

Analysis of business models innovation – a multiple case study

Business
models
innovation

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17

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Abstract

Purpose – This paper aims to analyze the business model innovation in medium and large Brazilian manufacturing companies located in Rio do Sul State.

Design/methodology/approach – A holistic multiple case study in five companies was developed. Data were collected through interviews and analyzed according to the content analysis technique.

Findings – The main motivation to business model innovation was the innovation in products and services, while the difficulties were the factors relating to the cost. The most common practice among cases was innovation in value proposition and the most widely used method was learning-by-searching. While part of the theory was demonstrated in the case studies, new motivations and practices were identified. The investigation of the learning process on business models' innovation is pioneered in this study. Further studies on this subject are required.

Originality/value – New business models are likely to provide new opportunities to better address customer needs, generating differentiating itself from its competitors. It is a subject little investigated in the international context, and there are no studies to investigate the experience of Brazilian companies.

Keywords Innovation, Motivations, Learning, Business models, Difficulties

Paper type Research paper

1. Introduction

Business model innovation (BMI) consists in one of the greatest challenges of this business era. With globalization, the increased focus on the customer, high number of competitors, economic changes, interconnectivity between markets and technological changes, organizations are forced to rethink their traditional models and develop new business formats to gain competitive advantage (Chesbrough, 2003; Johnson *et al.*, 2008; Lindgardt *et al.*, 2009; Teece, 2010; Casadesus-Masanell and Ricart, 2011; Lee *et al.*, 2012; Schneider and Spieth, 2013).

A business model (BM) can be defined as a way for a company to deliver benefits for the clients, the organization of the company to attend its needs and the way the company captures value through those actions (Teece, 2010). BM is also defined as relationships and

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aspects involving the companies' approach to offer benefits that generate profits through their target audience (Sinfield *et al.*, 2012).

According to Giesen *et al.* (2010), the BMI is essential to the achievement of companies' success in the complex and dynamic environment. To the cited authors, companies must understand how and when to renew, re-think and adapt their BM so that they do not become obsolete. Regarding the organizational performance, Zott *et al.* (2011) state that BMI is an essential aspect to enhance the companies' performance. Bonakdar (2015) states that companies that innovated their BM are present in the current marketing environment ahead of their competitors.

Understanding the process of BMI, according to Sinfield *et al.* (2012), can lead to discover new market opportunities, to better attend the clients' needs, putting the company in a place ahead of their competitors. Focusing on results, Teece (2010) argues that new or adapted models can result in cost reduction or enhance the value perception from the customer's perspective and, if not easily replicated, the model can generate high results for the pioneers.

According to Chesbrough (2010), both the academic and business fields focus highly on the innovation of products and services and technology and little on the challenges of the topic of this study. For this author, the BMI will be as essential as the technological innovation as a well-structured and constantly innovated model can overcome the investments perspectives in technology. Thus, Zott *et al.* (2011) state that, besides implementing technologies, companies must define a good BM to reach their market potential.

Despite the recent academic interest on the topic, research in this field is limited (Bonakdar, 2015). According to Teece (2010), the essence of BMI and their applications in the organization and in society should be exploited to improve the understanding of BM and their involvement in entrepreneurship and innovation. The effects of BMI should be studied and deepened to improve the understanding of the results and the performance that this type of innovation provides (Schneider and Spieth, 2013). Spieth *et al.* (2014) consider that BMI is a recent and not yet fully defined topic, but it is becoming increasingly important to the business environment, it is a promising and important field for research.

Considering the need for more studies related to the field and the absence of studies that investigated Brazilian companies, we argue that: How does BMI happen in Brazilian companies? A delimitation was carried out in the study of manufacturing companies, from medium to large-sized, located in the Rio Grande do Sul state. Companies were selected by accessibility and convenience. The main objective of this article is to analyze how does BMI happens in Brazilian manufacturing companies, from medium to large-sized, located in the Rio Grande do Sul state. The specific objectives include the investigation of BMI practices adopted by the companies, the difficulties faced to innovate and the organizational learning acquired with this innovation process.

2. Innovation

The first studies on innovation start with Schumpeter (1934), to whom the innovation consisted of new ways of organization, with new sources of materials and new markets. Almost one decade later, when referring to the economic changes and replacing of products and process of the market and the industry, Schumpeter (1942) stated that the process of revolutionizing, destroying and creating a new economic structure, called "creative destruction," is a fundamental fact for the capitalism must be continuous. In the beginning of the 1960s, Schumpeter (1961) describes innovation as major disruptions related to

products, services and processes, representing a break with previous paradigms to generate wealth and differentiation.

In the early 2000s, [Chesbrough \(2003\)](#) states that with the strong changes in the economy and competitive market, the companies must be prepared for future changes using innovation through the adoption of new practices, the development of new technologies and the creation new products, services or processes that enable them to face this new market. Similarly, [Prahalad and Ramaswamy \(2004\)](#) contribute to a new approach and define innovation as the incorporation of new technologies aiming to increase the competitiveness and added value of the organizations in the market. [Tidd *et al.* \(2008\)](#) present the innovation as the development of something new that adds value, affecting positively the performance and position of the companies. Innovation is the production of new products, services, production and organization methods that are new to the company and to the market ([Johannessen and Olsen, 2011](#)).

According to [Norman and Verganti \(2014\)](#), there are two degrees of innovation: radical innovation and incremental innovation. These authors classify the radical innovation as something completely new, never done before, which introduces new paradigms, creating potential and opportunities for big and significant changes. The incremental innovation is classified as making improvements on what already exists, making little changes to enhance the performance and improve functionalities or applications. In addition, [Christensen and Raynor \(2003\)](#) present the concept of “disruptive innovation,” characterized by the creation of new markets or the transformation of existing markets. The types of innovation are summarized in [Table I](#).

To understand what makes the organizations to innovate, [Simantob and Lippi \(2003\)](#) present two groups of reasons: technological and economic. The first involves:

- developing new products and services;
- improving production methods;
- copying innovative companies;
- adapting technologies from other sectors or industries to their context; and
- improving techniques.

The second one prioritizes:

- innovation of products, which include replacing products, increase the portfolio and expand in new markets; and
- innovation of processes, which involves flexibilization of the manufacture and reducing their costs, having better work conditions and reducing the pollution.

The approach of the Oslo Manual ([EUROSTAT, 2015](#)) presents some factors that stimulate the innovation in corporations:

- economic factors, which involve high costs and demand deficiencies, and affect the development and differentiation of products and process improvement, to increase sales and market share and reduce costs and prices;
- specific factors to a company, such as lack of qualified personnel or knowledge, which involve investment in human resources, staff training and degree of adaptation of the workforce in the labor market structure; and
- legal factors, as laws, regulations or tax rules, which involve access to information, property rights, tax and administrative charges and environmental standards.

Authors	Types	Definition
Prado and Mañas (2014)	Product or service innovation	Technologically new or improved products or services
	Process innovation	Production methods and/or new or improved distribution
Tidd <i>et al.</i> (2008)	Management model innovation	Improvement of the existing management practices
	Marketing innovation	New approached in 4 P's of marketing
	Business model innovation	Reformulation of the existent business model
	Product innovation	Changes in the products or services
Sawhney <i>et al.</i> (2006)	Process innovation	Changes in the way products or services are created and distributed
	Position innovation	Changes in the way products and services are introduced to the market
	Paradigm innovation	Change in the mental models of work
	Offer innovation	Create innovative products and services
	Platform innovation	The use of the same platform to create offers deriving from the first one
	Solution innovation	Create integrated offers to solve problems of the clients
	Innovation in clients	Identification of the non-revealed needs of the client and the non-target audience
	Innovation in client experience	Re-shaping the interaction with the client through all contact points
	Innovation in value capturing	Re-define new means through which the company will be paid
	Process innovation	Re-design the key operational processes
EUROSTAT (2005)	Organizational innovation	Change the business or the company's structure
	Innovation in the supply chain	Re-thing the way the products are supplied, delivered and outsourced
	Presence innovation	Create new distribution channels or contact points
	Relationship innovation	Create relationship intelligence and integrated offers
	Brand innovation	Enhance the brand concept and its positioning
	Production innovation	Introduce a new or improved product or services
	Process innovation	New or improved production and distribution
EUROSTAT (2005)	Marketing innovation	New approaches in 4 P's of marketing
	Organizational innovation	New practices and business methods

Table I.
Types of innovation

Source: Developed based on EUROSTAT (2005, p. 23), Sawhney *et al.* (2006, p. 78), Tidd *et al.* (2008, p. 30) and Prado and Mañas (2014, p. 2)

As difficulties for innovation, Simantob and Lippi (2003) point out three main reasons:

- identifying innovation as a topic for academicians with no real market experience;
- not incorporating an innovation culture;
- surviving from a past innovation;
- not continuing the innovation processes;
- having excessive risk aversion;
- accommodating in closed systems and not seeking new formats; and
- being influenced by macroeconomic and political scenarios.

With a more specific approach, the Oslo Manual presents five factors that turn the innovation in organizations difficult:

- factors related to cost, such as risks, high costs, and lack of internal and/or external funding;
- factors related to knowledge, such as low level of innovative potential, lack of qualified labor, limited information on technologies and markets and aversion to organizational changes;
- market factors, such as uncertain demand and potential market established;
- institutional factors, like insufficient infra-structure, propriety rights, legislation and regulation; and
- other reasons as surviving with past innovations and lack of demand (EUROSTAT, 2005) Zott and Amit (2001) show the attachment to traditional structures and resistance to experimentation, while Chesbrough (2010) highlights the settings of processes and the inability of managers to understand the potential value of a new BM.

Antonello and Godoy (2010) identified and described five types of learning in the innovation literature:

- learning-by-doing, which is internal to the company, focusing on the production activities;
- learning-by-searching, which is mainly internal to the company, focusing on commercial activities and on research and development;
- scientific learning, with both internal and external focus on the company and on technological knowledge;
- learning-by-using, which is internal to the company, focusing on the use of products and inputs; and
- spillover learning, which is external to the company, focusing on acquiring external knowledge to copy already existent practices.

3. Business models

BM involves new ways of interaction that complement the studies on the innovation of processes, innovation of products and organizational innovation (Zott *et al.*, 2011). Timmers (1998) defines BM as the description of the flow of products, services, information and income sources, involved in the business and their activities as well as their potential benefits. From a more comprehensive view of the ones involved and focused on the outcomes, Dubosson-Torbay *et al.* (2002) define BM as the way the companies and their stakeholders create and deliver value to their target market, to generate sustainable and profitable income flows. With a concept towards the competitive advantage, Morris *et al.* (2005) define BM as the roll of variables in strategy, organizational design, and economy to create competitive advantage in organizations. Schneider and Spieth (2013) argue that BM emerge as a new analysis unit and as a critical point to innovation.

To deepen the understanding of the topic and its applicability, Osterwalder and Pigneur (2010) divide the BM into nine blocks. Complementing the concepts above, Lindgardt *et al.* (2009) divide BM into two great dimensions comprehending six elements. The two approaches are presented in Table II.

Considering the BM concepts and components presented in this section, we choose to apply the Teece's (2010) definition of BM as our conceptual base. According to him, a BM

Authors	Dimensions	Elements	Definition
Lindgardt <i>et al.</i> (2009)	Value proposition	Market segment	Customers that the company intends to attend
		Product or service offer	Products or services offered by the company to satisfy the customer's needs
	Operational model	Income model	Model of how they will receive the proper offer
		Value chain	How the company is organized to deliver the customer's demand
		Cost model	How to structure the assets and costs to deliver value to the client thus guaranteeing profitability
		Organization	How to make the collaborators deliver this value and have competitive advantage
Osterwalder and Pigneur (2010)	Offer	Value propositions	How to solve problems and satisfy the customer's needs
	Clients	Segment of clients	Which segments of clients the company intends to offer value
		Channels	How to deliver value to the customer
		Relationship with the client	How the company interacts with each of their several targeted segments
	Infrastructure	Key resources	Which resources to offer and deliver the value proposition
		Key activities	Which are the main activities of the business
		Key partners	How to do the contracts with other companies to perform the activities and raise funds for the business
		Income model	Result of the value proposition offered to the customers
	Financial Viability	Cost structure	The monetary issues applied to the model

Table II.
the Composition of
BM

Source: Developed based on Lindgardt *et al.* (2009, p. 2) and Osterwalder and Pigneur (2010, p. 16)

represents the way a company delivers value to their customers, how it gets organized to attend its own need and how it captures value doing these.

3.1 Business model innovation

Markides (2006) defines BMI as the discovery of a new and different model within an existent business. On the other hand, Lindgardt *et al.* (2009) not only state that BMI includes products, services, technologies or sales models but also point out that BMI is innovating simultaneously between the business components, in a coherent, organized and planned way. Lindgardt *et al.* (2009) mention that the BMI occurs when two or more elements of the model are renewed to deliver value in a new and different way. According to Spieth *et al.* (2014), BMI is defined as a new value proposition to the client and as the reconfiguration of organizational structures. Casadesus-Masanell and Zhu (2013) classify BMI as new means for the company to create and capture value for its stakeholders. Schneider and Spieth (2013) define that BMI search to renew company's business logic, instead of restricting the innovation in products and services.

Johnson *et al.* (2008) pointed out four main success factors for BMI. Giesen *et al.* (2010) consider three factors co-related to their definition of the types of BMI. These two concepts are presented in Table III to a better understanding of the topic.

Teece (2010) says that innovative models can ensure strong differentiation and competitive advantage in the market. However, they must identify and attend the

Authors	Success factors	Definition
Johnson et al. (2008)	Value proposition	How to create value for the customers, helping them to solve an important problem or satisfy a need
	Profit formula	Description of how an organization creates value for itself while it creates value to the customer. It includes: income model (price vs volume); cost structure (allocation of the main assets, direct costs, indirect costs and scale economy); margin model (transaction liquidity to achieve the expected profit); and resources speed (how fast the resources must be used to support the targeted segment)
	Key resources	Interaction between: staff; technology; products; facilities; equipment; channels; and brand
	Key process	Operational and managerial processes that allow to create and raise the value, such as: training, development, research, manufacture, budget; planning, sales, IT and service; rules and metrics (margins required for investment, credit, contracts with suppliers); and norms (determining the size of the investment opportunity and the approach of consumers and company channels)
Giesen et al. (2010)	Alignment	Customer's value Internal alignment between industry, income and company's models External alignment
	Analysis	Competencies and capacities Business intelligence: Strategic view Financial model Measures
	Adaptation	Leadership and change: Visionary and innovative leadership Support for decision of revolutionary innovations Operational model: Transparent processes Scalable technology Costs flexibility

Table III.
Success factors for
BM

Source: Developed based on [Johnson et al. \(2008, p. 62\)](#) and [Giesen et al. \(2010, p. 20\)](#)

consumer's needs through an organization dedicated to carrying out actions to achieve this goal. When studying the situations demanding BMI, [Johnson et al. \(2008\)](#) mention five circumstances of opportunity:

- opportunity through disruptive innovation to meet the needs of consumers' groups that are excluded from a market due to the existing solutions being expensive and complicated;

- opportunity to capitalize on a new technology in a new BM or take a technology already tested to a new market;
- opportunity to solve a problem and satisfy a consumer's need not yet attended;
- need to distance from the disruptive innovations in the low market; and
- need to respond to a shift in the basis of competition.

[Pohle and Chapman \(2006\)](#) state that BMI is an optimal approach for the companies to face the changes in creating value in instability times. [Zott et al. \(2011\)](#) reveal that BMI a key factor for the good performance of companies and that their logic occurs through income models and costs, value proposition and value capture. [Bonakdar \(2015\)](#) also considers that BMI changes how the company organizes itself and works to generate value, thus generating competitive advantage.

Considering that we previously decided to use [Teece's \(2010\)](#) BMI concept to guide our research, we had the same need regarding BMI. So, at this paper, we consider BMI as the new configuration, due to changes in the forms of proposition, development and delivery capacity of the company for its consumer.

4. Research method

Given the purpose of the study and the limited literature on the subject, it was chosen to carry out an exploratory qualitative research through the development of multiple holistic case studies. The case study, according to [Yin \(2010, p. 39\)](#), “[...] is an empirical investigation that investigates a contemporary phenomenon in depth its context of real life, especially when the boundaries between phenomenon and context are not clearly defined.” [Freely translated from the original] Holistic multiple case study, according to [Yin \(2010\)](#), is the study that contains more than one case, where each has its own context and the results to be obtained must be similar or contrasting.

The cases investigated in this study were Brazilian manufactures companies, from medium to large-sized, that have innovated in their BM. According to the [Serviço Brasileiro de Apoio às Micro e Pequenas Empresas \[SEBRAE\] \(2015\)](#), following the criterion of the number of employees, medium to large-sized companies are commercial and service companies with more than 50 employees and manufactures with more than 100 employees. The companies studied were selected considering accessibility and convenience. [Table IV](#) presents the companies investigated in this research. To preserve the identity of the companies, their names will not be disclosed in this article, once an identification by colors is distinguishing them.

The description of the interviewees of the study is presented in [Table V](#).

First, a documentary research was carried out related to each investigated company. Company websites, scientific articles and reports were analyzed prior to the interviews to

Table IV.
Description of the
investigated
companies

Company	Foundation	Activity sector	No. of collaborators
Blue	1980s	Industrial automation	301-500
Yellow	1940s	Chemistry, Plastics, and Equipment for Individual Protection	2,001-3,000
Red	1980s	Fashion	1,001-2,000
Green	2000s	Electronics	200-300
White	1960s	Building materials	500-700

Source: Developed by the authors

allow a better prior knowledge that qualified the interviews. The semi-structured interviews were made based on a questionnaire developed with the support of the literature review. [Table VI](#) presents the data collection plan, with the identification of the objectives, research categories and reference authors.

The interviews were held during the second semester of 2015. They were recorded with the authorization of the interviewees. The transcriptions were analyzed according to the content analysis technique following [Bardin \(2002\)](#) guides. The categories listed in [Table V](#) were used to conduct the analysis. Successive readings of the interviews and the search for categorizing allowed us to compare them, and the result of this analysis is presented below.

5. Motivations of the companies for business model innovation

The main motivating factor to BMI, as mentioned by the five interviewees, was the innovation of products and services, related to the replacement of products, an increase of the portfolio and expansion of the company in new markets. This is one of the motivations reported by [Simantob and Lippi \(2003\)](#) in the group of economic reasons. Interviewee 2 states that operating in multiple markets is an essential and motivating factor because if the Yellow Companies kept operating only in the footwear industry, the innovation would be much more restricted. Interviewee 3 reveals that the increase in the portfolio and the expansion of the market was a motivating factor for innovation to achieve new business strategies. Interviewee 4 reveals that constantly investment in research and development to produce updated products and differentiate themselves in the market is a motivating factor, mainly for the Green Company, which is a technology company that must be constantly renewed to stay competitive.

The second most common motivation was the legal factors, classified by the Oslo Manual as laws, regulations or tax rules ([EUROSTAT, 2005](#)). This was mentioned by three of the five interviewees, such as laws encouraging innovation and specific laws in some industries, which influenced positively the management of innovation in companies. Interviewee 1 reports that the *Law of Informatics* and other complements played a key role in the success of the Blue Company, due to grant funds for developing complex products such as those in its segment. Interviewee 3 considers that the laws encouraging innovation often enable and facilitate innovation, and motivate the implementation of an innovative solution more quickly. Similarly, Interviewee 4 mentions that the tax benefits must be used to become more competitive, as well as resources to develop new products to increase the portfolio.

One of the least-common factors, considered only by Interviewee 2, was the adaptation of technologies from other manufacturers in your business, which [Simantob and Lippi \(2003\)](#) present in the group of technological purposes as motivating factor. The interviewee states

Interviewee	Company	Position	Education
1	Blue	President	Bachelor's degree in Electrical Engineering
2	Yellow	President	Bachelor's degree in Business Administration Specialization in Marketing
3	Red	Branding Director	Bachelor's degree in Financial Management
4	Green	Executive President	Bachelor's degree in Business Administration Specialization in Marketing
5	White	Commercial Director	Bachelor's degree in Law Specialization in Business Administration

Source: Developed by the authors

Table V.
Interviewees

Objectives	Variables	References
Identifying the motivations of the companies to BMI	Adapting technologies from other industries Economic factors (high costs and demand deficiencies) Specific factors (lack of specialized personnel or lack of knowledge) Legal factors (laws, regulation or tax rules) Process innovation (flexibilization of manufacture and costs reduction) Products and services innovation (replacing products, enhancing the portfolio and expanding in new markets)	EUROSTAT (2005) Simantob and Lippi (2003)
Presenting the practices in BMI used by the companies	Cost structure Measures Income model Operational model Key partners Key process Value proposition Key resources Strategic view	Giesen et al. (2010) Johnson et al. (2008) Lindgardt et al. (2009)
Identifying the difficulties to BMI	Attachment to traditional structures Macroeconomic and political scenes Lack of an innovation culture Market factors (uncertain demand and potential established market) Institutional factors (infra-structure, propriety rights, legislation, and regulations) Cost-related factors (risks, high costs, and lack of financial support) Knowledge related factors (lack of qualified labor, aversion to changes, and information) Resistance to the experimentation Surviving with past innovations	EUROSTAT (2005) Simantob and Lippi (2003) Zott and Amit (2001)
Revealing the learnings with BMI	Scientific learning Acquisition, interpretation of information, and implementation Learning-by-doing Learning-by-searching Learning-by-using Spillover learning	Antonello and Godoy (2010)

Table VI.Data collection plan **Source:** Developed by the authors

that the innovation in the Yellow Company is considered as adaptive, using technologies from other industries, by searching tendencies of innovation and technologies that were never used in their markets.

Another factor mentioned only by Interviewee 3 was the innovation process, involving flexibilization of manufacturing and cost reduction, a motive that was considered by [Simantob and Lippi \(2003\)](#) among the economic reasons to innovate. Red company innovated its manufacturing facility to obtain efficiency, machinery and processes gains, as it enabled flexibility to attend the entire chain and increase of the agility in selling and delivering products.

Figure 1 presents the motivating factors identified by the interviewees for BMI according to the literature studied.

Economic and specific factors were not identified in the studies. However, the interviewees pointed to other specific motivating factors of their business. Interviewee 2 shows that a motivating factor for the Yellow Company was a matter of defense because with the onset of globalization a world without barriers and with free competition was being predicted. They also understood that there was also an opportunity to enhance growth in this new global BM. In contrast, Interviewee 3 states that the primary motivation was achieving the view and the dream of the company, changing, influencing and leaving a positive image on the market. Interviewee 5 points out that keeping on growing so that the organization expands itself and can accommodate more projects, people and new challenges is a motivating factor, thus being a desire of constant improvement.

The following motivations are presented as motivating factors that were not mentioned in the literature: market pressure for innovation and differentiation, survival in a globalized world, defense in face of the market changes, identification of growth opportunity with new BM, improvement of processes, achievement of the dream and the company’s view and positive image on the market. These motivations can be grouped as “Strategic Factors,” as they are related with the planning and execution of the strategy of the companies.

6. Business model innovation’s practices used by the companies

The most frequent practice, used by all the investigated companies, is innovating in the value proposition. It is considered by Osterwalder and Pigneur (2010), Lindgardt et al. (2009) and Johnson et al. (2008) as one of the major dimensions of BMI.

The second most common practice, considered by four of the five respondents, was the issue of key partnerships, defined by Osterwalder and Pigneur (2010) as the use of partners that positively influence the business activities. The other most used practices, mentioned by three interviewees, were the processes and key-resources of the companies, which Johnson et al. (2008) consider as two of the four success factors to BMI.

The other two less common factors, mentioned only by two interviewees, was the strategic view, defined by Giesen et al. (2010) in the analysis factors, and the operational

Factors	Cases				
	1	2	3	4	5
Products and services innovations (replacing products, enhancing the portfolio, and expanding in new markets)					
Legal factors (laws, regulation, or tax rules)					
Adaptation of technologies from other manufacturers					
Process innovation (flexibilization of manufacture and costs reduction)					
Economic factors (high costs and demand deficiencies)					
Specific factors (lack of specialized personnel or lack of knowledge)					

Source: Developed by the authors

Figure 1. Motivating factors

model, considered by [Giesen *et al.* \(2010\)](#) as a group of adaptation factors, and by [Lindgardt *et al.* \(2009\)](#) as the second group of factors composing the innovation in BM.

Interviewee 2 considers that the main point of the company's innovation was the decision to have three business areas divided by market segment and technologies, not focused on just one sector. The interviewee says that the company opted for diversifying the business in three simultaneous dimensions. The first dimension is geographical, from being a company with a unique operating in Brazil to a company operating in all Latin America. The second is the markets dimension, where 80 per cent of its operation was the footwear industry, becoming a multi-market company. And the third, the business dimension, from being a shoe components company to be a group of three companies that were in three segments: individual protective equipment, chemical area focused on adhesives and sealants and special plastics area of engineering and composites. Thus, the company made a breakthrough in their BM through:

- value proposition, offering a broader portfolio and diversifying its customer segment; and
- operating model, which involves the corporate design of the structure and value chain enterprises and the strategic vision of dividing the company's operations.

Moreover, it innovated in their key-resources through technology applied in each company and brand consolidation, and in key-partnerships, through the formation of strategic alliances, with cooperation with international companies, technological associations and joint ventures, that enable a better and more consistent growth.

Interviewee 3 considers that one of their main innovations was the new value proposition and strategic view of the business, both in market segment and range of products, leaving a business that started only as men footwear, going to the market of women footwear, and then going to the men's clothing market, obtaining a broader view of the business. According to the interviewee, the company has a continuous product innovation, both in visual and technological, aiming at bringing new product categories, together with designers to brand consolidation. Thus, the group innovated the resources and key-partnerships. The interviewee comments that the group innovated in service because the company gave up a sales model based on production per order, passing to make productions per demand to be able to deliver faster, reduce disruption at the sales point and improve service to the client, which is defined as an innovation in its key processes of sales and service.

Interviewee 4 reports that the company makes a sale besides the product, combined with a business concept, through advice to the layout of projects and consulting. Thus, the company innovated in its value proposition by offering quality products associated with a differentiated service to the client, in a market where only selling the product predominates. The company also has a high level of research and development, with a group of qualified professionals who provide a vast capacity for fast development of products, with continuous production of high-tech products, making innovation in their key processes of research and manufacturing.

[Figure 2](#) lists the practices studied in the literature with those used by companies to innovate in their BM. The data analysis shows that six of the nine BMI practices found in literature are used by the investigated companies. The innovation practices in costs structure, metrics and income model were not evidenced in the study. It is observed that new dimensions of innovation practices in BMI are not presented in the cases studied.

7. Difficulties of the companies to business model innovation

The group of most common difficulties, mentioned by four of the five interviewees, was the factors related to the cost. This is one of the five groups covered by the Oslo Manual

Practices	Cases				
	1	2	3	4	5
Value proposition					
Key-partners					
Key-process					
Key-resources					
Operational model					
Strategic view					
Cost structure					
Measures					
Income model					

Source: Developed by the authors

Figure 2.
Practices used by the
investigated
companies

(EUROSTAT, 2005) that involve risks, costs, investments and financing. Interviewee 2 considers that the investment is a difficulty as it does not only represent the allocation of financial resources but also of people and time. Similarly, Interviewee 3 comments that resources are a constraint, as they require a financial investment capacity, risk assessment, implementation time and people to manage innovation.

The second group of most common difficulties, as mentioned by three of the five interviewees, is the institutional factors. Interview 1 states that the laws represent a large difficulty to innovate in Brazil because they are very complicated and time-consuming compared to other countries, with excess of changes in regulations. Interviewee 2 states that some laws to encourage innovation have advanced, but they are still very bureaucratic, with very complicated processes, which inhibit some companies to use the resources. Similarly, Interviewee 5 comments that the environment for the innovative process in Brazil is very unfriendly and considers that the risks of the initiatives become too high due to the uncertainty degree caused by excessive changes in regulations.

Other common factor, also mentioned by three of the five interviewees, is the influence of political and economic scenarios. Interviewee 2 says that the political and economic instability make companies think in the short term and of survival, while innovation requires effort to generate a satisfactory result. However, Interviewee 2 states that, in their company, the team takes advantage of times like these to evaluate the innovation projects that are being worked on to see which one of these is likely to come to the market faster, and consequently get to grow with them to compensate the reduced purchases from the market. Interviewee 3 considers that the political and economic scenario in the country generate more fear in risk assessment and investment. Interviewee 4 mentions that the political uncertainties directly affect their business because it makes the companies hold their investments and stop receiving funding due to high interest rates.

The less common difficulty in the research, mentioned only by Interviewee 3, was the aversion to organizational changes, conceptualized by the Oslo Manual (EUROSTAT, 2005) among the factors concerning knowledge. The interviewee states that in cases of innovation and changes, it is necessary to have people lined up with the strategy who can adapt themselves. The interviewee understands that the innovation to be carried out must be communicated clearly, so that the innovation process is no longer tiresome and time-consuming due to the company failing in communicating the actions that will be taken.

Figure 3 presents the difficulty factors identified by the interviewees for BMI, as it is shown in the literature review.

In addition to the difficulties found in the literature, the interviewees mentioned other limitations on their process of BMI. Interviewee 2 believes that incorporating innovation in the organization's BM is difficult. S/he believes that innovation must be top-down in the structure, and if this is not an option, a corporate decision and is not part of the model business, it will not succeed. The organization must deal with innovation in an organic and systematic way, guiding everyone involved for this purpose. Interviewee 3 considers that the main difficulty for the implementation of innovation is the cultural change. It is a difficult, slow process that requires time to be understood, changed and adapted. With the data analysis, it was possible to identify new difficulty factors reported by the interviewees: the performance of companies in new markets, incorporation of the innovation into the BM, cultural change of employees and transformation of ideas into something marketable, generating outcomes.

8. Learnings acquired by the companies through business model innovation

The interviewees revealed their main acquired learning in the process of BMI as it is shown in Table VII.

Regarding the influence of the learning in the company's management, Interviewee 1 declares that the main influences were the change of mentality of the groups about the constant search for generating value and the change of strategy of commercializing a product. Interviewee 2 considers that the main influence when managing the organization is acquiring professionals that fit the transformation profile, together with the training made available through courses, training, lectures and technical visits.

In contrast, Interviewee 3 comments that the learning influenced the management model by migrating from a more hierarchical process to a view of corporate governance, with the

Factors	Cases				
	1	2	3	4	5
Cost related factors (risks, high costs, and lack of financial support)		■	■	■	■
Macro-economic and political scenes		■	■	■	
Institutional factors (infra-structure, propriety rights, legislation, and regulations)	■	■			■
Aversion to changes			■		
Attachment to traditional structures					
Lack of an innovation culture					
Market factors (uncertain demand and potential established market)					
Knowledge related factors (lack of qualified labor and information)					
Resistance to the experimentation					
Surviving with past innovations					

Figure 3.
Difficulties faced by
the investigated
companies

Source: Developed by the authors

Cases	Learnings
1	In the technology field, companies must relate to the world Everyone in the organization must be aligned with the challenge of being in constant renewal and innovation to develop and commercialize high-quality products and technology, to create market differentiation
2	The innovation is addictive when there are an innovation environment and transformation motivating and uniting people. They get used to this environment of renewal and constant change Innovation must be sustainable: in the social aspect, it must make sense to the society, both in the environmental and economic aspects As the competence for innovation is built, it becomes very difficult to be copied because there is the combination of innovation with a unique BM The competitor cannot be seen any longer as a company with a similar product, but as a competitor with a similar BMI
3	Staff and structural belonging to collaborate with innovation, culture change and evolution to implement innovation and achieve results Structured communication, because if an innovation has happened or if it will happen, this must be communicated to all very efficiently, so that there are no alignment problems between the company and the collaborators
4	Having elements to decide, analyzing where they want to reach and where the company is going Having a structured planning of the innovation processes to obtain results consisting through their products and services
5	Developing methodologies to use the tools of the field staff, of observation of users, training, and knowledge, adding them to the projects, and then transforming this into a product. Creation of tools to conciliate the conception and marketing understanding with the opportunities and risks

Source: Developed by the authors

Table VII.
Acquired learnings

creation of a Council and committees and being more open and participatory for innovation issues. Interviewee 4 states that the influence was due to the use of tools to monitor and measure the performance of innovations and products developed in the company. Interviewee 5 reports that the influence of these learnings was to reconcile the two majors process of engineering and production to the marketing processes, sale and consumption, made through adjustments in the structure and division of responsibilities, and political power play of the organization, with the creation of tools, committees and accountability groups.

Regarding the influence of learning in innovation processes, the Blue Company uses the learning-by-doing method (Antonello and Godoy, 2010), which is internal to the company and focuses on production activities. Interviewee 1 considers changing the company's strategy to gain access to the world market, to monitor trends and manufacture products with increasing technology, to be able to compete on the level of international players, improving its production. The Yellow Company used the spillover learning method (Antonello and Godoy, 2010), which is external to the company and focusing on acquiring knowledge from outside to reuse existing practices. Interviewee 2 states that the main influence was the adaptive innovation, by searching tendencies of innovation and technologies that were never used in their markets, aiming to fast the process and enhance the dynamics of the creation of innovations. In the case of the Red Company, the innovation learning method is *learning-by-searching*, defined by Antonello and Godoy (2010) as being mainly internal to the company and focusing on commercial activities and research and development. Interviewee 3 believes that the biggest influence was the creation of

committees to present ideas, multidisciplinary innovations and new proposals of value for the client. The Green Company uses the scientific learning method, that according to [Antonello and Godoy \(2010\)](#) focus both internally and externally to the company and on technological knowledge. Interviewee 4 states that the main influence was to establish a process of hearing the needs and suggestions of the clients, evaluating these needs and to where the market is going, debating with the responsible areas, doing research and developing products that are more in line with the market expectations. [Figure 4](#) presents the methods of organizational learning related to innovation, according to the literature, with methods used by the companies being investigated.

It is observed that four of the six learning methods addressed in the literature are used in the companies investigated. The only method used by two companies is the learning-by-searching. The other methods identified were scientific learning, learning-by-doing and spillover learning. The methods learning-by-using and acquisition, interpretation of information and implementation were not identified in the investigated cases. In addition, they present a new learning reported by the interviewees regarding BMI that include new market views, communication strengthening, cultural and structural change for innovation, planning and decision-making tools and creation of different models to generate competitiveness and positive feedback to the organization.

9. Final considerations

Considering the essential concept of BM developed by [Teece \(2010\)](#), which guided the development of this research, and the BMI practices proposed by [Osterwalder and Pigneur \(2010\)](#), it was possible to observe that BMI represent new ways of generating value through changes that occur in different parts of the organization. Thus, it was realized that the BMI represents not the sum, but the combination of innovations in several dimensions. Thus, the new form of value generation stems from the way smaller changes combine within the organizational context.

The BMI of the investigated companies occurs mainly boosted by the desire to expand the markets, diversification and differentiation of products and services, to guarantee competitiveness in the market. The processes occurred due to the identification of new market opportunities and to the need to survive in the business environment.

It was noteworthy that innovative practices centered to products and markets are used, such as the incorporation of services to the sale, widening of the existent portfolio and expansion to other markets and target audiences, aiming at the growth and differentiation of

Learnings	Cases				
	1	2	3	4	5
Learning-by-searching					
Scientific learning					
Learning-by-doing					
Spillover learning					
Acquisition, interpretation of information, and implementation					
Learning-by-using					

Figure 4.
Learning methods

Source: Developed by the authors

the company. Moreover, innovations in corporate and business structure are carried out, such as the business division and operations by business segment and target audience, and creation of specialized departments that better organize and attend the organization's value chain. Practices related to research and development were seen, such as partnerships with institutions and professionals that provide greater growth, quality and technology for the company's products and projects. BMI is also made possible by the learning methods related to organizational changes, product manufacturing with technology, search for trends and knowledge, study models and identification of needs and market opportunities for process improvement and model redesign to generate more value to the client.

BMI occur through actions that involve creating and delivering value to the client with a personalized and directed offer to different audiences, restructuring and organizing the business and research, development and technology so that it generates value also for itself with the outcome of these actions. Innovation happens also due to being addressed as a business strategy and being incorporated into the culture of the organizations, with people motivated and adapted to constant renovations and changes and with resources targeting innovation.

Due to being a topic directly related to the business environment, some managerial implications are proposed. The major one refers to the investigation of what the clients need and what the company may do differently, through the value proposition, so that it generates differentiation, recognition and competitiveness in the market, while the companies also capture value for themselves. It is recommended that the organizations rethink their business structure, their processes and resources to create value and evaluate their markets segments and products offer to have a direction to where they intend to reach and what they can do to achieve their objective. Moreover, it is suggested that the companies address the innovation in their strategy and create an innovation culture within the organization to focus all efforts to the same objective.

For future studies, it is recommended the investigation of measurable aspects, such as the financial results gained by the companies through BMI, to understand what the innovation will bring to them. Moreover, it is recommended to investigate companies operating in the same sector, so that it is possible to have more comparison between the answers and behavior of the companies related to BMI. A comparative study is also proposed between the group of companies that did not innovate in their BM and a group of companies that did innovate, to make a comparison of the differences and similarities in the clients' perception about the offered value, the financial results and the used practices.

References

- Antonello, C.S. and Godoy, A.S. (2010), "A encruzilhada da aprendizagem organizacional: Uma visão multiparadigmática", *Revista de Administração Contemporânea*, Vol. 14 No. 2, pp. 310-332.
- Bardin, L. (2002), *Análise de Conteúdo – primeira parte, história e teoria*, Edições 70, Lisboa.
- Bonakdar, A. (2015), Business Model Innovation: studies on business model design, protection, and anchoring, Ph.D. thesis, School of Management, Economics, Law, Social Sciences and International Affairs, University of St Gallen, Germany.
- Casadesus-Masanell, R. and Ricart, J. (2011), "How to design a winning business model", *Harvard Business Review*, Vol. 89 Nos 1/2, p. 100107.
- Casadesus-Masanell, R. and Zhu, F. (2013), "Business model innovation and competitive imitation: the case of sponsor-based business models", *Strategic Management Journal*, Vol. 34 No. 4, pp. 464-482.

- Chesbrough, H. (2003), "New business logic of open innovation", *Harvard Business Review*, Vol. 1 No. 2, pp. 11-15.
- Chesbrough, H. (2010), "Model innovation: Opportunities and barriers", *Long Range Planning*, Vol. 43 Nos 2/3, pp. 354-363.
- Christensen, C.M. and Raynor, M.E. (2003), *The Innovator's Solution: Creating and Sustaining Successful Growth*, Harvard Business School Press, Boston.
- Dubosson-Torbay, M., Osterwalder, A. and Pigneur, Y. (2002), "E-business model design, classification, and measurements", *Thunderbird International Business Review*, Vol. 4 No. 1, pp. 5-23.
- EUROSTAT, Organização para Cooperação e Desenvolvimento Econômico (2005), *The Measurement of Scientific and Technological Activities - Proposed Guidelines for Collecting and Interpreting Technological Innovation Data*, Tradução: Financiadora de Estudos e Projetos (Finep), Manual de Oslo: Diretrizes para coleta e interpretação de dados sobre inovação.
- Giesen, E., Riddleberger, E., Christner, R. and Bell, R. (2010), "When and how to innovate your business model", *Strategy and Leadership*, v, Vol. 38 No. 4, pp. 17-26.
- Johannessen, J.A. and Olsen, B. (2011), "Projects as communicating systems: creating a culture of innovation and performance", *International Journal of Information Management*, Vol. 31 No. 1, pp. 30-37.
- Johnson, M.W., Christensen, C.M. and Kagermann, H. (2008), "Reinventing your business model", *Harvard Business Review*, Vol. 86 No. 12, pp. 59-67.
- Lee, Y., Shin, J. and Park, Y. (2012), "The changing pattern of SME's innovativeness through business model globalization", *Technological Forecasting and Social Change*, Vol. 72 No. 5, pp. 832-842.
- Lindgardt, Z., Reeves, M., Stalk, G. and Deimler, M.S. (2009), *Business Model Innovation: When the Game Gets Tough, Change the Game*, The Boston Consulting Group.
- Markides, C. (2006), "Disruptive innovation: in the need of better theory", *Journal of Product Innovation Management*, Vol. 23 No. 1, pp. 19-25.
- Morris, M., Schindehutte, M. and Allen, J. (2005), "The entrepreneur's business model: toward a unified perspective", *Journal of Business Research*, Vol. 58 No. 6, pp. 726-735.
- Norman, D.A. and Verganti, R. (2014), "Incremental and radical innovation: design research versus technology and meaning change", *MIT Press Journal, Cambridge*, Vol. 30 No. 1, pp. 78-96.
- Osterwalder, A. and Pigneur, Y. (2010), *Business Model Generation*, (1a ed.), John Wiley and Sons, Inc, Hoboken.
- Pohle, G. and Chapman, M. (2006), "IBM's global CEO report 2006: business model innovation matters", *Strategy and Leadership*, Vol. 34 No. 5, pp. 34-40.
- Prado, F.L. and Mañas, A.V. (2014), "Uma análise métrica das principais tipologias de inovação", Pontifícia Universidade Católica de São Paulo (PUC-SP), 2009, available at: www.sapientia.pucsp.br/tde_arquivos/5/TDE-2009-12-17T07:40:18Z-8890/Publico/Fabio%20Lucio%20Prado.pdf
- Prahalad, C.K. and Ramaswamy, V. (2004), "Co-creation experiences: the next practice in value creation", *Journal of Interactive Marketing*, Vol. 18 No. 3, pp. 5-14.
- Sawhney, M., Wolcott, R.C. and Arroniz, I. (2006), "The 12 different ways for companies to innovate", *MIT Sloan Management Review*, Vol. 47 No. 3, pp. 75-81.
- Schneider, S. and Spieth, P. (2013), "Business model innovation: towards an integrated future research agenda", *International Journal of Innovation Management*, Vol. 37 No. 1, pp. 1-34.
- Schumpeter, J.A. (1934), *The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest, and the Business Cycle*, Transaction Publishers, Nova York.
- Schumpeter, J.A. (1942), *Capitalismo, Socialismo e Democracia*, Zahar, Rio de Janeiro.
- Schumpeter, J.A. (1961), *The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest, and the Business Cycle*, Oxford University Press, Oxford.

-
- Serviço Brasileiro de Apoio às Micro e Pequenas Empresas (SEBRAE-SC) (2015), “Critérios de classificação de empresas: EI - ME – EPP”, Disponível em, available at: www.sebrae-sc.com.br/leis/default.asp?vcdtexto=4154
- Simantob, M. and Lippi, R. (2003), *Guia Valor Econômico de Inovação Nas Empresas*, (1a ed), Editora Globo, São Paulo.
- Sinfield, J.V., Calder, E., Mcconnell, B. and Colson, S. (2012), “How to identify new business models”, *MIT Sloan Management Review*, Vol. 53 No. 2, pp. 85-90.
- Spieth, P., Schneckenberg, D. and Ricart, J.E. (2014), “Business model innovation- state of the art and future challenges for the field”, *R&D Management*, Vol. 44 No. 3, pp. 237-247.
- Teece, D.J. (2010), “Business models, Business strategy and innovation”, *Long Range Planning*, Vol. 43 Nos 2/3, pp. 172-194.
- Tidd, J., Bessant, J. and Pavitt, K. (2008), *Gestão da Inovação*, (3a ed.), Bookman, Porto Alegre.
- Timmers, P. (1998), “Business models for electronic markets”, *Electronic Markets*, Vol. 8 No. 2, pp. 3-8.
- Yin, R.K. (2010), *Estudo de Caso: Planejamento e Métodos*, (4a ed.), Bookman, Porto Alegre.
- Zott, C., Amit, R. and Massa, L. (2011), “The business model: recent developments and future research”, *Journal of Management*, Vol. 37 No. 4, pp. 1019-1042.
- Zott, C. and Amit, R. (2001), “Value creation in e-business”, *Strategic Management Journal*, Vol. 22 Nos 6/7, pp. 493-520.

Further reading

- Christensen, C.M. (2001), “The past and future of competitive advantage”, *MIT Sloan Management Review*, Vol. 42 No. 2, pp. 105-109.
- Markides, C. and Charitou, C.D. (2004), “Competing with dual business models: a contingency approach”, *Academy of Management Perspectives*, Vol. 18 No. 1, pp. 22-36.
- Zott, C. and Amit, R. (2008), “The fit between product market strategy and business model: implications for firm performance”, *Strategic Management Journal*, Vol. 29 No. 1, pp. 1-26.
- Zott, C. and Amit, R. (2010), “Business model design: an activity system perspective”, *Long Range Planning*, Vol. 43 Nos 2/3, pp. 216-226.

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