenue)	One-dimensional	Data envelopment analysis (DEA), Mediation models
Salem, Shawtari, Shamsudin & Hussain (2016)	The present study analyzed the OC based in past studies, where the construct is multidimensional. OC analyzed three factors: Image practices, satisfaction and profits, with a scale of 11 items.	Multi-dimensional	Exploratory and confirmatory analysis and structural equational model (SEM)
Sánchez-Hernández, Gallardo-Vázquez, Barcik & Dziwinski (2016)	The authors used the scale proposed by Gallardo-Vazquez and Sanchez-Hernandez (2012). Understanding OC as the ability to obtain and sustain a favorable position and superior results in the market. The OC construct is one-dimensional and consider ten indicators related to human recourse management, training an empowerment, leadership capabilities, marketing capabilities, quality of products, organizational management quality, technological recourses and information systems, financial management, values and culture and market knowledge- Know how	One-dimensional	Factor analysis and structural equational model (SEM)
Zhu & Cheung (2017)	The present study analyzed the OC of construction organizations, understanding OC as a multidimensional construct, which have three categories: Core competence -expertise of the company- with 4 items (based on Prahalad and Hamel, 1990); Company strategy with 14 items	Multi-dimensional	Confirmatory analysis and Structural Equation model (SEM)

Author	Constructing OC Variables	Dimension	Methodology
	(Porter, 1990) and Product with 15 items (Teece et al. 1997).		
Cao, Li, Wang, Luo & Tan, (2018)	The construct conceived for the construction industry, consider two variables: Won projects and the value of the projects in comparison with main competitors.	One-dimensional	Method of ordinary least squares regression.

4. Further research of the organizational competitiveness concept

Further research should focus on the gaps that actually are found in literature, specially, for creating an approximation to new knowledge that may contribute to a consensus around the construct, and also will set a base for analyzing OC from different perspectives and contexts, not only in development countries, also including emerging countries and specifics sector of economy.

4.1 Ambiguity of the concept

One of the gaps identified in literature is that despite the fact that Competitiveness is a construct that is a relevant for economy development of developed and emerging countries, based on the idea that Competitiveness leads to superior performances and productivity, the concept is still ambiguous (Camison & Fores, 2015; Hinkkanen & Vaatanen, 2011). In particularly, organizational competitiveness has become fundamental for practitioners, politics, economy and the academia. However, competitiveness understood as a capability or capacity of a firm for obtaining superior performance or resisting the competitors, it is confused or mixed with partial factors of its measurement, as it is profitability or productivity, which are financial indicators that makes part of the whole concept but not cover the whole definition.

4.2 The influence of internal and external factors and its analysis in different contexts

Based on the idea that organizational competitiveness it is a concept that is affected by several factors which are not only financial. It is still under a lack of consensus about the analysis of which and how internal and external variables have an effect on the construct (the effect could be of a specific factor of a combination of many of them). These is one of the most controversial points, due to the amount of research about the evolution of the organizational competitiveness concept, considering different findings and proposal that can be disconnected between each other (Camison & Fores, 2015; Sauka, 2014). The complexity of the construct it is shown on the different models and proposals of academics attempting to fill the gap behind the research. Despite the results of the proposals contribute to the theoretical framework, the big picture is still unclear. Additionally, it is found that exiting literature and empirical evidence examining the match of the internal and external factors and the organizational resources that affects or influence the organizational competitiveness has been focused in developed economies, still little research has examined the current propositions and findings in the context of emerging economies with a systematic review (Hinkkanen & Vaatanen, 2011).

4.3 The dimensionality of Organizational Competitiveness

Another gap identified is related to the dimensionality of the construct; Scholars comprehends competitiveness as a multidimensional phenomenon, which is influenced in many ways by a number of methods and perspectives, applied on microeconomics and macroeconomics levels. However, when analyzing specifically organizational competitiveness is more complex due to the lack of consensus and the amount of factors analyzed, for some authors this type of competitiveness is a one-dimensional concept (i.e. comparing variables with main competitors). Others, in the last decade, comprehends the concept as a multi-dimensional notion (i.e. examined from different internal and external factors influencing competitiveness of a firm).

Therefore, there is not a unique measurement proposal for the concept, arising statistical problems when trying to measure competitiveness and its factors (Laureti & Viviani, 2011). More research should deep in the conception of a synthetic measurement model considering the analysis and the influence of factors classified by the level of relevance. Based on the above, there is still a long way to fulfill the gap, and a clear necessity of deepen in studies measuring firm competitiveness, specially, as a multidimensional construct, considering the different approaches and theories (Papalia, Calia & Filippucci, 2015).

5. Conclusions and limitations

The research addressed important concepts, factors and measurement process in the field about organizational competitiveness covering a period of ten years (2009 to 2018), considering the contribution of different perspectives, especially, the contributions made by the argument of Porter (1980-1985) by the industry perspective and Barner (1991) by the recourse-base view. These have opened contributions to several studies (theoretic and empiric) which have developed the construct of competitiveness at the firm level, analyzed the factors that influence the construct and providing different approximations and explanation to the development of organizational competitiveness.

Academics and experts have considered the construct as a capability, capacity, ability or a result that leads a company to a superior performance, competitive advantage, or to the strategic way to operate in a competitive market. In addition, authors have identified internal and external factors that influence or affect the development of competitiveness at the firm level. From the internal factors analysis, it is important to understand that companies have an influence in their performance.

The way they achieved to manage the integration of the chain supply, the stakeholders, the human recourses, networking and partnership, and also the organizational recourses (physical and intangibles) and main activities (quality, innovation, knowledge management, performance, processes and structures, among other corporative practices).

In addition, external factors influence organizational competitiveness seen from the perspective of support to the industry; those factors cannot be influence by a single company. In this sense, external factors constitute the base for developing competitiveness in an industry and creates the infrastructure, policies, Institutionality and networking between companies and institutions like governments and academia.

Based on the above, organizational competitiveness is a complex construct that still denotes a lack of consensus theoretically and empirically, especially when competitiveness wants to be measured. Several scholars comprehend the construct as a one-dimensional construct that is composed by different items, while others argued that is a multidimensional construct integrated by factors of analysis. In addition, literature found qualitative and quantitative methods for building a scale of measurement. This situation implies that competitiveness, as a complex construct still requires a mayor analysis for reaching a conceptual consensus by the scientific community in terms of factors that influence competitiveness and its measurement.

Future research should analyze not only the factors that can influence organizational competitiveness, but also, the drivers and its combination for increasing the performance. It is needed more empirical evidence for examining the interactions of the factors and the way of measure the whole concept. In addition, future research should analyze which factors can be more influential than others in different contexts, both in developed and emerging countries.

The present study has some limitations. Namely, the research does not represent all the findings in literatures around the construct of organizational competitiveness due to the time line examined between 2009 to 2018. Thus, can be some studies that have not being studied. In addition, the authors only examined articles in English and Spanish based on the understanding of the language.

Acknowledgment

This publication is part of the Bank of Projects funded by the Research Vice-rectory of the San Buenaventura University, during the period of 2017-2018. The present article is part of the work developed as a junior researcher of Colciencias, as a result of the Call 761 for young investigators and innovators 2016, in which the junior researcher Lina Marcela Padilla Delgado was selected.

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