

Development of market-oriented strategies through crossfunctional integration in the context of the food and beverage industry

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Abstract

Purpose: The objective of this study is to analyze how cross-functional integration contributes to the development of market-oriented strategies in the context of food and beverage manufacturers in Latin America.

Design/methodology/approach: A multi-case study was conducted in two multinational companies in Costa Rica and Brazil. Twenty-four semi-structured interviews were carried out with managers, leaders and supervisors.

Findings: The results showed four market-oriented processes: Product launch, Product delivery, Customer complaints solution, and Improvement and innovation projects. Within these processes, twelve integration factors that impact market orientation were characterized. They also indicate that the concepts of Market orientation and Cross-functional integration should be integrated in the organizational culture to facilitate the understanding of the different needs and levels of urgency.

Originality/value: The studied literature does not emphasize the way integration is operationalized to allow organizations to be market-oriented. According to our findings, responsive strategies depend on the integration of various internal functions to generate market intelligence. Managers must realize that when the workers are motivated and informed, they become more willing to take on a group vision and commit to organizational goals. This paper presents seven propositions on the operationalization of market orientation through cross-functional integration.

Key words: Cross-functional integration, Market orientation, Responsiveness, Food industry.

Introduction

The complexity of decisions and the need for change are inherent in the global organizational competitive context. In order to decide and respond appropriately to changes, it is essential to develop interdisciplinary strategies (Varadarajan and Clark, 1994). In this sense, Cross-functional Integration (CFI) has become a means of improving responsiveness, while promoting customer value delivery. According to Kahn and Mentzer, (1998) CFI may be defined as the collaboration and the interaction between the departments of an organization.

The elements present in CFI processes are: boundary spanning activities, integration factors, formality/informality, level of integration, and impacts of integration (Pimenta et al., 2016). Studies on CFI focus on several research themes, such as: 1) *boundary spanning activities* (Silva et al., 2013), *integration between specific functions*, e.g.: marketing and R&D integration (García et al., 2005), R&D and manufacturing (Hauptman and Hirji, 1999), sales and marketing (Rouziès et al., 2005); 2) *Integration factors and their formal or informal operationalization* (Lambert and Cook, 1990; Kahn, 1996; Wlazlak and Johansson, 2014); 3) *The level of integration* (Ferreira et al., 2019). Another research stream, that presents a close relationship with Market Orientation, is the *Integration impacts, e.g.:* the increase of customer service levels and profit (Lambert and Cook, 1990; Oliveira et al., 2016), creating and delivering value to its customers (Esper, et al., 2009; Hilletofth, 2010; Hilletofth and Lättilä, 2012; Hilletofth et al., 2012; Seno et al., 2019), efficiency in product development processes (Kahn, 1996; Perks, 2007; Hilletofth, 2008; Bertan et al., 2016; Jugend et al., 2018), and increased market responsiveness (Pimenta et al., 2016).

On the other hand, Market Orientation (MO) is present when organizations demonstrate ability to understand, attract and retain customers, which deepens their relationships with the latter and with stakeholders. Thus, the organization collects market information and shares knowledge within and outside its spheres, in order to adequately meet the consumers' expectations (Day, 1999).

According to Jaworski and Kohli, (1993), MO can be achieved by three antecedents: top management support, interdepartmental dynamics - which is essentially cross-functional integration - and organizational systems (Jaworski and Kohli, 1993). In another perspective, MO has three behavioral components: customer orientation, competition orientation, and cross-functional coordination (Narver and Slater, 1990). Thus, the literature focused on defining MO considers that integration is a part (Narver and Slater, 1990) or an antecedent of MO (Kohli and Jaworski, 1990). Nevertheless, papers that aim to investigate CFI as their main objective do not analyze MO in a thorough manner (e.g., Im and Nakata, 2008; Wei and Atuahene-Gima, 2009);

and vice versa: papers focused on MO put emphasis on other antecedents other than CFI (e.g., Jaworski and Kohli, 1993; Chang, Chen, Lin, and Chiu, 2010; Hernández-Linares et al., 2020). Therefore, it is possible to see that literature places little emphasis on the operational and technical aspects of integration as an antecedent of MO.

Studies on the influence of MO on organizational performance are mainly focused on European or US organizations, and there is a gap in international studies (Auh and Merlo, 2012; Powers et al., 2020). In the context of Latin America, which brings together emerging countries, studies on MO focus on validating the scales proposed by Narver and Slater (1990) and Kohli and Jaworski (1990) in, for example: Brazil (Perin and Sampaio, 2004), Peru (Spillan, Li, Totten, and Mayolo, 2009), Chile (Olavarrieta and Friedmann, 2008), Argentina and Paraguay (Olsen and Olsen, 2004). These studies did not present analyses on how cross-functional integration may be operationalized as an antecedent of MO strategies, in order to enhance company performance.

Several authors (Narver and Slater, 1990; Kohli and Jaworski, 1990; Day, 1999) treat market orientation as essential for achieving competitiveness and adapting to the market, and also mention that internal integration is essential to reach market orientation. However, there is a lack of studies explaining the association of CFI and MO, especially in the context of industrial development in Latin America. Thus, analyzing how integration occurs in marketoriented processes can generate relevant knowledge from a practical point of view, and also, from a theoretical point of view, especially in the context of emerging markets with difficulties in the development of strategies aimed at global markets.

In Costa Rica and Brazil, countries of emerging economies in Latin America, there is no clear evidence of MO strategies involving inter-functional integration as an antecedent or component of MO to improve the performance of their industries. Considering this scenario, we perceived the necessity to conduct studies to add theoretical information on CFI as a facilitator of MO. Thus, the following research gaps are highlighted: a) how is market orientation achieved through cross-functional integration? b) what integration factors are present in organizational actions? and c) what impact metrics will determine the effective market orientation of an organization?

The food and beverage industry was investigated, including companies from Costa Rica and Brazil, that adopt formal strategic initiatives of MO. The industrial context of these countries in Latin America is characterized by small local companies, that seek to serve regional markets with traditional products, while large multinationals are focused on investments on technologies and processes, to supply customers all over the country (Cordero, 2011). For both studied countries, this industry is relevant, given its growth and economic importance. In Brazil, the food and beverages industry represents about 22% of the general manufacturing industry. In terms of revenues, it represents 10% of the total GDP (Gross Domestic Product), with revenues exceeding R\$ 656 billion. Even in scenarios of economic slowdown, the growth of the food and beverage industry stays above the national average (CNI, 2020). In Costa Rica, the presence of large multinational industries in this sector is growing above the average for other sectors.

Large companies that operate in turbulent markets depend on cross-functional integration to become more efficient and flexible (Kahn, 1996). Currently, the food and beverage industry is passing through a strong trend of modernization, motivated by technological changes and constant growth of competition (Bader and Rahimifard, 2020). This type of scenario motivates companies to invest in innovation of products and processes, and in the concentration of distribution channels (Johnson et al., 2009). This market dynamism increases the relevance of MO in organizations, as well as in CFI processes, because the companies need to constantly update their portfolio, and that requires multidisciplinary efforts.

The objective of this study is to analyze how cross-functional integration contributes to the development of market-oriented strategies in the context of food and beverage manufacturers in Latin America. For that, a study of multiple cases was carried out in two multinational companies of the sector, based on twenty-four semi-structured interviews. It was possible to identify market-oriented processes/activities, functional areas to be integrated and their respective integration factors, as well as the impacts of cross-functional integration on MO strategies.

Literature review

The structure of the literature review is based on the fundamentals and components of market orientation (MO) and the aspects of cross functional integration (CFI), as well. This topic aims to provide the basic ideas about the connection of these two themes, focusing on the role of the cross-functional integration factors as antecedents of MO (Kohli and Jaworski, 1990, Pagell, 2004, Pimenta et al., 2016).

Market orientation

According to Crick (2019), there are multiple definitions for MO as a construct, but there is a common view that it relates to the processing of information towards the implementation of the marketing concept in order to generate value and competitiveness. Market orientation

(MO) is a strategic organizational behavior focused on the responsiveness to customer needs and market conditions (Kaňovská and Tomášková, 2014) through the generation and dissemination of market intelligence between different departments of the organization (Kohli and Jaworski, 1990; Narver and Slater, 1990). MO takes an outside-in perspective, in which information on the environment is collected to generate strategies to create value for the customer and, at the same time, differentiate the organization from its competitors (Shapiro, 1988; Kohli and Jaworski, 1990; Day, 1994).

MO relates to processes aimed at: customer orientation, competition orientation, crossfunctional integration; and two decision criteria: long-term focus and profitability (Narver and Slater, 1990; Deng and Dart, 1994). As a behavioral approach, MO involves values, beliefs, identities and attitudes that are inherent to it as a business culture (Day, 1994). This construction allows organizations committed to creating value through the exchange of information on the needs of customers and on the strategic capacity of the competitors to perform better (Slater and Narver, 2000).

In customer orientation, the first behavior pattern concerns in-depth knowledge of buyers to create value (Narver and Slater, 1990). It involves knowledge of the buyers' economic conditions and their surroundings, as well as the characteristics and needs of current and potential consumers. The second behavior pattern mentioned by the authors is orientation to competition, which means the understanding of the strengths and weaknesses of the competition, as well as the technological advances achieved by the organization's actions. The third behavior pattern is functional coordination, which is the alignment of incentives to the functional areas. This involves initiatives to highlight the benefits of working together in order to generate interdependence between functions. The marketing department and other departments involved in the strategy must be sensitive and responsive to the needs and perceptions of each internal component (Narver and Slater, 1990; Day, 1994). The customer orientation and cross-functional coordination help to build market intelligence and meet customer needs (Ma and Todorovic, 2011).

Knowledge of customer needs, the environment and the ideas and advancements of the competition must be present within the concepts of MO. The knowledge of customer and the environment should be generated and disseminated in the organization in order to formulate and execute responsive strategies (Kohli and Jaworski, 1990). MO can be defined by the following main components shown in Table 1.

Thus, MO may be defined as a strategic perspective that values the generation and dissemination of knowledge of the environment, customers, competitors, and other stakeholders

in order to meet market needs. Market satisfaction should be sought through response strategies involving the participation of various functions and organizational levels in order to generate market intelligence (Kohli and Jaworski, 1990; Narver and Slater, 1990; Jaworski and Kohli, 1993; Conduit and Mavondo, 2001; Narver, Slater and MacLachlan, 2004). Thus, CFI is essential in the search for responsiveness to the market.

[Insert Table 1 about here]

From a practical perspective, some authors highlight the importance of developing dynamic capabilities that can help to support MO and value creation (Hernández-Linares et al., 2020), others mention the influence of differentiation and positioning on MO (Iyer et al., 2019). Moreover, there are recent studies that inquire about the influence of MO adopted by suppliers and other supply chain members on the success of focal companies' MO. This latter research stream may indicate that, in order to pursuit MO success, the company needs to seek partners in its supply chain that agree on coordinating efforts towards the generation of value to their end costumers (Gligor et al., 2019; Powers et al., 2020; Tajeddini and Ratten, 2020).

Gupta et al., (2019) reinforce the importance of inquiry mediators and practical forms of reaching MO through different sets of learning procedures and organizational structures. According to them, the interdepartmental dynamics and the integration between marketing and other functions need to be carefully considered. However, this integration depends on an organizational structure capable of facilitating the generation, dissemination and use of market knowledge to generate value. Therefore, there is some opportunity to investigate the practical side of cross-functional integration on MO, and its respective impacts, as well.

The discussion of CFI in the literature about Market Orientation has received little emphasis in the literature, particularly in the context of Latin America, e.g.: Perin and Sampaio (2004), Olavarrieta and Friedmann (2008), Spillan et al. (2009). A possible reason of such a gap may be because MO was initially treated as a "business philosophy" of very complex implementation (Day, 1994). Moreover, the historical, economic and industrial contexts of emerging countries in Latin America make it difficult to implement this business orientation. However, the modern and global economy, with new perspectives on customers and markets, arouses the need for MO strategies in these countries, as they became important players in the global export scenario.

Cross functional integration

In this study, the perspective of Kohli and Jaworski (1990) about MO is adopted, and it considers CFI as an antecedent of market orientation. Therefore, MO depends on the support of CFI to be effective (Ingenbleek *et al.*, 2010; Camarero and Garrido, 2012; Kanovska and Tomášková, 2012; Mahmoud *et al.*, 2012).

CFI promotes interrelation among departments, which in turn, allows knowledge on customers and competitors to be shared, discussed and analyzed by the relevant areas to create value for the customer (Lawrence and Lorsch, 1967). CFI depends on collaborative activities that define how well departments work together when mutual collaboration is necessary (Ellinger, 2000).

Cross-functional integration can be defined as the set of interaction and collaboration between internal departments (Kahn and Mentzer, 1996). Integration is the process in which departments work in a cooperative way to obtain results that favor the organization as a whole (Pagell, 2004). Studies on the relationship between internal functions from the perspective of supply chain management show that integration and collaboration between functions inside and outside the organization are necessary to establish supply chain processes that promote the optimization of organizational performance (Mentzer et al., 2008).

Hence, CFI is defined as an organizational phenomenon characterized by the dynamics of five elements: boundary spanning activities, integration factors, formality/ informality, level of integration, and impacts of integration. These five elements are explained below.

The first element corresponds to the boundary spanning activities that require interrelation between functions or departments of the organization in order to be performed (Pimenta et al., 2016). This shows that decision making between functional areas on issues involving operation management is based on information, tools and skills that do not belong to one functional area alone (Mentzer et al., 2008).

The second element corresponds to the integration factors, that are mechanisms used to establish cooperation between people from different functions who need to work together to implement internal processes (Pagell, 2004; Pimenta et al., 2016). Department Integration takes place through factors that promote working together. In this sense, this definition includes a collaborative and interactive view on the relationship and joint work (Kahn and Mentzer, 1998). The literature identifies some integration factors necessary to promote integration in market-orientated processes, as shown in Table 2. Despite the fact that these integration factors are recognized in the literature, there is still a gap on how organizations can operationalize them to achieve goals related to MO and thus improve their performance.

[Insert Table 2 about here]

The third element of the dynamics concerns the formality and informality present in the integration processes (Pimenta et al., 2016). Several authors state that integration processes can be characterized as formal, informal or a combination of these two types. (Ruekert and Walker, 1987; Kahn, 1996; Gimenez and Ventura, 2005; Daugherty et al., 2009). Some highlight the importance of formal processes (Gimenez and Ventura, 2005; Jüttner et al., 2007); whereas others defend the informal ones as essential for integration (Ruekert and Walker, 1987; Kahn and Mentzer, 1998; Ellinger, 2000; Ellinger et al., 2006, Chen et al., 2009).

The fourth element relates to the level of integration, which is the intensity - high, medium or low - of involvement of cross-functional activities, based on the frequency of contact and the fulfillment of the goals established for the integrated functions. The presence of formal and informal integration factors, as well as the absence of conflicts between functions can also increase the level of integration (Pimenta et al., 2016).

Finally, the fifth element is comprised of integration impacts. Cross functional teams (CFT) may generate positive impacts, such as an alignment between demand and supply (Esper et al. 2009; Freitas et al., 2020) and external integration in the supply chain (Gimenez, 2006). Moreover, MO was identified as an impact of CFT, that helps to integrate sales, marketing and manufacturing departments, in order to disseminate consumer information and respond to market needs (Whybark, 1994). Several authors investigate impacts of MO initiatives, such as cross-functional integration, on company and supply chain performance. Therefore, this construct may be important to understand results related to strategic and practical efforts related to MO (Gligor et al., 2019; Powers et al., 2020; Tajeddini and Ratten, 2020)

Research Method

First of all, it is important to clarify that this paper is derived from a project that received a relevant research grant from a Brazilian agency (FAPEMIG) and also from OEA. A preliminary and exploratory part of the results of this project is available in Murillo-Oviedo et al., (2019). However, the results shown by Murillo-Oviedo et al., (2019) are very exploratory. On the other hand, this paper focused on a relevant theoretical contribution, as it presents a solid theoretical review to support the research problem. Moreover, it presents a set of propositions that are innovative both in the literature of Market Orientation and in the literature of cross-functional integration. Finally, this paper presents two case studies instead of one, with an additional effort

to compare strategies in two different countries in Latin America, with a deep discussion regarding the regional aspects of Market Orientation.

To achieve the objectives of this study, a multi-case study involving an organization in Brazil and another in Costa Rica was conducted. Initially, companies were pre-selected through an exploratory interview using the following criteria: 1) the company's main focus is on the customer / responsiveness (Deshpande et al., 1993; Lafferty and Hult, 2001); 2) companies perform studies about the surrounding market / customer interaction (Shapiro, 1988; Kohli and Jaworski, 1990); 3) there are initiatives to integrate organizational functions, i.e.: presence of at least two integration factors (Narver and Slater, 1990; Lafferty and Hult, 2001); and 4) companies recognize the importance of other stakeholders (Conduit and Mavondo 2001). According to these criteria, two companies were selected, as shown in Table 3.

[Insert Table 3 about here]

The BR Organization is a franchise of a multinational beverage manufacturer. It is headquartered in Uberlandia, Minas Gerais State, and has three business units: juices, soft drinks and beers. It has sales and distribution facilities in other cities in the range of 200 kilometers from its headquarters. Being a franchise, the BR Organization has operational independence, but does not develop new products. It has a matrix organizational structure with staff units and functional departments working together to meet organizational objectives.

The CR Organization is headquartered in the city of Desamparados in the province of San José, Costa Rica. It is a multinational food manufacturer and seller, and has three business units: snacks; crackers and cookies; oats and cereals). The operations of the CR Organization are divided by regions involving two or more countries; Costa Rica and Panama comprise the South sub-region. This division is part of the organizational structure defined by interviewees as a 'matrix cube', and establishes three structure levels: geographical, functional and business units. The South sub-region has no local production, which is performed in the North sub-region.

Data Collection

Gaskell (2011) recommends that between 15 and 25 interviews be carried out, but this number depends on information saturation. In total, 24 people from different departments were interviewed, as detailed in Table 4. Each interview lasted 60 minutes on average, generating 192 pages of transcribed material.

[Insert Table 4 about here]

The protocol for the interviews was developed from a theoretical review on MO, CFI, and integration factors that favor MO. In addition to the nine integration factors identified in Table 2, the following items from the framework by Pimenta et al. (2016) were added: longevity of relationships, trust in relationships, group work among cross-functional teams to solve conflicts, informal/formal communication, job rotation and perception of interdependence. The protocol was translated from Portuguese into Spanish to be used in both Brazil and Costa Rica. To ensure that there were no changes in meaning in the translation, the instruments were revised by native Spanish speaking professionals from the marketing area.

Firstly, interviews involved questions about the main internal processes used to promote MO in the organization. Then, questions on the existence of each integration factor contained in the form were asked. The respondent marked the occurrence frequency of each factor of integration in the form. Interviewees were asked to indicate the impact of frequent factors on the processes related to market orientation mentioned earlier.

Data analysis

The 24 interviews were audio recorded, transcribed and subjected to content analysis. Following the recommendations by Bauer (2011) and Bardin (1977), the following procedures were performed: 1) exploratory analysis; 2) open coding, in order to identify analysis units; and 3) categorization. To ensure the validity of data coding and categorization, these procedures were conducted by two researchers using MS Excel®, when organizing and performing the cross-analysis among codes. Subsequently, the transcriptions and codes with the identified processes were sent back to the respondents so that they could confirm the meaning of the categories.

Four categories were identified in the analysis of the information: 1) **critical market oriented processes** (that are boundary spanning activities); 2) **functions** that need to be integrated within such processes; 3) **integration factors** that help to achieve market oriented processes and keep the functions working together; and 4) **impacts of the integration** on the operationalization and performance of MO processes. According to the MO process identified, there were specific integrated functions and factors. The preliminary framework in Figure 1 includes these four basic categories and their respective relationships.

[Insert Figure 1 about here]

Findings and Discussion

Critical market oriented processes and integrated functions

Four critical MO processes were identified in the studied companies: product launch, product delivery; customer's complaints solution, and improvement and innovation projects. The objectives of these MO processes are closely related to the identification of market needs and adaptation of production, logistics or product to satisfy external requirements from the consumers.

The first two, product launch and delivery, are present in both surveyed organizations. Customer complaint solution processes were only present in the BR Organization. Finally, improvement and innovation projects for strengthening market orientation was only identified in the CR Organization. As a core activity of the studied organizations, product launch and delivery is related to two other processes: customer complaint solution and improvement and innovation projects. In order to achieve quality and client satisfaction, the product launch and delivery uses information from the customer complaint solution processes. Moreover, improvement and innovation projects may help to redesign processes of product launch and delivery priorities according to current changes in customer's requirements.

Innovations launch is a cross-functional process that aims at responding to customer and consumer needs, as well as generating differentiation from the competition (Calantone; Di Benedetto; Rubera, 2012). Product launch involves the integration among marketing, commercial, finance, production, logistics, purchasing and legal departments. Everyone has a specific role before, during or after the launch to ensure that the whole organization understands the process and customer expectations.

The product delivery process (Pimenta et al., 2016), starts with demand planning and has the active participation of the marketing, sales, logistics, production and financial departments. It is essential for the product to be available at the point of sale at the right time. According to the Market Planning Supervisor of the BR Organization:

A sale is only accomplished upon delivery, it is not fulfilled upon the order. Our IT department does all the processing and delivers it to the logistics area, which fulfills the subsequent steps, i.e. picking, loading, delivering and receiving. The sale is only materialized when the product in fact reaches the final consumer (MP1).

The third process involves customer's complaints solution, and is only present in the BR Organization. In the studied literature, this process was not characterized as an important process for MO nor as a process that requires CFI. The channels of communication with customers, such as Customer Service, act as a 'thermometer' of quality and efficiency. It analyzes and solves the causes of disruptions in the market, and requires the involvement of all areas involved in the production, delivery, service and product development processes. This evaluation allows the maintenance of quality standards required by the market, improves responsiveness and avoids damage to the brand's image. Finally, this process requires the integration of several areas, such as: marketing, production, logistics and demand planning.

The fourth process, improvement and innovation projects, was only identified in the CR Organization. It can contribute to the effectiveness of the three earlier processes and consists in planning and implementation of activities to increase the speed of responsiveness the organization offers to the market. Two examples of projects shown by the CR Organization are: development of a logistics hub and change of materials sourcing. Such projects primarily seek improvements through reactive actions, in order to avoid disruptions and customer dissatisfaction. Marketing, sales, logistics, human resources, finance, legal and purchasing departments are involved in these processes. As a boundary spanning activity, it can be related to innovation launch, as identified by Calantone et al., (2012).

A finding of the study is that the participation of each department in the critical MO processes may happen in two ways: ordinary routine processes and new projects.

In the routine processes of an organization, such as demand planning, promotions or product launch, integration happens in two stages. The first involves the marketing, finance and trade areas. When most decisions have been made, the production and logistics areas join the process. In the two studied companies, these decisions are made by cross-functional teams that make up the Sales and Operation Planning (S&OP). Therefore, each functional team must be aware of the importance of its integration with peer functional teams and how that can lead to improvements in the organization's response to the market.

In the two surveyed organizations, the purchasing department recognizes the need for more involvement, knowledge about strategies, and joint activities to plan the demand from suppliers. Such initiatives may help to keep adequate prices and avoid delays (SP1, PA2). Therefore, both the purchasing function and the suppliers should participate more actively in management in order to foster market orientation not only within the company, but also along the supply chain (Martin and Grbac, 2003; Jüttner and Christopher, 2013).

New integration projects work in a different way. The central ideas of these projects may come from regional management, general management, or from a particular department. However, strategy formulation and decision-making are carried out with the participation of all involved functions from the beginning. This is fundamental for the design and execution of the project, considering the different perspectives and the specific role each function has to achieve their goals.

Planning often begins in marketing and sales, and the information is then passed down and discussed with other departments. Some projects, however, need everyone's involvement; for example, a change in sourcing from Nicaragua to Guatemala means all departments should participate in the planning from the beginning so as not to forget any detail in the planning of the logistics, finances, sales, marketing, etc.... (MMS2).

Integration factors and Impacts of cross-functional integration on market orientation

Integration factors are necessary for the implementation of successful strategies in the studied functions. In the four MO critical processes mentioned, twelve integration factors were identified. The interviewees highlighted several relationships among these integration factors and their impact on MO processes. Figure 2 details all the codes found within each category through the content analysis, and their potential relationships.

[Insert Figure 2 about here]

The consolidated analysis of the codes, according to the perception of the interviewees, supported the development of seven exploratory propositions, as detailed next.

Managers from the various departments meet weekly to evaluate results and organization of events (LHS1, PP1, DA1, WS1, FC1, FM2, WCM2, SM2, AC2, PA2, MMC2). In both organizations there are cross-functional teams to operationalize S&OP. These groups also have their weekly meetings to analyze and plan sales forecasts in order to reduce the risk of disruption in the market.

(...) we have a weekly meeting with all the managers from the different areas. The Customer Service quality manager, for example, presents information, complaints, and if there is anything out of the curve, they make an analysis saying "look I noticed this point here and I sent a person to the market to identify and collect customer

information. We have identified that the driver is not carrying out the activities he has to do..." (IPM1).

Cross-functional teams enable personal and collective experiences, which are essential to improve organizational performance (Biemans and Brenčič, 2007; Biemans et al., 2010; Qu, 2012). The characteristics of the operationalization of the studied cross-functional teams support the following proposition:

P¹. The use of cross-functional teams in the planning of internal improvement projects facilitates the deployment of strategic objectives through operational activities capable of improving product quality and customer service.

Common goals are often established among the areas of strategic planning, marketing and integrated planning in the BR Organization; and marketing, sales and finance areas in the CR Organization. They are applied in activities that require direct attention to the market, such as launching of innovations or product delivery. Despite these integration efforts, they are restricted to achieving the sales and profitability goals of the organization (DA1, CAS1, FC1, TM1, SP1, RH1, TA1, LHS1, RCM2, AC2, PA2, WCM2). There is not a shared goal system among different departments. However, RCM2 perceives that this integration factor should be deployed to improve the agility of the processes.

When the staff asks for an unplanned demand, we can all react as a team to deliver, because the customer expects to be satisfied. However, we often fail because not everyone has the same sense of urgency. If we all did, we could achieve goals at the right time, create better and exclusive promotions, have a higher sales volume and better meet customer needs (RCM2).

The importance of establishing common goals is also cited as an integrating factor (Chang et al., 2015). These observations led to the following proposition:

P³. The design of common goals, establishing urgency levels for each department in the process of delivering products and services, improves sales performance and market share.

Internal marketing strategies makes employees act in accordance with the same orientation, thus generating other integration factors such as information sharing and team spirit (PC1,

CAS1, TA1, DA1, RH1, WCM2, AC2, LC2, RCM2, HR2, PA2). It is a factor applied mainly by the HR department through training and career management within the organization. Nevertheless, the initiative is part of each manager, who should know and motivate their team, communicating initiatives and information on new products or promotions. This factor is supported in the literature (Conduit and Mavondo, 2001), highlighting the importance of employees throughout the organization for the generation and dissemination of market intelligence.

Every time we have a new product, we first make a demonstration with the employees, starting here, because the worst thing is when the product reaches the market and the employee does not know the product is ours. Then, they go to their families, friends and acquaintances, who again have to know about the product for it to work (DA1).

Availability of information for the employee on innovation releases is critical to reduce conflicts among functional teams, as it generates mutual understanding (MP1, TA1, PC1, PP1, TM1, DA1, FM2, HR2, MMS2, MMC2, PA2). The relevance perceived by respondents about these factors supports the following proposition:

P⁴ Internal marketing, as a mechanism of informing and motivating marketing and peer functions, promotes team spirit and greater willingness to work in marketoriented actions.

Cross-functional training is important to establish interaction and collaboration among departments. In both analyzed organizations, the existence of individual and organizational knowledge on the basis of CFI and MO, at all levels, is necessary (PP1, MP1, TM1, WS1, FC1, QE1, TA1, RH1, PC1, DA1, SP1, CAS1, LHS1, IPM1, FM2, SM2, RCM2, LC2, MMS2, FM2). For example, in the process of admission of new employees in the CR Organization, two actions by the HR department promote mutual understanding: 1) list of delivery with key words and abbreviations that are often used in the organization; 2) 30-minute visits to meet the staff and learn about the activities of each department (AC2, LC2, PA2, HR2, SM2, WCM2).

The awareness of interdependence is when the employees realize the importance of CFI and MO. This awareness facilitates proactive attitudes in functional collaboration, which are necessary for the organization to be responsive and for its proper conduct (Inglis and Clift, 2008; Hillal and Mubarak, 2014). The characteristics of this integration factor support the following proposition:

P⁵. The recognition of interdependence, through individual and organizational knowledge, on the basis of CFI and MO, promotes improved integration and consequently generates results in line with market requirements.

Individual and organizational knowledge on the basis of CFI and MO requires the sharing of information on marketing projects and employee training on the characteristics of the strategy. Such actions generate mutual understanding about each other's responsibilities and it can accelerate time-to-market (IPM1, DA1, SP1, QE1, RCM2, SM2, LC2). Additionally, certain features may not be considered as important to organizational performance. With this knowledge, employees have more awareness and may collaborate more actively in the process to improve customer services (MMC2, WCM2). The investment is not entirely monetary, as information provided at the right time on what happens in the organization may be enough to stimulate employees' involvement (SP1, PA2, MMS2). Knowledge on the marketing function and its strategies generates concern about the impact market information may have on organizational performance (Kobylanski and Szulc, 2011; Hillal and Mubarak, 2014). This form of mutual operational understanding regarding the launch of innovations led to the following proposition:

^{P6}. Dissemination of marketing projects and sales in the launch of new products creates more efficiency and quality in customer care and product availability to consumers.

The impacts featured in the cases studied are presented in Table 5. Several authors have mentioned MO impacts on the organization (e.g. Han, Kim, and Srivastava, 1998; Kumar et al., 2002; Langerak, 2003; Guenzi and Troilo, 2006, Aziz and Yassin, 2010; Heidari et al., 2015). The impact of MO can be categorized according to those that provide benefits to workers and those that affect organizational performance (Jaworski and Kohli, 1993). Moreover, cross-functional integration (CFI) may help to achieve the desired levels of market share (Pimenta et al., 2016). This study identifies an additional category of CFI impacts on MO: impact on responsiveness, highlighting the role of CFI in market orientation in organizations.

[Insert Table 5 about here]

To improve response strategies, organizations must learn from their previous experiences (Veisi et al., 2007; Silva et al., 2009). The analyzed organizations were found to have no

mechanisms to document their experiences. Nevertheless, respondents highlighted the need to register experiences in order to avoid rework (LC2), or the repetition of mistakes in promotions, innovations and launches (IPM1, TM1, MP1, MMS2, RCM2).

As explained in each of the critical MO processes, impacts on motivation, commitment and team spirit are generated from the valuation of employees' activities and their involvement in the activities and results of the organization. Therefore, managers should be aware that the creation of value for the customer requires changes in organizational culture, in management systems and in employees' behaviors (Guenzi and Troilo, 2006). Identification with the company improves performance in that it makes functional processes more market oriented, e.g. it improves responsiveness, market share, brand image, sales performance, efficiency and profitability.

Finally, and as a fundamental objective of MO, these cross-functional processes are focused on meeting the customers' needs in a timely manner. Thus, the impacts on the studied organizations resulted in the manufacturing of quality products, and enhanced supply. The formality of the meetings carried out by the cross-functional teams was the factor that impacted most on the implementation of MO strategies in the studied organizations. In addition, it was observed that the coexistence of cross-functional teams generates several informal integration factors, such as trust and team spirit. The following proposition was elaborated from these observations:

P⁷. Cross-functional teams are essential to the operation of other integration factors necessary to implement cross-functional market-oriented processes.

Thus, it was verified that CFI facilitates response to market needs through interaction and collaboration processes across functions involved in processes that are critical to the orientation of the company towards the market. CFI allows joint work, which in turn, helps to achieve organizational goals more quickly and effectively.

Conclusion

Cross-functional integration can contribute to the effectiveness of Market Orientation. The existing literature suggests different roles for CFI within MO, i.e. as a component (Narver and Slater, 1990) or as an antecedent (Kohli and Jaworski, 1990). This study shows that processes oriented to the market should have an important requirement: to be cross-functional. The studied cases confirm CFI as an antecedent of MO, and in addition, they indicate several forms

of operationalization of integration factors aimed at market responsiveness. Four critical market-oriented processes were identified: 1) launch of innovations, 2) product delivery and services, 3) solution of complaints, and 4) innovation projects and internal improvement.

In the respondents' perception, top management support is necessary, but other factors are also needed for it to be effective, e.g. cross-functional meetings for planning and decision making. Similarly, internal marketing strategies generate other factors such as information sharing, team spirit and cross-functional training, through which the organization strengthens its orientation to the market. Specifically, information sharing must then be considered as a philosophy within organizations (Tiedemann et al., 2009), which generates a positive influence on responsiveness, in order to achieve higher levels of customer loyalty and satisfaction. In addition, cross-functional teams are key to planning and decision-making involving different perspectives at meetings, and improving responsiveness to the market. In the studied cases, cross-functional training was not used to foster mutual understanding among departments. However, the studied companies use job-rotation, which enhances awareness of the need for collaboration and interaction in cross-functional processes.

Theoretical implications

Seven exploratory propositions were developed. The propositions emphasize that, under the studied companies, cross-functional integration may happen in two different ways:

- when CFI is necessary to perform a routine process that has an impact on market orientation. Initially, the areas of marketing, finance and sales make analyses and proposals. Then, through formal integration factors, operations and logistics finish the procedure.
- when CFI is necessary to develop new projects that generate innovation and internal improvements. In these processes, the planning of the strategy and the decision making is jointly made by all the areas involved from the beginning, in order to achieve the expected results.

This study shows that the concepts of MO and CFI should be integrated in the organizational culture to facilitate the understanding of the different internal needs and levels of urgency. In addition, this study shows the importance of identifying processes related to MO and its respective characteristics of cross-functional work. The field research revealed that workers are organizational assets in MO processes. If they are motivated and informed, employees tend to be more willing to adopt a collective vision and commit to organizational goals. In this sense, this research reaffirms the importance of the employee as a leading actor in

the relationship between CFI and MO (Siu and Wilson, 1998; Ho Voon, 2006). When the employees are motivated, informed, and feel that they are part of the process, CFI happens with greater fluidity throughout the organization.

Moreover, formal factors such as cross-functional teams are also necessary to create a collaborative working environment, to facilitate interaction, and to plan for multidisciplinary decision making. Team members should learn how the company deals with informal factors, and how they may help to improve processes. This internal alignment helps to enhance the quality of service and products, as improves the employees' understanding about the market needs.

Finally, this study contradicts the results of other studies that suggest that MO is not a determinant of organizational performance in developing countries (Ellis, 2005). The study shows how MO presents an opportunity to use organizational resources in an efficient way through the case studies conducted in Brazil and Costa Rica. Such case studies provide examples of how integration may favor organizational performance and, consequently, its positioning in the market. In this sense, the most important theoretical contribution of this study is to fill this contextual gap in the CFI processes to achieve market-oriented organizational performance in Latin American companies.

Managerial implications

Some initiatives, emerging from field research, may help managers to reflect about the development of stronger relationships with their customers and partners. This research revealed several possible practices, related to CFI, that can positively impact MO. First of all, managers should pay attention to the employees learning and knowledge creation capabilities. It is an important issue regarding the initial phases of the development of integrated marketing processes. The studied cases revealed that the generation and t internal dissemination of market information might allow workers to understand their internal needs, improving customer responsiveness. Particularly in this sense, cross-functional integration plays an essential role, leading to the dissemination of knowledge about organizational and market dynamics, on both departmental and individual levels.

Another practical insight comes from joint planning involving activities of product launch and customer complaints. This integration factor may positively affect specific elements of market orientation, such as: responsiveness, customer satisfaction, and service and product quality. According to the field data, marketing and peer functions should perform joint planning with peer functions, in order to generate interdependency among functions and internally spread the awareness about the customer needs.

Limitations and future research

As a multi-case study, this research is limited to the analysis of two organizations. Future research may examine cases in other countries and collect data from different sectors and organizations. Another possibility is to test the relationship between the cause and effect relationships of the presented propositions. To achieve this, a survey with business managers could be carried out to test their trueness through hypotheses. In addition, the field research was limited to studying the perception of strategic and mid-level managers, and did not include the opinion of people from the operational levels, which could provide a different perception about the practical perspective of CFI and MO.

Finally, this study revealed some practices and perceptions from firms operating in Latin America that seem to be distinct from most part of the literature, which is based on empirical research from Europe and USA. Future research may include comparative studies about cultural, economic and political discrepancies related to the market orientation construct in both developing and developed regions. This type of effort may enrich the concept of market orientation through the discovery of innovative practices, characteristics and motivations.

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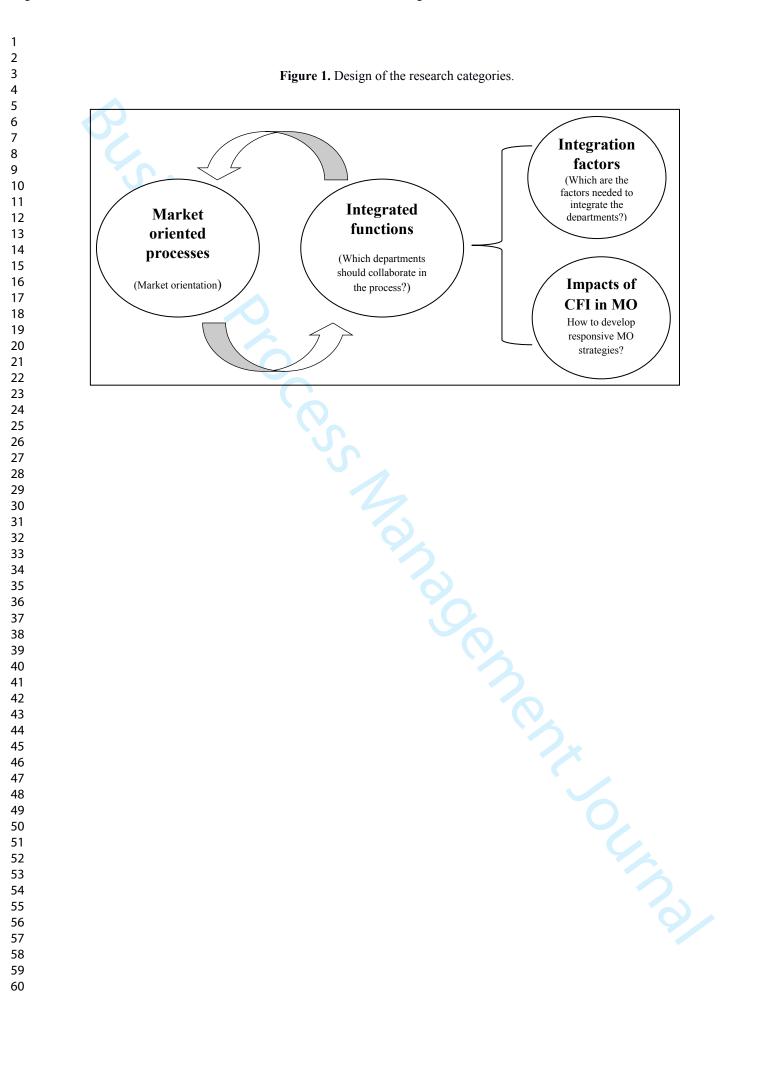


Figure 2. Elements of the market-oriented processes in the studied companies

Use of information systems Trust relationship Job rotation

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Components		
	Description	Authors
neration of arket intelligence	Analysis of current and future customer needs as well as the context in which they occur; involves reviewing the different interest groups of the organization and each department to identify elements that could be leveraged to create value.	(Kohli & Jaworski, 1990; Day, 1994)
read of market elligence	Related to the participation of all departments in the distribution and analysis of market information; provides the organization and its departments with shared information base that helps them act and respond to the context.	(Shapiro, 1988; Kohli & Jaworski, 1990; Day, 1994)
sponsiveness to e market	Actions based on the intelligence generated and disseminated as part of the responsibility of all departments of the organization.	(Kohli & Jaworski, 1990; Ruekert, 1992).

	Table 2 - Integration factors that promote MO.	
Factors	Definition	authors
Top management support	Managers and leaders must be clear about the importance of MO and CFI to create value for the customer, in order to be able to establish and reproduce the basis of these strategic perspectives.	Biemans, Brenčič, & Malshe, 2010; Chang, Chen & Chiou, 2015.
Mutual understanding	Individual and organizational knowledge about the bases of CFI and MO. Every employee - no matter from which level - must know the organizational characteristics that define CFI and MO.	Inglis & Clift, 2008; Hillal & Mubarak, 2014.
Reduction in centralization of information	Improve access to information on production, sales, costs, and market competition to foster an environment of collaboration and cooperation between departments, thus reducing hostility due to lack of information.	Lascu, Manrai, Manrai, & Kleczek, 2006; Kanovska & Tomášková 2012.
Market-oriented evaluation and rewards systems	To promote MO and CFI, reward systems must be based on long-term and risk-based goals. Recognition to the units involved must be granted in a comprehensive way, promoting cohesion and identity in the cross-functional team.	Siu & Wilson, 1998; Wei & Atuahene- Gima, 2009; Qu, 2012.
Information and IT systems	Design and use systems that allow communication and cross- functional coordination. Define the antecedents and consequences system to facilitate integrated decision making.	Inglis, 2008; Kang, 2015.
Structure and culture that promote integration	Horizontal structure and culture of open communication between units, with provision for discussions and decision-making that value: the individual's experiences and collective construction, knowledge of the context and stakeholders, and responsiveness.	Biemans & Brenčič, 2007; Biemans et al., 2010; Qu, 2012.
Internal marketing strategies	Internal marketing should be implemented so that all members of the organization act in accordance with the same orientation, goals and philosophy.	Conduit & Mavondo 2001
Establishment of common goals	Strategic planning of the contact points should be in conjunction with the establishment of common goals for the units concerned.	Chang et al., 2015.
Cross-functional training	Functional training should encourage joint work and group identity	Siu & Wilson, 1998; Tsiotsou, 2010.

	Table	endraeterne	dies of the ofga	nizations studied.		
Name given to the organizations	Location	Sector	Total number of employees	Approximate annual turnover	Interviewees	Period of interviews
BR Organization	Brazil	Beverages	1300	R \$ 600 million	14	June-August / 2016
CR Organization	Costa Rica	Foods	230	R \$ 102 million	10	July-October / 2016

 Table 3 - Characteristics of the organizations studied

 Table 4 - People interviewed in each organization

Interviewees in the BR Organization	Interviewees in the CR Organization
Integrated Planning Manager (IPM1)	Sales Development Manager (SM2)
Finance coordinator (FC1)	Finance Manager (FM2)
Warehouse Supervisor (WS1)	Retail Channel Manager (RCM2)
Drinks Category Analyst (DA1)	Wholesale Channel Manager (WCM2)
Trade Marketing Supervisor (TM1)	Marketing Manager for Business Unit Food, Cookies and Crackers (MMC2)
Production Control Analyst (PC1)	Marketing Manager for Business Unit Snacks (MMS2)
Production Planning Analyst (PP1)	Accounting Coordinator (AC2)
Supervisor of Market Planning (MP1)	Logistics Coordinator (LC2)
Senior Purchaser (SP1)	Purchasing Analyst (PA2)
Consumer Answering Analyst (CAS1)	Human Resources Analyst (HR2)
Leader of Handling and Storage (LHS1)	
Quality Engineer (QE1)	
People Development Analyst (RH1)	
Training Analyst (TA1)	

	Organization	Responsiveness
Feam spirit	Market share	Product quality and service
Commitment	brand and image of the organization	Agility in response
Motivation	Sales Performance	Product Availability
3	Efficiency and profitability	Innovations in products and services
	Internal innovation	
	Organizational learning	