

THE BUSINESS MODEL CANVAS TO DEVELOP ENTREPRENEURIAL MINDSET IN ONLINE LEARNING

Tejo Nurseto¹⁾ Sulasmi^{2)*} Ahmad Chafid Alwi³⁾

Faculty of Economics and Business, Yogyakarta State University, Yogyakarta^{1,2,3}
E-mail: tejo@uny.ac.id¹ sulasmi@uny.ac.id² ahmadchafidalwi@uny.ac.id³

Abstract : *This article aims to describe the implementation of the Business Model Canvas (BMC) in developing an entrepreneurial mindset (EM) within an online learning environment. This study employed a descriptive observational analytic method within a one-shot case study design. The subjects were 29 Economic Education students from the Faculty of Business and Economics at Yogyakarta State University who participated in an entrepreneurship practicum course. Data were analyzed using descriptive analysis. The results indicate that (1) The implementation of BMC effectively develops an entrepreneurial mindset. (2) The students' entrepreneurial mindset following the BMC online learning is characterized by the following indicators: motivation (66%), intention (52%), decision-making (48%), job experience (45%), friendly personality (41%), risk-taking and effective communication (38%), organizational experience (14%), active in organizing (10%), business experience (9%), and leadership (7%). (3) The entrepreneurial mindset of students who have participated in BMC-based learning is categorized as high (72.41%) and medium (27.59%).*

Keywords: BMC, entrepreneurship, mindset, motivation, online learning.

1. Introduction

Entrepreneurship education is one strategy in stimulating the emergence of new young entrepreneurs who will contribute to economic development in Indonesia. Entrepreneurship learning is basically a study of values, abilities, and attitudes in facing life's challenges to gain opportunities with the various risks faced (Kuratko, 2016). Learning Entrepreneurship in the realm of education, is not only developed to produce skilled intellectuals, but also inspirational-pragmatic ones, for this reason entrepreneurship learning in university must be an alternative in preparing graduates who are able to create their own jobs (Nurjamiah et al., 2021).

Entrepreneurship education has a very important role as it equips individuals with the necessary skills, knowledge, and attitudes to succeed in the business world. Entrepreneurship education helps develop an entrepreneurial mentality, which is a creative, innovative, and risk-taking mindset. It involves the ability to see opportunities amidst challenges and create new solutions (Kirby, 2005). Entrepreneurship education plays an important role in economic growth, as it helps create jobs, motivates innovation, and promotes sustainable development. Thus, entrepreneurship education not only helps individuals to succeed in the business world, but also contributes to overall economic development (Lack et al., 2022).

Entrepreneurship learning requires a variety of methods, one of which is Business Model Canvas. Business Model Canvas (BMC) is one method that is very useful in entrepreneurship learning. BMC is a strategic management tool developed by Alexander Osterwalder and Yves Pigneur. This tool helps entrepreneurs and managers to describe, design, measure, and

transform their organization's business model. Business Model Canvas can help entrepreneurs and management teams to detail and understand every key aspect of their business model. The advantage of using BMC is its simplicity and ability to provide an overview of the entire business model on a single sheet, easing communication and decision-making. This method is very popular in entrepreneurship classes and is used by many companies, both newly established and established, to design, change, or optimize their business models (Osterwalder & Pigneur, 2012).

Business Model Canvas (BMC) is a strategy tool used to describe a business model and describe the rationale for how organizations create, deliver, and capture value (Joyce & Paquin, 2016). It is a medium to see what kind of business that is running, or we are going to start more accurately. Business Model Canvas changes a complex business concept to a simple one that is displayed on a single canvas sheet containing a business plan with nine key elements that are well integrated in it includes both internal and external strategic analysis of the company (González-López et al., 2019). Business Model Canvas is a business model that is created and assembled in such a way as to produce a long-term plan and see what needs to be done when entrepreneurs want to build a business. With the business model canvas, the entrepreneurs can see what to do, not only looking inside but also looking outside or at the competitors and the market for the type of business that will be built so that you can get maximum results quickly as the journey goes.

The BMC concept consists of nine blocks, namely Customer Segment (CS), Customer Relationship (CR), Channel, Value Propositions (VP), Key Activities (KA), Key Partner (KP), Key Resource (KR), Cost Structure (CS), and Revenue Stream (RS) (Sudrajat, 2018). In the entrepreneurship course, students are given the concept of BMC in general, and more specifically discuss Value Propositions (PV) because a business idea that will be implemented must be able to solve consumer's problem (Customer Segment). If the business idea can explain the Value Propositions and Segmentation, then the business is feasible to run, so that other blocks such as Key Partner (KP) can be created.

Entrepreneurial mindset can be shaped through classroom learning. Attending entrepreneurship education courses or programs can provide an in-depth understanding of business principles, management and other important aspects. Engaging in projects or internships that involve hands-on experience with the business world can help develop entrepreneurial skills and instincts (Hayati, 2021). Engaging in activities that stimulate creativity and innovation, such as brainstorming and collaborative projects, can help hone creative thinking skills. An entrepreneurial mindset encompasses a way of thinking and outlook on life that supports a proactive, creative, and innovative attitude towards business. It is important to remember that an entrepreneurial mindset is not only about knowledge of the business, but also about attitude, perseverance, and the ability to overcome challenges. A combination of formal learning and practical experience can shape a successful entrepreneurial mindset (Handayati et al., 2020).

Entrepreneurial mindset must be instilled from an early age because the mindset is one of the important things for an entrepreneur to be successful. The initial mindset that an entrepreneur must have been to think positively. By thinking positively, we can form our self-confidence and can know the qualities of ourselves to be motivated and more developed. Positive thinking can make us focus on achieving a goal to overcome the obstacles to success. The second is to be responsible for the decisions taken where an entrepreneur could create many new innovations without thinking about matters that can harm a company. Those are the mindset that an entrepreneur must have.

The entrepreneurial mindset (EM) refers to a set of cognitive, behavioral, and emotional characteristics that influence individuals' ability to identify opportunities, take risks, and drive innovative solutions. According to Gibb (2017), an entrepreneurial mindset includes attributes such as proactiveness, innovativeness, risk-taking, and the ability to persevere through challenges. This mindset is essential for navigating the complexities of entrepreneurship, particularly in dynamic and uncertain environments.

The Business Model Canvas (BMC) is a strategic management tool that provides a visual framework for developing, visualizing, and communicating a business model. In entrepreneurship education, the BMC is widely used to foster critical thinking, creativity, and strategic planning among students. Studies by Joyce & Paquin (2016) have demonstrated that the BMC helps students to structure their ideas and transform them into viable business models, thereby enhancing their entrepreneurial mindset.

The rise of online learning has presented both opportunities and challenges for entrepreneurship education. According to Tseng et al. (2023), online learning platforms offer flexibility, accessibility, and a broad range of resources that can facilitate the development of entrepreneurial skills. However, maintaining student engagement and ensuring the practical application of concepts, such as the BMC, remains a significant challenge. Research by Yin & Wang (2017) has shown that interactive and participatory online learning experiences are crucial in fostering an entrepreneurial mindset, particularly in contexts where face-to-face interactions are limited.

Integrating the BMC into online learning environments has been shown to be effective in developing an entrepreneurial mindset among students. For instance, a study by Kim (2022) found that the use of BMC in online entrepreneurship courses significantly improved students' abilities in opportunity recognition, business model development, and strategic thinking. Similarly, Clauss et al. (2018) emphasized that BMC, when combined with online collaborative tools, enhances the practical learning experience by allowing students to engage in real-time problem-solving and decision-making processes.

This paper describes the implementation of Business Model Canvas in online learning for entrepreneurship practicum course. The simplified BMC components make students able to think comprehensively and be able to make real business planning needed. Students get a simpler and easier business. So that students are not dissolved in making complicated business plans, then they are able to move quickly to start a business to become an entrepreneur.

2. Research Method

This study employs an observational research design. The Business Model Canvas (BMC) was initially introduced to students in the Economic Education program at the Faculty of Economics, Yogyakarta State University, who were enrolled in an entrepreneurship practicum course. The students were taught the BMC framework and its application within the context of their coursework. Due to the Covid-19 pandemic, the research was conducted online, with all data collection carried out remotely.

Primary data were collected through questionnaires distributed to the respondents to assess the students' entrepreneurial mindset at the time. To measure the impact of BMC implementation on fostering their entrepreneurial mindset, a Likert scale-based questionnaire was utilized as the measurement instrument. The application of the Business Model Canvas in the entrepreneurship practicum was conducted in three stages:

1. Guide to Developing a Business Model Canvas

The initial stage involved the preparation of a Business Model Canvas guide designed to facilitate the students in developing their business models. A construct validity test was conducted to ensure the reliability of the guide.

2. Implementation of the Business Model Canvas

In the second stage, the BMC was applied in the course. Initially, this process was planned to be conducted offline; however, due to the Covid-19 pandemic, the activities were transitioned to an online format. Class management and organization were conducted online, with asynchronous learning activities facilitated through WhatsApp Groups. Discussions and Q&A sessions were also held online, while synchronous meetings were conducted via the Google Meet platform.

3. Evaluation of the Business Model Canvas

The final stage involved evaluating the students' Business Model Canvas projects. The evaluation was based on group assignments, wherein students were required to develop a Business Model Canvas for a business or product they created as a group. The students were divided into five groups, each tasked with creating a business name and product.

3. Results and Discussion

3.1. Results

The study examined the impact of the Business Model Canvas (BMC) on the development of an entrepreneurial mindset among 29 Economic Education students at the Faculty of Economics, Yogyakarta State University. The data were gathered using a Likert scale-based questionnaire, which assessed various indicators of an entrepreneurial mindset. The findings are presented as follows:

Table 1. Result of entrepreneurial mindset of student

| No | Indicator | Totally Agree | Agree | Disagree | Totally Disagree |
|-----|---------------------------|---------------|-------|----------|------------------|
| 1. | Motivation | 66% | 34% | 0% | 0% |
| 2. | Intention | 52% | 48% | 0% | 0% |
| 3. | Decision Making | 48% | 52% | 0% | 0% |
| 4. | Risk Taking | 38% | 55% | 7% | 0% |
| 5. | Leadership | 7% | 90% | 3% | 0% |
| 6. | Friendly personality | 41% | 59% | 0% | 0% |
| 7. | Communicative | 38% | 62% | 0% | 0% |
| 8. | Organizational experience | 14% | 72% | 14% | 0% |
| 9. | Active in Organizing | 10% | 87% | 3% | 0% |
| 10. | Business Experience | 9% | 88% | 3% | 0% |
| 11. | Job Experience | 45% | 50% | 5% | 0% |

From the table above, the indicators with the highest value are students' interest in becoming entrepreneurs at 66% and interest in starting a business at 52% with students' attitudes showing Strongly Agree. This means that after students carry out entrepreneurship practicum using the Business Model Canvas, which is easier to use, it makes students interested in becoming entrepreneurs and starting a business. Based on the table above, a diagram can be made as follows:

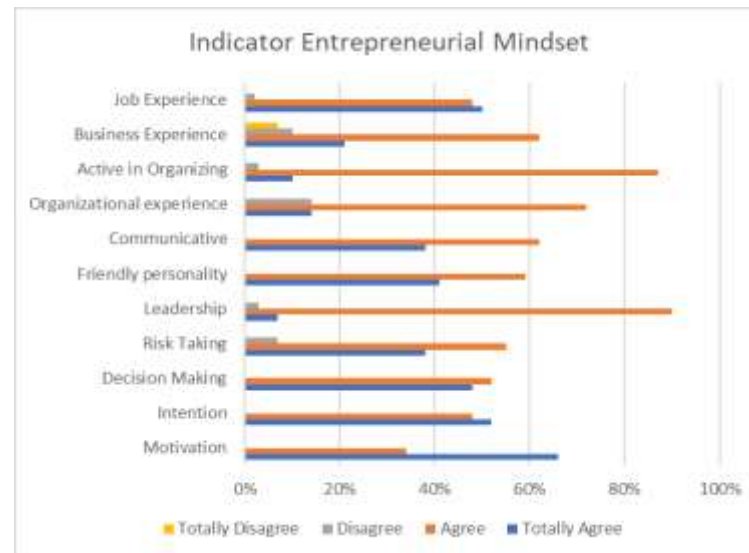


Figure 1. Diagram of entrepreneurial mindset of student

The study revealed that the Business Model Canvas (BMC) had a significant impact on various aspects of students' entrepreneurial mindset. A strong majority, 66%, of the students strongly agreed that the BMC approach notably boosted their motivation to pursue entrepreneurial activities, with the remaining 34% agreeing, indicating universal positive feedback with no negative responses. Similarly, BMC learning was found to strengthen the students' intention to engage in entrepreneurship, as 52% strongly agreed and 48% agreed, again with no disagreement. Decision-making skills were also enhanced, with 48% of students strongly agreeing and 52% agreeing, reflecting a consistently positive impact.

In terms of risk-taking, 38% of students strongly agreed that BMC fostered their willingness to take risks in entrepreneurial contexts, while 55% agreed and 7% disagreed, suggesting that some students may still feel hesitant about risk-taking. Leadership development, however, emerged as an area with room for improvement; only 7% of students strongly agreed that BMC helped develop their leadership skills, though 90% agreed, and 3% disagreed. This indicates that while most students felt some improvement, leadership remains a potential area for further development.

The study also showed that 41% of students strongly agreed that their interpersonal skills, such as being friendly, improved through BMC, with the remaining 59% agreeing, resulting in a universally positive response. Communicative skills were similarly enhanced, with 38% strongly agreeing and 62% agreeing, underscoring the effectiveness of BMC in this area. Organizational experience, however, received mixed responses; only 14% strongly agreed that their organizational experience was beneficial, 72% agreed, and 14% disagreed.

Moreover, 10% of students strongly agreed that they became more active in organizing activities due to BMC, while 87% agreed, and 3% disagreed, suggesting that most students felt more engaged, although some may need further encouragement. In terms of practical business experience, 9% of students strongly agreed that BMC enhanced their practical business skills, with 88% agreeing and 3% disagreeing, indicating a positive but somewhat limited impact. Finally, 45% of students strongly agreed that their previous job experiences were relevant and supported by the BMC framework, 50% agreed, and 5% disagreed, suggesting that while most students found their job experience valuable, some did not see a strong connection.

3.2. Discussion

The findings of this study demonstrate the significant role that the Business Model Canvas (BMC) plays in shaping various aspects of students' entrepreneurial mindset during online learning. The high percentage of students who reported increased motivation (66% strongly agreed, 34% agreed) underscores the effectiveness of BMC in fostering the enthusiasm and drive necessary for entrepreneurial pursuits. This aligns with previous research by Clauss et al. (2018), which highlights the importance of structured frameworks like BMC in stimulating student motivation and engagement in entrepreneurial education.

The study also found that BMC learning significantly strengthened students' intention to engage in entrepreneurship, with 100% of respondents either strongly agreeing or agreeing with this statement. This finding resonates with the work of (Osterwalder & Pigneur, 2012), who emphasize that BMC provides a clear and actionable roadmap for aspiring entrepreneurs, thereby reinforcing their entrepreneurial intentions. The positive impact on decision-making skills, where 48% strongly agreed and 52% agreed, further supports the notion that BMC equips students with critical thinking and strategic planning abilities, as noted by Joyce & Paquin (2016) in their study on BMC's role in decision-making processes.

However, the study also identified areas where BMC's impact was less pronounced, particularly in leadership development and risk-taking. Only 7% of students strongly agreed that BMC helped develop their leadership skills, with 90% agreeing, but 3% disagreeing. This suggests that while BMC is effective in some aspects, it may not fully address the development of leadership qualities, which are crucial for entrepreneurial success. This observation is supported by Al Mamun et al. (2020), who argue that leadership development in entrepreneurship education requires more experiential and practice-based learning opportunities, which may not be fully provided by BMC alone.

Similarly, the mixed responses regarding risk-taking (38% strongly agreed, 55% agreed, 7% disagreed) suggest that BMC may not sufficiently encourage students to embrace the risks inherent in entrepreneurship. As per the findings of Widyastuti et al. (2022), risk-taking is a critical component of entrepreneurial mindset development, and while BMC introduces students to the concept of risk, additional experiential learning activities, such as simulations or real-world business challenges, are needed to enhance students' risk-taking abilities.

The study also found that BMC had a positive impact on students' interpersonal skills, with 41% strongly agreeing and 59% agreeing that their friendly personality was improved through BMC. Additionally, 38% strongly agreed and 62% agreed that their communicative skills were enhanced. These findings suggest that BMC can effectively improve students' soft skills, which are essential for successful entrepreneurship. This is consistent with research by Rauch & Hulsink (2015), which emphasizes the importance of interpersonal and communication skills in entrepreneurship.

However, organizational experience received more mixed responses, with only 14% strongly agreeing, 72% agreeing, and 14% disagreeing that their organizational experience was beneficial. This indicates that while BMC provides a framework for organizational planning, it may not fully translate into practical organizational experience. To address this, O'Connor & Greene (2018) suggest that integrating BMC with real-world organizational projects or internships could provide students with more hands-on experience in managing business operations.

In terms of active organizing and practical business experience, the results indicate that BMC has a positive impact, but with some limitations. While 10% of students strongly agreed and 87% agreed that they became more active in organizing activities due to BMC, and 9% strongly agreed and 88% agreed that their practical business skills were enhanced, the lower

percentages of strong agreement suggest that these areas could benefit from more interactive and practical learning approaches. As suggested by González-López et al. (2019), incorporating more experiential learning opportunities into BMC-based courses could further enhance students' practical business skills and active engagement in organizing activities.

Finally, the mixed responses regarding job experience (45% strongly agreed, 50% agreed, 5% disagreed) highlight the need for a stronger connection between BMC learning and real-world job experience. This finding aligns with the research by Biniari et al. (2020), who recommend that entrepreneurship education programs should include more real-life business scenarios and interactions with industry professionals to bridge the gap between theoretical learning and practical job experience.

4. Conclusion

The results of this study underscore the substantial influence of the Business Model Canvas (BMC) on cultivating an entrepreneurial mindset among students in an online learning environment. The BMC has proven to be an effective tool in enhancing critical components such as motivation, entrepreneurial intention, decision-making skills, and interpersonal communication. These findings highlight the framework's ability to provide a structured approach that encourages students to actively engage with entrepreneurial concepts and develop the necessary skills for success.

However, the study also identified areas where the BMC's impact is less pronounced, particularly in leadership development and risk-taking. These aspects, which are vital to the entrepreneurial process, appear to require more experiential and practice-based learning opportunities than what BMC alone offers. Additionally, the mixed responses regarding organizational experience, active organizing, practical business skills, and the connection between BMC learning and real-world job experience suggest that while BMC provides a solid foundation, there is room for improvement in these areas.

To maximize the effectiveness of BMC in entrepreneurial education, it is recommended that the framework be complemented with hands-on projects, real-world business challenges, and interactions with industry professionals. Such enhancements could better prepare students for the complexities of entrepreneurship, bridging the gap between theoretical knowledge and practical application.

Overall, the BMC remains a valuable tool in entrepreneurship education, but its full potential can be realized by integrating it with additional experiential learning methods that address the more nuanced aspects of entrepreneurship. This approach would ensure a more comprehensive development of the entrepreneurial mindset, equipping students with the skills and confidence needed to thrive in entrepreneurial endeavors.

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