ABSTRACT: The objective of this study is to highlight the importance of the use of BMC to the entrepreneurs and the academic world. In pursuing this objective, the authors want to discuss the BMC problems and criticism and show its variations in order to help entrepreneurs use these models in the right way and successfully plan their businesses. The shortcomings and weaknesses of the model will then be compared with experiences made in the class ‘Entrepreneurship II’ offered in a undergrad course of Business at a Brazilian university in the state of São Paulo. The experience with them highlighted the importance of the use of BMC and it was helpful in developing their business plans. The contribution of this study to the body of knowledge is to fill the vacuum that exists in terms of academic study concerning the use of Business Model Canvas by the entrepreneurs when developing their business plan as well as to advance research in the areas of small and medium enterprises.

KEYWORDS: Business Model Canvas, Business Plan, Entrepreneurs, Business Model, Small and Medium Enterprises

INTRODUCTION

In the rising entrepreneurial ecosystems and communities, a really important part is communication. People need to talk to each other about their ideas, innovations and inventions in order to develop and improve them. This can also be seen in the concept of Open Innovation, where solution seeker and problem solver cannot only meet within a company but also in some sort of collaboration (Chesbrough, 2003). But in that process you soon come up with some problems. How do I present my idea or business model? Which parts do I need to tell so the basic story is told but boring necessities are left out? How can I give enough information so we can discuss the potential of the idea?

Osterwalder, Pigneur and Clark (2010) introduced a model which answers exactly those questions. Their motivation on building the Business Model Canvas was: “We need a business model concept that everybody understands: one that facilitates descriptions and discussion. We need to start from the same point and talk about the same thing. The challenge is that the concept must be simple, relevant and intuitively understandable, while not oversimplifying the complexities of how enterprises function.”

In the beginning of the book “Business Model Generation” Osterwalder et al (2010) ask three general questions:

1) Are you an entrepreneurial spirit?; 2) Are you constantly thinking about how to create value and build new businesses, or how to improve or transform your organization?; 3) Are you trying to find innovative ways of doing business to replace old, outdated ones?
If the reader answers only one of them with ‘yes’, he is welcomed friendly to a group of visionaries, game changers and challengers to defy outmoded business models and design tomorrow’s enterprises (Osterwalder et al., 2010). In the following, the so called “Business Model Canvas” BMC gets developed and explained to the reader. The model got quite famous in the recent years. Basically everyone around the world working with Entrepreneurship knows what it is. More than 650,000 people all over the world are using it (www.businessmodelgeneration.com). But as the model is now tested and used for a couple of years it comes to interest what is not good in it. What are possible shortcomings and downsides? What problems do people have while working with it? This is only a model which means it abstracts the reality in some parts. But are these parts missing?

Contribution to the existing body of Knowledge

There is a vacuum that exists in terms of academic study concerning the use of Business Model Canvas by the entrepreneurs when developing their business plan as well as its problems and criticisms, as the academic papers about BMC were practically non-existing. This paper will also contribute to advance research in the areas of small and medium enterprises SMEs since these areas play a very important role in the local economies. The objective in this study is to highlight the importance of the use of BMC to the entrepreneurs and the academic world. In pursuing this objective, the authors want to discuss the BMC problems and criticisms and show its variations in order to help entrepreneurs use these models in the right way, and successfully plan their businesses. The shortcomings and weaknesses of the model will then be compared with experiences made in the class ‘Entrepreneurship II’ offered in a undergraduate course of Business at a Brazilian university in the state of São Paulo.

The remainder of the paper is organized into five sections. In the next, the literature review on BMC, its criticisms and variations. Then, the methodology and data collection. This provides the context necessary for the fourth section, which presents the discussion of the results. The paper moves to the conclusions and recommendation that summarize the objective of this study. Finally, a suggestion of future research is presented.

LITERATURE REVIEW

The Business Model Canvas BMC

BMC consists of nine basic components of a business model. Instead of simply having them in a row, they are put on a canvas so the visualization of the different issues’ relation is improved. That helps the user to map, discuss, design and invent new business models. The whole thing can basically be divided in the product on the left side and the market on the right, while the value proposition is obviously divided in half (Maurya, 2010) – see figure 1.

On the very right we have the ‘Customer Segments’, all the people or organizations for which you are creating value, including simple users as well as paying customers. For each of the segments we have a specific ‘Value Proposition’, all the bundles of products and services which create value for your customers. The ‘Channels’ describes through which touch points you are interacting with your customers and delivering value, while the ‘Customer Relationships’ outlines the type of relationship you are establishing with your customer. Closing the right part of the canvas, the ‘Revenue Streams’ makes clear how and through which pricing mechanisms your business model is capturing value.
Indispensable assets of your business are shown in the ‘Key Resources’ on the left directly under the ‘Key Activities’, the things you need to perform well. ‘Key Partners’ are all those who help you leveraging your business model, since you will not own all key resources nor perform all key activities yourself. And with understanding your business’ infrastructure, you will get an idea of its ‘Cost Structure’.

For one, the simple visual structure of the BMC and the few number of descriptions (9 in total) make the BMC visually appealing. Also, the BMC’s usefulness in mapping and innovating on business systems make it valuable. Consequently, the BMC is being rapidly adopted (King, 2010a).

![Business Model Canvas](http://www.zebramc.com/tag/business-model-canvas/)

**Figure 1: Business Model Canvas – the basic model**

**Criticisms and Discussions on the BMC**

Spanz (2012) talks about the BMC as the way young entrepreneurs all over the world develop, question and visualize business models in brainstorming. He points three big positive features:

- Simplicity
- Practice-orientation instead of academic palaver
- Plug-and-Play principle (= the possibility to start from scratch)

He also talks about how the model helps to bring all participating people on the same page, to talk about the same idea. Especially for early ideas which haven’t been thought through.

But, of course, there is also another side of the medal of simplicity. They are put together in the next five points:

1. No broad analyze of competition
2. No taking in account of competition structures (and therefore potential synergy effects)
3. No formulating of business goals
4. No taking in account of KPIs and performance measurement
5. Applicable for innovation, not so much for transforming of existing models

Kraaijenbrink’s (2012a) three main critics on the BMC are the following:

1. Excluding strategic purpose - mission, vision and strategic objectives
The Canvas somehow suggests that only financial success can drive entrepreneurs and startups. This cannot be true for social enterprises, NGOs, etc. And secondly it is also claimed by other people and authors that there should be more what drives entrepreneurs (Komisar and Lineback, 2001).
2. Excluding a notion of competition
Of course, every decision about competition and competitors is crucial for every business model. And although it is understandable why Osterwalder did not add competition – keeping things simple – it limits the user relatively soon.
3. Mixing levels of abstraction
The components ‘customer relationships’ and ‘channels’ on the right side as well as ‘key activities’ and ‘key resources’ on the left side are on a different level of abstraction than other parts. This gives too much emphasis to certain aspects. The suggestion is to merge, omit or introduce these components later when more details is needed.

Maurya (2010) came up with some issues he missed in Oserwalder’s model:
1. Problem
Maurya wants entrepreneurs to find the real problem first in order to build the right product or service to solve it. He indicates that people normally succeed in building what they set out to build, but that was simply the wrong thing.
2. Solution
As an obvious counterpart to the problem, entrepreneurs should think about the fitting solution. The solution also has a motivating effect on the entrepreneur as it is his or her little baby.
3. Key Metrics
This is something really close to the key actions/activities. The author wants to bring the entrepreneur’s focus on the few Key Performance Indicators KPIs he has to have in mind and he has to work with.
4. Unfair Advantage
Maurya also suggests having a box for the unfair/competitive advantage. This means the one thing of your company which cannot be copied easily. Of course, this point is not necessarily present at the very beginning.

All of them have good criticisms for the original BMC. This underlines how good the actual model is and why the book ‘Business Model Generation’ has sold more than 500.000 copies in 26 different languages. However, they all miss the mention of competition in the model. Another similarity is the strategic alignment, the planning and further steps together with KPIs and so on. Perhaps, Kraaijenbrink’s third point is the strongest criticism, that the model is mixing levels of abstraction. While some parts are simple to understand, others may not be simple enough.

These authors have different approaches to BMC. While Spanz is only talking about the missing parts, the two others come up with variations, additions and changes. Kraaijenbrink
changed totally the whole look of the model, Maurya substitutes some of the blocks while keeping the main canvas the same. These variations can be seen in the next section.

**Business Model Canvas Variations**

In this section, some of BMC variations are shown in order to get an overview of what was not possible with the original canvas and can now be achieved.

- **Value Proposition Designer**

  Osterwalder himself presented the Value Proposition Designer, which is basically just another canvas to zoom into one part of the business model (Osterwalder, 2013). This tool helps you filling out the box of the value proposition by emphasizing the relation between the customer and the actual product or service. You start wondering why you think this value proposition has a reason to be and why that fits with the customer service. The main goal is that there is a perfect fit between the customer segment and the value proposition.

  To achieve this goal, we ask ourselves three questions which are important for the customer: What jobs is this customer trying to be done? What pains are in this situation for the customer? What gains does the customer achieve with it? Let this be described with an example: let us imagine you are selling vegetables online. So our customer, the caring mom, is trying to buy food in the most efficient way, this is the job she wants to be done. That is the problem she wants to solve. She needs to go to the supermarket after work and before picking up her children from school and then she has to search through the supermarket and wait in the line to pay. This is the pain part. The healthy food for her and her family are the gain part. Now, on the other side in this tool, we have the value proposition. As can be seen in Figure 2, it counteracts to what is needed by the customer. According to the Canvas’ creator, it is the offer, consisting product, services and features. Looking at the Value Proposition Designer, it is simply *what* is doing the jobs for the customer. And now, you want to describe how exactly you are creating value, how exactly you are creating benefits for the customer (Osterwalder, 2013). It describes how our product or service is killing the customer’s pains (the pain relievers) and how it achieves the gains (gain creators). In our example, a pain killer would be buying the vegetables from home, maybe through a mobile application or internet and they are delivered. She does not have to go to the supermarket and does not have to wait. And the gain creator is the healthy food which comes to her place faster and fresher without the detour of the supermarket.

  This model makes the value proposition more understandable and helps optimizing the product at the same time.
Kraaijenbrink’s Value Model Canvas

Kraaijenbrink’s Value Model Canvas is called Value Model Canvas. This emphasizes that the Canvas is not only for businesses but for all kinds of organizations, including non-profit and social ones. Completely deleted are the boxes ‘customer relationships’ and ‘channels’. The boxes ‘key resources’ and ‘key activities’ are merged into ‘key competences’. This addresses his third shortcoming, as the deleted issues are too much in depth for this early stage of business model designing. He turns the Canvas upside down in order to visualize that costs and revenues result from the remaining components. Making his first criticisms obsolete, he adds a field ‘Strategic Values’ for all kinds of values and purposes and organizations. The key partners are moved to the top left corner and defined as individuals or organizations that benefit from the organization or that are beneficial to the organization, even if they do not directly interact. Finally, Kraaijenbrink brings in the competition by adding a ‘Key Rivals’ field, defined as individuals or organizations that are disadvantaged by the organization or that are disadvantageous to it. The final chart can be seen in Figure 3.
Lean BMC

Maurya’s main objective with Lean Canvas was making it as actionable as possible while staying entrepreneur-focused (Maurya, 2010). He proposes to address the four issues he missed in the original BMC - problem, solution, key metrics and unfair advantage, by replacing 4 boxes as seen in figure 4.

![Lean Business Model Canvas](image)

Figure 4: The lean business model canvas
source: (Maurya, 2010)

For him, the boxes ‘key activities’ and ‘key resources’ were considered as more “outside-in than inside-out”, meaning that they serve people from outside the company to understand what it is doing but does not really help the entrepreneur himself. Furthermore, Maurya argues that key activities should really be developed out of the solution. And key resources, in our times of globalization and cloud computing, are not really hard to find anymore. The box customer relationship was deleted because every product should be built and developed with a close and direct customer relationship already. After this, a so called “path to customer” (Maurya, 2010) should be developed. But this is then written down in the channels box.

Finally, the ‘key partners’ was removed, which was the hardest part according to the developer. Of course there are products which really need key partners right from the beginning, but Maurya claims that most products don’t fall in that category.

Advanced BMC

The first step King (2012b) made to the original Business Model Canvas was adding sub-underlines on the left side of the model. This is definitely helping while filling it out, especially because it outlines the differences between the several key-boxes in a more
effective way. Interesting is that he also adds the words ‘Customer Problem/Job’. See figure 5.

![Figure 5: Advances Business Model Canvas 1](source: (King, 2010b))

His second step is only a different way of visualizing BMC. He changes the nine blocks of the original canvas into somewhat four blocks. Although the single components are still the same, it gives you a new view on the different areas. The four headlines are grouping the business model’s contents differently (see figure 6). It is quite recommendable to follow his 2 steps in a sequence. Start with ‘step 1’, fill it out and then put it in a drawer. The next day, start all over again and work on ‘step 2’. Probably, you will come up with different ideas, definitions and aspects which combined may improve your business.

![Figure 6: Advanced Business Model Canvas 2 – Jumbo Blocks](source: (King, 2010b))
Kraaijenbrink’s model has both great advantages as disadvantages. Including the rivals and leading the idea arrow-like to the strategic values is considered to promote the full description of the business model. Nevertheless, it might get a bit too much in the bird-view-perspective. As people tend to have problems with key resources, they will not be less troublesome with key competences. And the original canvas has a big strength in connecting the customer and the value proposition, thus building a value proposition just for the right customer. While simplifying the lower line, this advantage is left out.

Lean BMC seems to be a very good alternative of all the three models. People might get lost with the ‘key-’boxes on the left and also with distinguishing between customer relationships and channels. These boxes are not only removed but also replaced with typical questions from investors, business angels and venture capitalists. Everyone trusts you to find the right partner to work with, and are you attacking the right problem, have the right solution, the right drive. Finally, the value proposition is somehow filled from both sides as we can still use the Value Proposition Designer but now has problem and solution on the left side to work on it as well.

One issue not addressed by these 4 models is in detailing the cost and revenue structures. This issue was raised by the students in results and discussion section.

RESEARCH METHODOLOGY

The research method will be exploratory because it aims to obtain insight and knowledge about a particular phenomenon. A literature research was made in order to find related articles and criticism on BMC. However, as the academic papers about BMC were practically non-existing, the research was mostly based on few books, blog entries and internet search.

A second part of the research was discussions with the students. The target population of this study was students from an undergrad course of Business at a Brazilian university in the state of São Paulo that attended the class “Entrepreneurship II”. The students were divided in 14 teams and they developed a Business Plan in the span of one year as a prerequisite for attending this class. The main tool of data collection was an open questionnaire.

RESULTS AND DISCUSSIONS

This section shows the experiences of 14 teams in the class with the use of BMC in the second half of the year. The researchers collected from the 14 teams the canvas of their business plan as well as read and understood their plans. In the next step, they interviewed each and every one of the 14 teams to hear from them their experiences, insights, problems and comments with the use of BMC. Important to say that these students were using BMC for the first time.

The focus thereby lies on problems which occurred more often with the use of BMC by the students. One of the first problems which always come up is that the users need to have some introduction into the Business Model Canvas. In the interviews with the students, they did not completely understand what box is designed for what content and only after examples provided by the teacher, they were more confident about filling it in. The environment of lectures at a university is probably quite perfect but other people, just having a business idea and are then confronted with the canvas, might have more problems, such as understanding
what exactly is a Value Proposition, how to fully understand the difference between the Customer Relationships and the channels, and so on.

The researchers gave each group a stack of post-it notes. They instructed the students to start canvas from the moment a potential customer decides to purchase the good or service they will be offering. Who are they and why would they be willing to buy from them? What would be creating value for their customers? The students then map out the canvas by sticking the post-it notes onto the wall in sequence. It is possible to have multiple lines of post-its feeding into one box.

The goal is to have the students experiment all the actions and steps to complete the canvas model and to look for gaps they need more information and problems they had. Once the students had fully filled their canvas, the researchers had them looking into each other canvas and asked to identify boxes where they did not understand properly.

Very interesting is that all of them also had problem with the missing competition. When BMC was introduced in class and open for discussion, one of the first doubts was about the competition. “How are you better than this product?”; “Why will customers buy our product and not the competitors’ one?”; “But I know a product/service, which…” These issues were also discussed in the groups while working with BMC.

A further quite typical problem is the detail of cost and revenue structure. A whole business plan always has a financial plan and people work on it for weeks and months. However, when you are scribbling out your BMC, you have only some guidelines on where the costs develop and where the money might come from. It might happen eventually that the product price is way more expensive than what customers are willing to pay for. More detail would need more time. Of course, you always have these problems with models. But it caused a lot of confusion with the students.

Another problem was distinguishing between customer and partner in a situation called as broker-businesses. This is when the company brings together the real customers and sellers. For example, in the real estate business, if you see it from the perspective of the realtor: who is the customer now? Is it the selling house owner or the buying customer? Both of them are paying, which makes them customer and partner at the same time.

When writing the Business Plan for their ideas, the students had most of the boxes of BMC already prepared. This emphasizes the direct link between Business Plan and Business Model Canvas and how both of them benefit from each other. What also worked really well was the discussion about and around the model. The questions about the missing competition or the real classification of partners and customers showed how deeply the young entrepreneurs were involved with the model.

Overall, the students felt BMC very useful and helpful when writing their plans and also very motivated in having used it. When the BMC variations were shown to them, they suggested that for the next classes, the students should get knowledge working with the original BMC and then its variations. They should decide then which model fits better for each business. The biggest overlap between the students’ experiences and the criticism listed is probably the missing competition and almost all the variations bring it in in some point.
CONCLUSION AND RECOMMENDATION

In this paper, we presented several criticisms of the Business Model Canvas, which so far do not exist in form of academic paper. Furthermore, a selection of existing variations of the original Canvas from Osterwalder was introduced. Whether the users want to keep it ‘lean’ or simply focus on different matters, they get some input about what was developed after Osterwalder’s introduction. And in the end these criticisms were compared with the use of canvas by the undergrad students in Brazil.

The problem of understanding how to fill the model is addressed in a really good way by the Value Proposition Designer. It really gives the entrepreneurs more insight how customers and products or service are connected, it probably also helps to design directly for the market and not next to it. The Lean Canvas has different boxes which are faster understood by beginners. That does not mean that boxes like Key Resources are unimportant, but maybe they should be discussed in a later stage.

The main missing part is probably a product’s or service’s competition. This is very important for a business idea and should also be discussed right in the beginning. Furthermore, the existing variations should definitely be considered in a flexible way. For some businesses maybe one or the other variations fits better, for the beginning as mentioned the lean canvas is best, and so on.

Finally, the experience with the undergrad students highlighted the importance of the use of BMC and it was helpful in developing their business plans. We understand that the objective was attended with this paper.

Our conclusion is that BMC should be used initially by the entrepreneurs and businessmen and eventually, as they get more experienced with its use, they could try different variations that fit better for their businesses.

Our recommendation is that the entrepreneurs should work with BMC and its variations in order to have a more holistic understanding of their businesses.

FUTURE RESEARCH

As suggestion for future research, the university in Brazil could use the different models discussed in this paper. Each group with similar business ideas could work with one different model and compare their outcomes.

REFERENCES


