

#### ARTICLE

# Business Model Canvas and Entrepreneurs: Dilemmas in Managerial Practice

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## **ABSTRACT**

The literature on business models has developed under the assumption that they are tools that managers in general, and entrepreneurs in particular, use intensively to analyze information and make decisions. However, this approach has historically presented little empirical evidence about its relevance. This paper investigates this issue by assessing whether and how entrepreneurs use business models in their everyday practice. We used qualitative analysis of interviews with a group of micro and small entrepreneurs to evaluate their attitude toward one of the best-known business model frameworks on the market, the Business Model Canvas (BMC). The results indicated that these entrepreneurs tended to adopt the BMC if they believed their market was static. In more dynamic markets, they preferred to draw on their practical experience. These results highlight that entrepreneurs' perception of their firm's competitive environment is decisive in defining their attitude toward using business models as viable managerial tools.

#### **KEYWORDS**

Canvas, Business Models, Entrepreneurship, Decision Making, Strategy

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1. INTRODUCTION BBR

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Business models are broad structures representing the logic of value capture resulting from the firm's managers' decisions (Buser & Carlsson, 2020; Demil & Lecocq, 2010). This characteristic makes them relevant because managers cannot always define logic precisely, which can negatively affect the quality of decisions that anticipate or respond to changes in the business landscape (Bowman & Ambrosini, 2000; Casadeus-Masanell & Ricart, 2010; Rajagopal, 2019). Concomitantly, this conception reflects the belief that managers who develop consistent and coherent business models make their firms better, and capture more value from the market than their competitors (Achtenhagen et al., 2013; Freudenreich et al., 2019; Kringelum & Gjerding, 2018). Therefore, the crucial question for understanding business models is how managers use them daily.

The theoretical debate does not address this question directly. Studies assume that managers use business models to analyze information and make decisions (Massa & Hacklin, 2021; Muñoz & Cohen, 2018; Pels & Sheth, 2017). For this reason, since its early days, the literature has not investigated in detail how these models were used (Chesbrough & Rosenbloom, 2002; Demil et al., 2015; Hedman & Kalling, 2003; Henike & Hölzle, 2019; Wirtz, 2020; Zott et al., 2011).

However, this is an aspect that deserves attention. In this paper, our thesis is that managers frequently do not use business models to make decisions contrary to what the specific literature assumes. Managerial practice indicates that managers tend to use these models circumstantially, that is, in situations where they can help solve problems that are not always well delimited. That topic is addressed broadly in related studies on managerial behavior (Desjardins et al., 2021; Jouillié et al., 2021; Jouillié & Gould, 2021). In the case of the business models, if that statement is pertinent, it has an exciting impact on research on entrepreneurs. They are professionals who decide to create new businesses or modify existing ones (Behling & Lenzi, 2019; Breslin, 2017; Hisrich et al., 2019; Neck et al., 2020; Wolcott & Lippitz, 2007). Therefore, according to the existing literature's logic, they should consider business models as crucial tools in managerial practice by adopting them on a large scale. However, to what extent could one support this assumption? After all, studies present little evidence on entrepreneurs' actual use of business models.

This paper explains this critical question through research conducted with Brazilian micro and small entrepreneurs trained to use the Business Model Canvas (BMC). We used qualitative data analysis to evaluate these entrepreneurs' statements about the effective use of BMC in their daily practice. The results revealed that their market perception was decisive for their attitude towards this tool.

# 2. LITERATURE REVIEW

## 2.1. Entrepreneurs and business models

Market and price-coordinated economies change continuously. Recent cultural and social trends shape consumer preferences, governments alter their policies according to prevailing perceptions, and managerial and technological innovations change the conditions under which firms operate. These changes cause market economies to operate in economic cycles in which fluctuations in economic activity do not always follow easily identifiable patterns (Belongia & Ireland, 2021; Sowell, 2015). Consequently, in managerial practice, managers seek to anticipate these fluctuations in the best way so that their decisions are consistent with the prevailing economic cycle (Rothbard, 2008).

Entrepreneurs are a specific type of managers and, as such, act according to this logic. They are individuals who make decisions about creating new businesses or existing opportunities in those already consolidated (Hisrich et al., 2019; Neck et al., 2020; Wolcott & Lippitz, 2007). Therefore, they need to know how to use the information to make consistent and coherent decisions (Behling & Lenzi, 2019; Breslin, 2017).

This ability results from the interaction between two types of learning. The first is vicarious, which occurs by observing other people's behavior (Gioia & Manz, 1985; Holcomb et al., 2009). In this type, entrepreneurs extract more knowledge at a lower cost by analyzing the successes and failures of others' trajectories rather than their own (Bandura, 1965; Kim & Miner, 2007). Examples of vicarious learning are entrepreneurs' participation in training, lectures, seminars, workshops, or other forms of sharing and disseminating their peers' experiences and knowledge. The second type is experiential learning. The continuous interaction between the entrepreneur's prior knowledge—including that which is derived from vicarious learning and his everyday experiences—leads him to increase his level of knowledge (Kolb & Kolb, 2005, 2009). Therefore, entrepreneurs make decisions based on what they learn from others' experiences and everyday practice. That might affect how they use business models, considered in this paper as a simplified and aggregated representation of the relevant activities of a firm (Wirtz, 2020).

The literature, however, takes a different approach. Early academic studies advocated the idea that business models were valuable tools for managers to make targeted decisions to increase the value their firms captured (Chesbrough & Rosenbloom, 2002; Hedman & Kalling, 2003; Magretta, 2002; Teece, 2010a; Timmers, 1998; Zott et al., 2011). Subsequent studies not only maintained this approach but extended it by establishing an umbilical relationship between business models and managerial practice (Balocoo et al., 2019; Bohnsack et al., 2020; Buser & Carlsson, 2020; Demil et al., 2015; Freudenreich et al., 2019; Tageo et al., 2020). Consequently, an expressive part of the literature has come to admit that managers constantly use business models as tools for decision-making (Verstraete & Jouison-Laffitte, 2011).

However, there is relatively little empirical evidence to support this conclusion. That means we need to consider two essential aspects: 1) how entrepreneurs use business models and 2) to what degree this occurs. The literature addresses the first without specifying whether the phenomenon's description represents what the researcher wants to observe or what the entrepreneur does (George & Bock, 2010; Henike & Hölzle, 2019; Tavassoli et al., 2017; Trimi & Berbegal-Mirabent, 2012). The second aspect is even more problematic because the literature consistently ignores it.

In this paper, we address this gap by proposing that entrepreneurs adopt business models according to their perceptions of their environment. Conversely, if this process leads to the perception that the environment is dynamic and unstable, the entrepreneur will rely on practical experience to make decisions. In this case, he will leave aside the business models he learned in training courses, workshops, or lectures. On the other hand, if the entrepreneur understands that the environment is static and less risky, he may resort to business models to rethink the firm's directions.

This argument's empirical analysis rests on business model frameworks grounded in managerial practice. That means that such frameworks should not be mere theoretical constructs but reflect how managers run their firms. The framework that best meets this prerequisite is the Business Model Canvas, which we have chosen for this research.

# 2.2. Entrepreneurial theory and practice in the Business Model Canvas

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Business models arise through frameworks, which are pre-defined structures that specify their components and their interrelationships (Guldmann et al., 2019; Henike et al., 2020; Richardson, 2008; Wirtz & Daiser, 2017). Consequently, these frameworks provide the information for entrepreneurs to restructure their firms or create new businesses to capture the highest possible value in the market.

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The literature describes frameworks that deal with various aspects of value capture. Thus, there are those appropriate for managers who want to allocate internal resources and competencies (Demil & Lecocq, 2010), structure the firm's network of activities (Casadeus-Masanell & Ricart, 2010), promote innovation (Christensen et al., 2016; Schiavi et al., 2019; Teece, 2010b, 2018), or implement digital platforms (Aversa et al., 2019). There is also a framework for entrepreneurs needing well-defined value propositions articulated with the business model's other relevant components. This framework is the Business Model Canvas (BMC), developed from research with managers and entrepreneurs (Osterwalder, 2004).

The BMC contains nine interconnected components: value propositions, key partnerships, key activities, key resources, customer relationships, customer segments, channels, cost structure, and revenue streams (Osterwalder et al., 2014). In BMC, entrepreneurs take sequential actions to map their firms' business models (Fisher et al., 2020; Joyce & Paquin, 2016; Osterwalder & Pigneur, 2010). This process begins by identifying customer segments and associated channels and determining or revising the value proposition for both. Next, entrepreneurs list the customer relationships and assess how they affect their revenue streams and value capture. Next, they identify the key resources, key activities, and key partnerships to capture the expected value. Finally, the entrepreneur details the infrastructure that supports the firm's business model, assessing the cost structure's effect on value capture.

The BMC differs from other frameworks because it was improved through feedback from managers and entrepreneurs, highlighting its authors' concern in developing an effective managerial-practice tool (Tageo et al., 2020; Taipale-Erävala et al., 2020). For this reason, it is a proper standard for assessing the extent to which entrepreneurs use business model frameworks in their decisions. The literature indicates that managers often adapt frameworks to align with their needs (Apte & Davis, 2019; Ojasalo & Ojasalo, 2018; Sort & Nielsen, 2018). According to this logic, entrepreneurs would likely adopt a framework strongly associated with managerial practice such as BMC unless exogenous impeding factors exist. Two possible reasons for such factors would be: 1) the BMC framework incorporated inconsistent feedback from practitioners, or 2) it has significant structural limitations.

In this paper, we consider that the second reason is more plausible because the BMC is a static framework that depicts the business model at a specific time (Osterwalder & Pigneur, 2010). That is appropriate for firms operating in more stable industries, where managerial or product innovations are not crucial to capturing value. This situation, however, is exceptional because the intensity of competition can lead managers of these firms to change their business models frequently (Ehret et al., 2013; Frishammar & Parida, 2019).

Entrepreneurs need practical tools to monitor the market and extract the relevant information to implement changes in more unstable business environments (Eisenhardt & Martin, 2000; Lopes et al., 2020; Teece, 2007). Frameworks can meet this demand as long as they are dynamic and provide the conditions for managers to make decisions considering three dimensions: 1) understanding the business models, knowing how the interrelationships and complementarities among the framework components work (Amit & Zott, 2015; Johnson et al., 2008); 2) monitoring the core aspects of the business (Brea-Solís et al., 2015; DaSilva & Trkman, 2014; Teece, 2010a) and 3) reviewing the business (DaSilva & Trkman, 2014; Teece, 2010a).

The BMC does not specify these dimensions in its structure, which evidences its static conception (Achtenhagen et al., 2013). Concomitantly, the literature treats it as a framework capable of helping entrepreneurs create or improve business models (Osterwalder et al., 2014). However, in both cases, entrepreneurs use this inherently static framework in situations suitable for dynamic tools. Therefore, it is crucial to understand how entrepreneurs use BMC and deal with its intrinsic limitations.

This paper addresses this question by surveying a sample of micro and small business entrepreneurs who adopted BMC after undergoing specific training. The results indicated that they used this framework to understand, monitor, and revise their business models. This practice, however, was more frequent only when entrepreneurs perceived the environment as static. In scenarios that they considered dynamic, they hardly used the BMC, preferring to resort to what they had learned in practice to make decisions.

# 3. METHODOLOGY

## 3.1. Research design

This paper adopted the qualitative approach in a population of 57 Brazilian micro and small firms in the state of Minas Gerais that used the BMC over three years. Initially, we restricted data collection to these firms' entrepreneurs who received BMC training from SEBRAE (Brazilian Micro and Small Business Support Service) in Minas Gerais. These firms make up a larger group of 212 companies that, from 2014 to 2016, underwent training at SEBRAE.

After this first selection, we had active firms in the service, trade, or industry sectors. We refined the sample to ensure that the data's variability would not lead us to possibly incorrect conclusions. To do this, we adopted three additional selection criteria. First, we excluded firms with temporary experiences with BMC. Second, we kept at least two firms for each sector. Third, we disregard firms active in more than one sector, keeping the variability among firms within acceptable limits. We selected the firms based on these criteria and the judgment and indication of SEBRAE professionals who knew their operating environment.

#### 3.2. Data collection and analysis

We collected data through in-depth interviews conducted in two stages. In the first, we interviewed a reduced sample of entrepreneurs, from which we developed the initial script that we sent to be evaluated by five professors with a doctorate in the areas of business models, innovation, and entrepreneurship. The interview script comprised the entrepreneur and firm

characteristics and history, knowledge of the entrepreneur about the firm's business and the BMC, and the entrepreneur's evaluation of the BMC. We used the comments of these professors to get the final version of that script.

In the second stage, we interviewed the top executives or owners of these firms in person, recording their testimonials in audio files on average one hour long. The interviews took place at their offices. They were previously informed about the research objectives and agreed to participate in it voluntarily. We observed that the answers were like the previous ones during the tenth interview. Despite that, we carried out a final interview, reaching theoretical saturation. The data collection process took over three months. Table 1 exhibits the final sample profile.

Table 1
Final sample profile

Identification	Interviewee's position	Firm's industry	Firm's size	Years of operation
A	Partner	Fashion design	Microenterprise	10
В	Owner	Agrobusiness consultancy	Microenterprise	8
С	Managing partner	Insurance	Small business	5
D	Owner	Bar and restaurants	Small business	6
E	Owner	Marketing agency	Small business	31
F	Owner	Computer trade	Microenterprise	13
G	Owner	Fashion	Microenterprise	6
Н	Commercial director	Cosmetics	Medium-Sized Company	14
I	Owner	Jewelry	Microenterprise	6
J	Partner	Environmental consultancy	Small business	8
K	Owner	Automotive springs	Small business	21

Source: Research data.

We imported these files into the Atlas.ti software program, taking the precaution of first checking that the imports matched the original files. We then sorted the data into three orders of aggregation (Corley & Gioia, 2004; Gioia et al., 2012; Salvato & Corbetta, 2013). The first contained the interviewees' responses, from which we arrived at the second order, which included the themes they addressed. Finally, these themes allowed us to aggregate the data into dimensions, forming the third order. That sequence of aggregative analysis is shown in Figure 1.

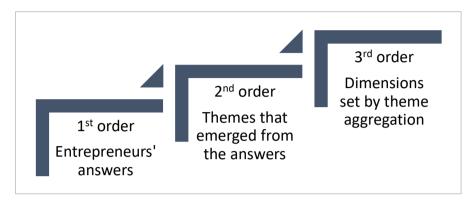
This procedure prevented us from merely comparing specific excerpts from the interviews. While this is a relatively standard procedure in qualitative analysis, it does not always allow the researcher to extract information relevant to the investigation's purpose (Eisenhardt, 1989; Günther, 2006). The aggregative analysis facilitated our understanding of the relationship between the results and what we addressed in the literature review. That is a critical aspect of qualitative research because its results need to indicate the validity of the theories that gave rise to the empirical study (Bansal & Corley, 2012).

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# 4. ANALYSIS OF RESULTS

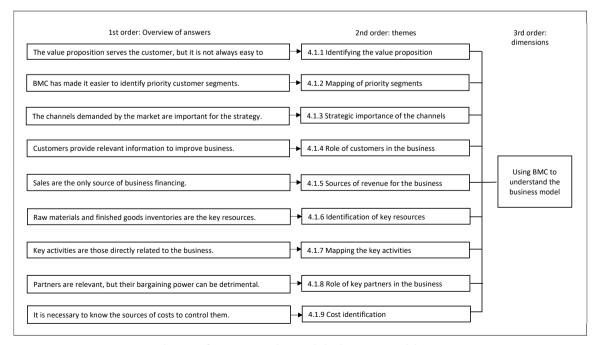
We grouped the results into the three dimensions identified in the interviews (Figure 1). The first shows how the entrepreneurs used the BMC to understand the firm's business model. The second records how they monitored the core aspects of the business. The third dimension describes how these entrepreneurs reviewed the elements of the business.



*Figure 1* - Sequence of the aggregative analysis of the data collected from the interviews *Source:* adapted from Salvato and Corbetta (2013).

# 4.1. Dimension 1: Use of BMC to understand the business model

The entrepreneurs knew how the BMC components could help them understand the firm's business model. However, they did not continuously use this framework because they believed it did not fully serve them. Figure 2 displays the systematized results and the following subsections with their full description.



*Figure 2* - Data structure on the use of BMC to understand the business model Note: the numbering of the themes corresponds to the numbering of the subsections in this text. *Source:* Research data.

# 4.1.1. Identifying the value proposition

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The value proposition is how the firm meets its customers' needs by solving their problems or improving their situations (Osterwalder et al., 2014; Osterwalder & Pigneur, 2010). Entrepreneurs understood this by focusing on serving customers appropriately:

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Our value proposition offers peace of mind, well-being, safety, protection, and personalized service at affordable prices. I am an insurance broker, right? So, besides my firm, I work with renowned brands in the market. (Firm D)

I will say that our value proposition, the main one, there are some, is clarity. Because the computer business is very obscure, the person fixes it and says that it was this and it was that, and you have to believe it, right? We appreciate our trying to show the client what happened. So our value proposition is this clarity. (Firm G)

The respondents could cite aspects of their value propositions. However, two groups were identified on whether the BMC framework would be an appropriate tool to verify if the business value proposition is adequate. The first perceives the BMC framework as a planning tool that cannot monitor the value proposition. It is necessary to consider other tools to obtain this support for them. The following snippet exemplifies this.

I don't think BMC alone [can identify the need to adapt the value proposition]; you have to have all the other businesses [tools] working in your business: finance, sales, but always looking at revenue sources, then [the BMC] helps. (Firm K)

The second group considers that the BMC framework is an adequate tool to identify changes in the firm's business model due to its simple structure to model the business, as it is very visual and easy to use. However, this group emphasizes that it is necessary to frequently revisit the filling of the BMC framework so that it is possible to monitor changes from it. The following speech addresses that topic:

The BMC is an excellent tool to assess what needs to change in the business, but you have to keep reassessing it because it is so small. When you get a business plan, there are pages and pages and pages; then, you don't have time to look at it. (Firm G)

# 4.1.2. Mapping of priority customer segments

In BMC, entrepreneurs have to define priority customer segments, allocating the firm's resources appropriately (Osterwalder & Pigneur, 2010). The testimonials indicate that the entrepreneurs have achieved this goal:

I work with a specific low-income public, classes C and D, right? So, it is a large public, but most of my clients are employees of public transportation firms. (Firm D)

I sell to jewelry stores, self-employed people, and sometimes to some retail friends. And, now, exportation: I am exporting to Dubai. My clients' scope is international because I am a person who has been diversifying a lot, mainly the line of my products. (Firm F)

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The first entrepreneur identified his broader customers and a specific segment: mass transit firms. The second entrepreneur recognized that his market inside and outside the country included jewelry stores, self-employed people, and some retailers. That conscience about the segments they were dealing with also appears in the other entrepreneurs' statements. Therefore, they might have a solid idea about the kind of customers they should serve.

# 4.1.3. Strategic importance of the channels

Channels are essential in BMC because they define how its products reach customers (Osterwalder & Pigneur, 2010). In general, entrepreneurs identified their channels quickly:

We use personal visits, e-mail, marketing, newsletters, trade shows, and events. We continue, as I said, to maintain the same channels. (Firm E)

The products reach the clients through the distributors, and they are partners too. Nevertheless, they go by carriers and by sea because we have a distributor in Angola. We have an e-commerce channel that started this year because we saw no point in wanting to fight against this. (Firm K)

Respondents were concerned about offering digital relationship channels. Even those who have not implemented such means of customer relationship perceived it as necessary to offer traditional channels and digital ones.

# 4.1.4. Role of customers in the business

The entrepreneurs recognized the importance of maintaining good relationships with their key customers by meeting their demands:

So... the question of personal relationship... we have a very close relationship with the clients. They create a bond of trust with us so that we can do this. (Firm B)

I keep an eye out; I keep an eye out; now, mainly, I have to listen to the client, to what he points out... And, mainly, I have a kind of relationship with the client that I tell him: "Look, I can be as big as you want. If you want, my services will be as big as you want". (Firm E)

These statements indicate that the entrepreneurs considered key customers as consumers of their products and people crucial to their business development.

# 4.1.5. Sources of revenue for the business

The entrepreneurs' answers about sources of revenue showed that their firms depended substantially on sales:

My revenue comes from the sale of the products in the store. (Firm I)

It [the revenue] comes 100% from the sale of the material. There is no other source; for now, no. (Firm H)

This situation helps explain why entrepreneurs admitted that their key customers were critical to business development. After all, revenues that depend only on sales increase the need for a closer relationship between entrepreneurs and these customers. However, when discussing the

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# 4.1.6. Identification of key resources

The entrepreneurs showed no difficulty in adequately identifying the key resources for the operation of their firms. They framed everything necessary for the company to function within the resource element, not only financial resources, such as the need for machinery, equipment, and human resources. One of the most representative responses of their positioning reinforces this statement:

The firm is structured; we have two million finished products in stock alone, ready-made products, the invoiced products ready to be sold. If I were to tell you about the raw materials stored for us to produce, it would be more than five million. (Firm K)

# 4.1.7. Mapping the key activities

The entrepreneurs knew the activities most directly related to the business. Two statements reinforce this statement:

Here we work with graphic design with much focus on fashion. So we create catalogs, campaigns, events, everything associated with fashion. (Firm B)

Our key activity is the production of sandwiches. It is a differentiated sandwich production, right? Which is the pressed sandwich. That is the biggest and, along with an adequate supply, because I have production and service, the two are key, and I cannot sin in any of them because I have to make delicious things in an innovative format and deliver as promised. So, I have to be efficient in production and efficient in service. Those are the two key activities, besides the control, within austerity, in financial control. (Firm I)

These answers indicate that the entrepreneurs paid attention to activities directly related to production without mentioning indirect activities that could be equally relevant to their business.

# 4.1.8. Role of key partners in the business

Channels are how the firm delivers the product to its customers (Alexander Osterwalder & Pigneur, 2010). They are critical to the operation, assigning partners the role of intermediaries in the business. The entrepreneurs were able to identify their key partners quickly:

The external salespeople, the insurance firms. The people who develop the management software. I am working on another software that helps me with the processes, internal communication, sales, etc. So, these IT people that are outsourced firms... I have some partners in the market. There are the insurance market institutions themselves as well. There is SEBRAE, which also helped me a lot. (Firm D)

I have been partnering with designers who have been developing exclusive pieces. (Firm F)

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The firms already work with different partners, such as suppliers, vendors, distributors, and outsourced professionals. On the other hand, a common criticism among entrepreneurs is the difficulty in finding partners who share the same value proposition as the company.

# 4.1.9. Cost identification

The entrepreneurs were aware of their costs, paying particular attention to those arising from unforeseen situations:

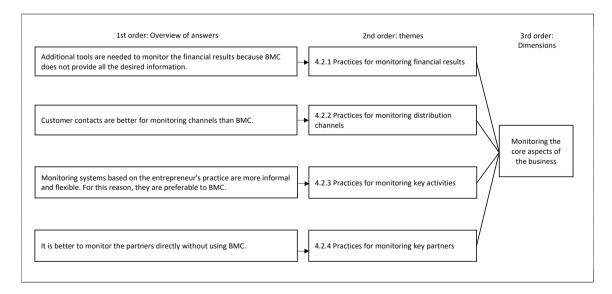
Besides the operational costs, there were terminations, dismissals, and separation [of the firm]. I am very overloaded here in the area of costs. You can't imagine! Economic crisis, drop in sales, you lose control of the store because of the crisis. (Firm I)

And I also put machine maintenance; sometimes I have to have an extra resource that I always keep in reserve because sometimes I need to buy another machine, something like that. (Firm H)

Respondents made it clear that they did not perceive the BMC framework as appropriate for providing detailed insight into costs as they needed it. Thus, although entrepreneurs understand the BMC framework and its component elements, many have not yet been able to thoroughly apply it in their business. Therefore, other financial control tools are part of the business. For these, the BMC appears to be very theoretical, with little adherence to the entrepreneurs' experiences.

# 4.2. DIMENSION 2: MONITORING CORE BUSINESS ASPECTS

This dimension recorded how entrepreneurs used the BMC to monitor business performance. The results indicate that it did not give them enough information for managing the business model. Figure 3 presents these themes and the structure of the data.



*Figure 3* - Data structure on the use of BMC to monitor core business aspects

Note: the numbering of the themes corresponds to the numbering of the subsections of this text *Source:* Research data.

# 4.2.1. Practices for monitoring financial results

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One of the entrepreneurs admitted that he did not use BMC to monitor financial results. He preferred to rely on routinely collected information:

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It's more for feedback anyway! (Firm A)

However, this was not the rule, as entrepreneurs preferred to use additional tools to track financial results:

BMC does not develop this much (financial monitoring), but at the same time, we are doing financial management. (...) This [control of income and expenses] is well controlled. (...) It [the BMC framework] needs complementary tools." (Firm K).

We have been holding meetings to see where the successes and mistakes are and see if we know how to make the raw materials, processes, and product sales feasible. So, we have been having these meetings to monitor this. We have a spreadsheet from the financial department that gives me this [feedback and number of sales]. We got a spreadsheet from SEBRAE to know our breakeven point. (Firm J)

I use a program [software]. It must be very controlled because you work with gold from the moment the business has to be very well controlled. (Firm F)

One entrepreneur pointed out that his firm used monitoring systems before turning to BMC:

Yes, we have a management system for the business's technical and operational management and financial management. This [monitoring] was already done before BMC, using outsourced software specifically for insurance brokers. (Firm D).

Two entrepreneurs stated that they adopt BMC concurrently with other tools:

The thing is this: what helped me the most was the financial flow. It is the one that gives me this vision [balance of cost structure] that is briefly there in the BMC. It [BMC] is the world map. So, what helps is the financial flow. It is financial analysis, let's say, and I do it daily. The BMC is secondary; it is not the primary tool; it is the generic, right? From there, you pull things. (Firm I)

The maps and graphs that the Public [management system] offers make comparisons and are read every month (...). Nevertheless, the cool thing I think about a BMC, for example, is that you verbalize that, you transform it into... when you have to register, write, describe that, it gives another view, you know? (Firm D)

These statements reveal that entrepreneurs turned to the BMC to define the overall financial situation of their businesses. At the same time, they stated that this framework would not provide them with enough information to run these businesses.

# 4.2.2. Practices for monitoring distribution channels

The entrepreneurs monitored the channels through contact with their direct employees and with their customers:

We monitor the sales team, the e-mails, and customer feedback. (Firm D)

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Informally, [we monitor the channels] because we feel where it flows more, right? So, you notice that clients prefer you to go there and choose a physical contact. Of course, this has diminished a lot. There are clients, for example, that always like to call; initially, they prefer to call, they prefer to talk. But it is also interesting in these cases and with other clients that you realize that, after this initial contact, they perfectly accept the continuity by e-mail, for example, right? Furthermore, eventually, because we are cautious on WhatsApp. (Firm E)

However, most respondents do not monitor channels systematically. That task is based on feedback, feelings, and perceptions from a deep-rooted tacit knowledge about the business.

# 4.2.3. Practices for monitoring key activities

Although many entrepreneurs have stated that they constantly monitor key business activities, this is left to the perception and experience of the managers themselves. The use of tools to assist them in this regard was not reported.

That is all the time [monitoring]. Because if you formalize this, it gets bogged down if it becomes a spreadsheet. In our business, it gets bogged down. Or, maybe, it gets bogged down in our industry for its size. We have already analyzed this a few times through process management, but you cannot theorize about this too much. (Firm E)

This entrepreneur followed the key activities but was concerned about the rigidity of the more formal processes. Therefore, he preferred more informal and flexible monitoring. Another entrepreneur followed this same line of thinking:

Everything developed was thought in this rationality. Logically, the salad client is different from the sandwich client, but this is a trend you see in the market. So, it did not leave my key activity to serving fast food. Our food is fast food, right? Furthermore, the salad is fast food. It is just another segment that I did not reach and came to call. However, I was there at the BMC (...) I monitor by noticing the trends. (Firm I)

# 4.2.4. Practices for monitoring key partners

The entrepreneurs did not use the BMC to monitor their key partners, preferring to track them informally:

I haven't practiced that, no. They come with their knowledge and expertise. They come with their knowledge and expertise. The deadline is what we have with the client, and we will apply it to them. If they do not deliver on time, we will also be prejudiced against the client. (Firm A).

I do not monitor with indicators, but I see that I observe in the more qualitative sense of the thing, of perceiving a result (Firm D)

It is all in the conversation! It is all in a project-by-project setting of agreements. I do not have any tools to guide me, no! (Firm H)

Feedback on results and dialogue are the most common ways of following up with partners. This entrepreneurs' preference reinforces that they did not use BMC for monitoring but instead relied on complementary tools or assessments.

# 5. DISCUSSION OF RESULTS

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The results indicate that the vicarious learning originated from the entrepreneurs' training and predisposed them to use BMC in decision making. However, this framework's level of use varied according to the entrepreneurs' perception of the business environment. In other words, knowledge originating from managerial practice - experiential learning - moderated the level of BMC use.

More specifically, the testimonies from Dimension 1 show that this framework helped entrepreneurs to define the main aspects of their business environment. They said that the nine BMC components led them to identify significant environmental components like the role of key customers and partners in operations. That follows Behling and Lenzi (2019) and Breslin (2017).

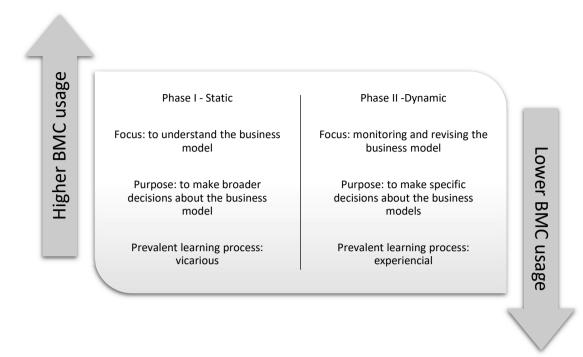
Dimension 2, however, shows that this framework did not provide much of the environmental information desired to monitor the business or decide on changes to be made. The interviews revealed that, in practice, the framework is not used to monitor the implemented business model and evaluate its fit to the environment. The entrepreneurs expressed that the BMC framework focuses more on planning than monitoring. They recognized the potential usefulness of the BMC but preferred to use knowledge learned in practice. That indicates that the entrepreneurs have experiential learning in a higher account than other forms, vicarious included. In this type, entrepreneurs extract more knowledge at a lower cost by analyzing the successes and failures of others' trajectories rather than their own (Bandura, 1965; Kim & Miner, 2007). Therefore, the total education might not be a linear combination of vicarious and experiential learnings, as assumed by Kolb and Kolb (2005, 2009).

These differences lead to two implications. The first is that BMC may be better suited to entrepreneurs who need to understand their business models and make broad, long-term decisions (Behling & Lenzi, 2019; Breslin, 2017; Hisrich et al., 2019; Neck et al., 2020; Wolcott & Lippitz, 2007). These would include identifying the elements in the BMC components and their role in the business model's proper functioning.

The second implication is that the BMC is more limited to monitoring and reviewing business models. The entrepreneurs stated that managerial practice required environmental information beyond what the framework could provide. Hence, they again indicated the relevance of experiential learning to their decision-making processes.

In summary, the results indicated that the level of BMC usage depends on two phases of business model operation that entrepreneurs identified according to the interaction between their vicarious and experiential learning. Both phases are connected to the ways entrepreneurs perceive their business environments. They consider the environment stable enough to accommodate long-term decisions in a static phase. Therefore, entrepreneurs will use the BMC because it gives them the desired understanding of the business model's critical elements. That is the effect of vicarious learning. However, if entrepreneurs believe the environment is relatively unstable, they tend to rely on their managerial experience and consider the information provided by the BMC as complementary. Hence, they prefer monitoring and reviewing the business through the knowledge gained in practice, highlighted in a dynamic phase. Consequently, the framework's level of use will be lower because entrepreneurs will tend to adopt it concomitantly with other tools. Figure 4 summarizes these statements.

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*Figure 4* - BMC utilization levels in the static and dynamic phases *Source*: Prepared by the authors.

# 6. CONCLUSION

This paper investigated how the entrepreneurs in the sample used the BMC framework in their business. This goal is relevant because the literature assumes that business management uses frameworks continuously. The results we obtained, however, revealed a different scenario.

The entrepreneurs were technically capable of dealing with BMC due to their training. Nevertheless, they preferred to restrict the use of this framework to specific aspects of management. Indeed, the results indicated that the entrepreneurs defined the level of BMC use according to the phase in which they placed their business. They resorted to what they learned from their own experience and others.

This process generated two phases. In phase 1, the entrepreneur needed to understand the firm's business model and make broader decisions. In this case, he or she tended to use the BMC more intensively because this was a static phase, propitious to take advantage of what this framework would offer the best: detailing the critical components of the business model. However, in phase 2, the manager reduced the use of the BMC to make room for complementary tools, such as spreadsheets or management software. That occurred because this phase demands entrepreneurs to monitor and review the business model, consistent with decisions about the dynamism of the firm's markets. As the BMC is static, it became less valuable to the entrepreneur, who preferred to resort to what he knew from his daily practice.

These results have important implications. Studies should pay attention to how entrepreneurs use frameworks, contrary to how they resort to business models constantly. Furthermore, it should be recognized that the level of use of frameworks such as BMC depends on the entrepreneurs' needs. They may realize its usefulness but not hesitate to abandon it when he needs information

to monitor and revise the business model. Therefore, what matters for the entrepreneur is the framework's ability to provide adequate information for decision-making. This assessment depends on the interaction between vicarious and experiential learning.

These implications raise possibilities for future research. The first is to investigate how managers use frameworks to make relevant decisions about their business. That may contribute to the discussions in the literature on managers' actual behavior toward business models. The second possibility is to investigate why the BMC components do not fully meet the needs of managers, even though it is a framework developed according to their demands.

The limitation of our study is that we consider that each entrepreneur was representative of the firm's attitude towards the BMC. The entrepreneurs' opinions were critical for our investigation because we were dealing with micro and small businesses. In that case, those professionals play an essential role in paving the firms' roads. However, future studies might benefit if they incorporate employees' views and external business partners such as suppliers, distributors, and sales representatives.

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#### **AUTHOR'S CONTRIBUTION**

HEGL: Theoretical review, methodological planning, data analysis, review, and manuscript writing; VCR: Data collection. RSL: Review and manuscript writing. MG: Review of the manuscript preliminary version.

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#### **CONFLICTS OF INTEREST**

The authors declare no conflicts of interest in this paper submission.