

Business Model Canvas Analysis and Financial Feasibility Assessment of the “TEMATIK” Math Board Game as an Educational-Based Technopreneurship Innovation

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ABSTRACT

This study aims to analyze the digital business model, the effectiveness of digital marketing strategies, and the business feasibility of the “TEMATIK” Math Board Game. This study employed a quantitative descriptive approach using a case study method. Primary data were obtained from sales records during seven weeks of operations, capital and production cost data, and expert validation results, while secondary data were sourced from the program’s final report and digital marketing documentation. The analysis was conducted using the Business Model Canvas framework, which comprises nine key business elements, along with five financial feasibility indicators. The results indicate that the TEMATIK product offers differentiation through the integration of a physical board game with an Android-based educational application covering mathematics topics for elementary school. A hybrid marketing strategy utilizing Shopee, Instagram, WhatsApp, and direct visits to elementary schools demonstrated a shift in channel distribution from an

initial dominance of offline channels toward increased adoption of online channels, with total sales reaching 70 units during the first seven weeks. Based on the financial feasibility projections, the business is estimated to reach its break-even point at sales of 103 units. The business feasibility analysis yielded a Benefit-Cost Ratio of 1.46, a Return on Investment of 45.7%, a Cost of Goods Manufactured of IDR 58,333 per unit, and a Payback Period of 6.6 months. Overall, the findings confirm that the digital business model of the “TEMATIK” product is financially feasible and has the potential to be further developed as a scalable education-based technopreneurship product.

1. INTRODUCTION

Advances in digital technology have created significant business opportunities across various sectors, including the education-based industry, by enabling businesses to reach broader markets through digital platforms (Aryasatya Pramudita et al., 2025). The tangible impact of this transformation is also evident in Indonesia, where e-commerce has experienced rapid growth. Transaction value was projected to reach US\$75 billion in 2024, with an annual growth rate of 19% expected through 2027, thereby making the digital media marketing ecosystem increasingly strategic for businesses of various scales (Wardhana, 2024). However, many micro, small, and medium-sized enterprises (MSMEs) still rely on conventional marketing methods and have not yet been able to optimize the potential of digital markets, including those operating in the education-based industry (Cahyadi et al., 2024).

Game-based educational products represent a segment with considerable potential but remain relatively underintegrated with digital marketing strategies. Data from the Ministry of Education, Culture, Research, and Technology indicate that the number of elementary school students in Indonesia reached 24,046,922 in 2023, making this demographic a

promising target market for innovative learning products (Badan Pusat Statistik, 2024). In addition, improving literacy and numeracy among elementary school students has become an important focus in the development of technology-based learning media. A study by Novianti et al. (2024) demonstrated that the implementation of knowledge sharing through the Kampus Mengajar collaboration program improved students' literacy and numeracy skills through more interactive and collaborative learning approaches. These findings indicate that innovation in learning media plays a strategic role in supporting the improvement of the quality of primary education.

The use of digital platforms as marketing tools has a positive impact on market reach and marketing performance (Natania & Dwijayanti, 2024). Therefore, the ability to develop an appropriate digital business model is a crucial factor in effectively marketing educational products through digital channels.

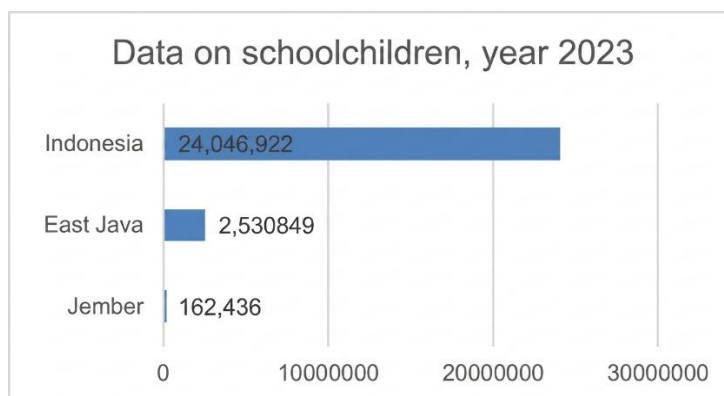


Figure 1. Elementary School Student Data in Indonesia, East Java, and Jember

The consistent implementation of digital media as a marketing strategy has been demonstrated to influence business growth, with customer preferences and online purchasing trends serving as key determinants of success (Natania & Dwijayanti, 2024). Meanwhile, the Business Model Canvas (BMC) is useful for systematically analyzing and designing business models, enabling businesses to map nine key business elements from customer segments to cost structure within a comprehensive framework (Mahardika et al., 2023). The integration of digital marketing strategies and Business Model Canvas (BMC) mapping therefore provides a relevant foundation for evaluating the sustainability of technology-based educational products.



Figure 2. Board Game Product and Android Application

Through the Student Creativity Program in Entrepreneurship (Program Kreativitas Mahasiswa Kewirausahaan/PKM-K), the Math Board Game “TEMATIK” was developed as an educational product that combines a physical board game with an Android-based educational game application. The “TEMATIK” product employs a hybrid marketing strategy

by combining online channels, including the Shopee marketplace, Instagram, and WhatsApp, with offline approaches involving direct visits to elementary schools in Jember Regency. Innovation in the development of technology-based entrepreneurial products, supported by comprehensive business feasibility analysis, represents one of the most sustainable approaches to entrepreneurial product development (Harjawati & Kustiawati, 2023).

Previous studies have examined the application of the Business Model Canvas to MSMEs (Candraningrat et al., 2021; Mahardika et al., 2023), as well as the implementation of digital marketing strategies across various small and medium-sized business sectors (Betti & Muhrim, 2024; Natania & Dwijayanti, 2024). However, studies that simultaneously integrate business model analysis, digital marketing strategy implementation, and financial feasibility evaluation for technology-based educational products using a hybrid model namely, products that combine physical components with an Android application within a single ecosystem remain limited. This research gap provides the foundation for the present study.

Accordingly, this study aims to analyze the digital business model of the “TEMATIK” Math Board Game using the Business Model Canvas (BMC) framework, examine the implementation of its digital marketing strategy, and evaluate its business feasibility using financial indicators, including Cost of Goods Manufactured (COGM), Break-Even Point (BEP), Benefit–Cost Ratio (B/C Ratio), Return on Investment (ROI), and Payback Period.

2. LITERATURE REVIEW

Digital Marketing

Digital marketing refers to marketing activities that utilize digital media and technologies to reach, attract, and retain consumers more efficiently than conventional marketing approaches (Ayesha et al., 2022). In the digital era, digital marketing has become an increasingly important strategy for micro, small, and medium-sized enterprises (MSMEs), as it enables them to reach broader markets than conventional marketing methods (Tilaar et al., 2026). Its practical implementation can be observed through the use of e-commerce platforms and social media as primary distribution and communication channels for various products, including educational products.

From an e-commerce marketing perspective, the consistent implementation of digital marketing strategies has been shown to significantly contribute to business growth, with consumer habits and online shopping behavior serving as key determinants of marketing effectiveness (Betti & Muhrim, 2024). The use of digital platforms also has a positive impact on MSMEs by enabling them to reach broader markets and increase sales (Natania & Dwijayanti, 2024). The growth of e-commerce in Indonesia, which was projected to reach US\$75 billion in 2024 with a growth rate of 19% (Wardhana, 2024), demonstrates the relevance of digital marketing strategies for small and medium-sized businesses.

In this study, the digital marketing strategy implemented for the “TEMATIK” product incorporates the Shopee e-commerce platform, Instagram and WhatsApp social media, as well as offline direct-selling activities conducted through visits to elementary schools, thereby constituting a hybrid marketing strategy.

Business Model Canvas (BMC)

The Business Model Canvas (BMC) is a strategic framework designed to describe, analyze, and design business models through nine key elements: customer segments, value propositions, channels, customer relationships, revenue streams, key resources, key activities, key partnerships, and cost structure (Mahardika et al., 2023). These nine elements are interconnected and collectively provide a comprehensive overview of how a business creates, delivers, and captures value (Susanti et al., 2024). The implementation of the BMC offers various benefits for MSMEs, particularly in developing more organized and flexible business strategies.

The Business Model Canvas (BMC) is highly effective as a tool for business strategy development because it simplifies the complexity of business models into a visual format that

is easy to understand and evaluate (Candraningrat et al., 2021). In addition, the implementation of the BMC can influence the financial performance of MSMEs by enabling business owners to systematically identify opportunities, evaluate weaknesses, and optimize existing potential. In this study, the Business Model Canvas (BMC) is used to describe all elements of the business model of the “TEMATIK” Math Board Game, including customer segments (elementary school students, teachers, and parents), the value proposition (the unique integration of a physical board game and an Android application), as well as the cost structure and cash flow.

Business Feasibility Analysis

Business feasibility analysis is a systematic evaluation of the viability of a business from a financial perspective to determine whether the business is feasible to operate (Ilhami & Tahwin, 2023). It serves as a fundamental foundation for developing innovation-based businesses by ensuring that the products developed provide both academic and economic value (Harjawati & Kustiawati, 2023). The main indicators used in business feasibility analysis include: (1) Cost of Goods Manufactured (COGM), which refers to the total cost required to produce one unit of a product; (2) Break-Even Point (BEP), which refers to the number of units that must be sold for a business to reach the equilibrium point between revenue and costs; (3) Benefit Cost Ratio (B/C Ratio), defined as the ratio of total benefits or revenue to total costs used to determine business feasibility, with a B/C Ratio greater than one indicating that a business is financially feasible; (4) Return on Investment (ROI), which represents the rate of return on invested capital based on business profitability; and (5) Payback Period, which refers to the time required to recover the initial investment (Ilhami & Tahwin, 2023).

Business feasibility analysis not only functions as a tool for evaluating financial performance but also serves as a basis for decision-making related to sustainable development and business growth (Susanti et al., 2024). In the context of digital businesses, business process optimization and operational efficiency are important factors in improving the performance of technology-based enterprises. A study by Trianto and Suharso (2026) demonstrated that the Business Process Reengineering and Throughput Efficiency approaches can improve the effectiveness of payment processes in digital systems, thereby supporting business operational efficiency. Furthermore, amid increasingly intense competition in digital markets, MSMEs that consistently monitor business feasibility indicators have been shown to be more resilient than those that neglect such indicators (Wardhana, 2024). Therefore, this study conducts a business feasibility analysis of the “TEMATIK” Math Board Game based on the five indicators described above.

3. METHOD

This study employed a quantitative descriptive approach using a case study method. Quantitative descriptive research provides a systematic description of a phenomenon through numerical data that can be objectively analyzed (Waruwu, 2023). Meanwhile, the case study method is a research approach that examines a phenomenon in depth within its real-world context, particularly when the boundaries between the phenomenon and its context are difficult to distinguish (Creswell & Poth, 2016). The combination of these two methods was applied in this study because the research aims to analyze the digital business model and the implementation of marketing strategies within a specific business entity.

Research Object and Data Sources

The object of this study is the “TEMATIK” Math Board Game, an educational product developed by the PKM-K team of Politeknik Negeri Jember in 2024. The study utilized both primary and secondary data. Primary data were obtained directly from the business

operations, including weekly sales data collected over a seven-week period (July 1 - August 21, 2024), capital and production cost data, and the results of validation conducted by subject-matter and media experts. Secondary data were obtained from the final PKM-K report, digital marketing documentation from the Shopee marketplace, Instagram, and WhatsApp, as well as basic education data published by the Indonesian Ministry of Education, Culture, Research, and Technology. The seven-week observation period was selected because it represents the initial commercialization phase following the product's market launch. Therefore, this period was considered relevant for examining early market adoption patterns and the distribution of sales channels.

Data Collection Techniques

Data were collected using three methods. First, documentation was used to obtain sales, capital, and marketing strategy data from the final PKM-K report and weekly transaction records. Second, observation was conducted by analyzing the marketing activities of the "TEMATIK" product on digital platforms, including Shopee, Instagram, and WhatsApp, based on engagement and transaction data. Third, a literature analysis was conducted by reviewing relevant literature on the Business Model Canvas (BMC), digital marketing, and business feasibility to establish the analytical framework for this study (Creswell & Poth, 2016).

Data Analysis Techniques

The data analysis process in this study was conducted in two stages. First, the business model was analyzed using the Business Model Canvas (BMC) to systematically map the nine key elements of the "TEMATIK" product business model (Mahardika et al., 2023). Second, business feasibility was assessed by analyzing the following five financial indicators:

1. Cost of Goods Manufactured (COGM)

$$COGM = Total\ Production\ Costs \div Total\ Production\ Units \quad (1)$$

2. Break Even Point (BEP)

$$BEP = Total\ Production\ Costs \div Selling\ Price\ per\ Unit \quad (2)$$

3. B/C Ratio

$$B/C\ Ratio = Total\ Revenue \div Total\ Production\ Costs \quad (3)$$

4. Return on Investment (ROI)

$$ROI = (Profit \div Total\ Production\ Costs) \times 100\% \quad (4)$$

5. Payback Period

$$Payback\ Period = (Total\ Production\ Costs \times Production\ Period) \div Profit\ Margin \quad (5)$$

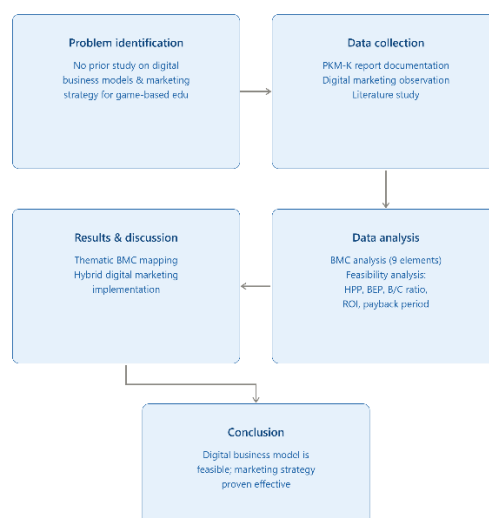


Figure 3. Research Methodology Flowchart

Figure 3 presents the research methodology, which is divided into four main stages. The first stage is problem identification, which involves identifying research issues related to digital business models and the implementation of marketing strategies for technology-based educational products. The second stage is data collection, conducted through an analysis of the PKM-K report, observation of digital marketing practices, and a literature review. The third stage is data analysis, which consists of two main aspects: business model mapping using the BMC framework and business feasibility analysis using the COGM, BEP, B/C Ratio, ROI, and Payback Period indicators. The fourth stage involves drawing conclusions based on the results of the analysis.

4. RESULT AND DISCUSSION

Business Model Canvas (BMC) Analysis of the “TEMATIK” Math Board Game

The digital business model of the “TEMATIK” Math Board Game was mapped using the Business Model Canvas (BMC) framework, which consists of nine key elements. The results of the BMC mapping are presented in Figure 4.

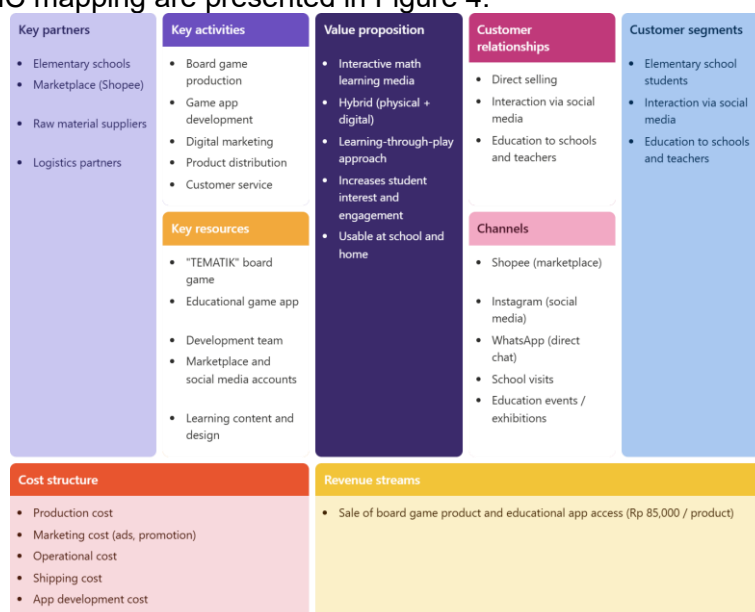


Figure 4. Business Model Canvas (BMC)

Based on the BMC presented in Figure 4, the value proposition that differentiates the “TEMATIK” product from similar products lies in the integration of a physical board game and an Android-based educational game within a single product. A strong and differentiated value proposition is one of the most important components of the BMC, as it forms the basis for customers’ decisions to choose a product over competitors’ offerings (Candraningrat et al., 2021). This finding is consistent with Mahardika et al. (2023), who demonstrated that the presence of differentiated value within a BMC can enhance product competitiveness and contribute to sustainable competitive advantage. In addition, Susanti et al. (2024) demonstrated that the consistent application of the BMC has a positive effect on the financial performance of MSMEs, as business owners are encouraged to optimize the development of all business components.

Table 1. Comparative Analysis of the “TEMATIK” Math Board Game and Competing Products

Feature	Tematik	JEM Learn & Play	Mideer Mathematic	ZUZO	Simple Math
Gambar					
Theme	Mathematics	Mathematics	Mathematics	Mathematics	Mathematics
Cards	Available	Available	Not available	Available	Not available
Learning Materials	Comprehensive mathematics materials taught in elementary school from Grades 1 to 6	Addition, subtraction, multiplication, division, and fractions	Addition and subtraction	Addition, subtraction, multiplication, and division	Addition and multiplication
Educational Game	Available	Not available	Not available	Not available	Not available
Number of Series	6	5	3	1	1
Price	IDR 85,000	IDR 120,000	IDR 90,000 - 376,000	IDR 185,500	IDR 100,000

Analysis of Digital Marketing Strategy Implementation

The marketing strategy for the “TEMATIK” product has been implemented through a hybrid approach, combining online and offline channels since July 1, 2024. The digital marketing system implemented for the “TEMATIK” product is illustrated in Figure 5.



Figure 5. Digital Marketing System Flow for the “TEMATIK” Product

Figure 5 illustrates the digital marketing system for the “TEMATIK” product, which consists of ten cyclically interconnected stages. The first stage involves the production of the physical board game and educational game application. The second stage involves entering the product into digital platforms by uploading product descriptions, prices, and promotional content. The third stage involves distribution through three platforms: Shopee, Instagram, and WhatsApp. The fourth stage involves implementing the marketing strategy through three parallel channels: posting educational and product-related content, Instagram advertising, and direct promotion to elementary schools. The fifth stage occurs when users interact with the content through reach, engagement, and actions such as likes, shares, and saves. The sixth stage involves checkout through Shopee or ordering via WhatsApp. The seventh stage consists of product packaging and delivery to customers. The eighth stage involves collecting user feedback in the form of reviews, testimonials, and suggestions. The ninth stage involves analyzing sales performance through indicators such as ROI, BEP, and channel effectiveness. Finally, in the tenth stage, the evaluation results are used to optimize the marketing strategy for the subsequent cycle, making the system adaptive and sustainable.

The implementation of the aforementioned system is supported by a digital marketing architecture that illustrates how all system components are operationally interconnected, as shown in Figure 6.

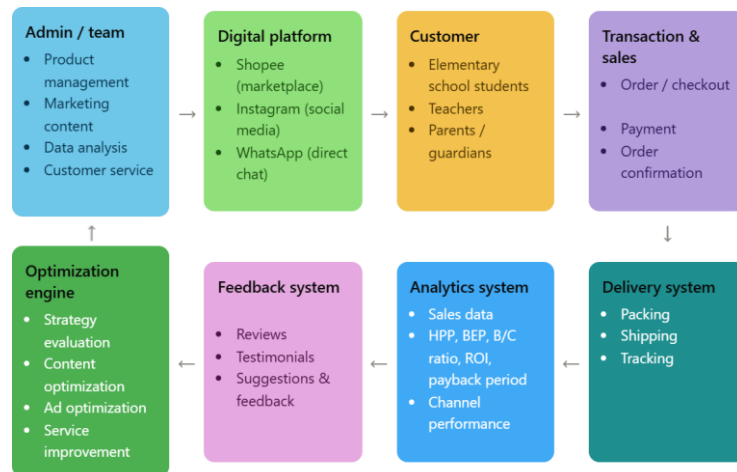


Figure 6. Digital Marketing System Architecture of the “TEMATIK” Product

The digital marketing system architecture of the “TEMATIK” product consists of six interconnected components, as illustrated in Figure 6. The system begins with the Admin/Team as the central management unit responsible for product management, marketing content, data analysis, and customer service. This component is directly connected to three primary digital platforms: Shopee (marketplace), Instagram (social media), and WhatsApp (direct chat), which serve as customer touchpoints for the target segments, namely elementary school students, teachers, and parents.

Transactions conducted through these digital platforms are processed through the transaction and sales component, which includes order placement, payment, and order confirmation. The process then continues through the delivery system, which manages product packaging, shipping, and tracking. All customer interactions generate data that are collected through the feedback system in the form of reviews and testimonials. These data are subsequently analyzed by the analytics system, which evaluates sales data, COGM, BEP, B/C Ratio, ROI, Payback Period, and channel performance. The results of this analysis are then utilized by the optimization engine to evaluate marketing strategies, optimize content and advertising, and continuously improve customer service.

Online Channels

The online marketing process was conducted through three different platforms. First, the Shopee marketplace was utilized through the store “temanmatematika,” which had 17 reviews with a 5.0 rating, 24 sales, and 10 favorites. Shopee was selected because it has one of the highest numbers of visitors among marketplace platforms in Indonesia, reaching approximately 2.35 billion visits annually (Ahdiat, 2024). Second, Instagram (@tematik_pkmk), with 630 followers and 396 following accounts, was used to regularly disseminate promotional and educational content related to the product. Third, WhatsApp was used for direct communication with prospective customers and personalized order processing.

Offline Channels

Offline marketing was conducted through visits to elementary schools in Jember Regency. This method was more effective during the initial weeks of marketing, with offline sales consistently exceeding online sales in five of the first seven weeks. Face-to-face marketing remains an effective complement to online marketing campaigns, particularly for products that require direct engagement and reinforcement with prospective customers (Betti & Muhrim, 2024).

Table 2. Weekly Sales Data

PrIOD	Sales Channel	Profit (IDR)
Week I (July 01 - 08)	Online : 1 x 85.000 = 85.000 Offline : 4 x 85.000 = 340.000 425.000	26.666 106.664 133.330
Minggu II (July 09 - 17)	Online : 0 Offline : 6 x 85.000 = 510.000 510.000	0 159.996 159.996
Week III (July 18 - 24)	Online : 2 x 85.000 = 170.000 Offline : 10 x 85.000 = 850.000 1.020.000	53.332 266.660 319.992
Week IV (July 25 - 31)	Online : 7 x 85.000 = 595.000 Offline : 3 x 85.000 = 255.000 850.000	186.662 79.998 266.660
Week V (August 01 - 07)	Online : 5 x 85.000 = 425.000 Offline : 7 x 85.000 = 595.000 1.020.000	133.330 186.662 319.992
Week VI (August 08 - 14)	Online : 10 x 85.000 = 850.000 Offline : 4 x 85.000 = 340.000 1.190.000	266.660 106.664 373.324
Week VII (August 15 - 21)	Online : 6 x 85.000 = 510.000 Offline : 5 x 85.000 = 425.000 935.000	159.996 133.330 293.326
TOTAL	5.950.000	1.866.620

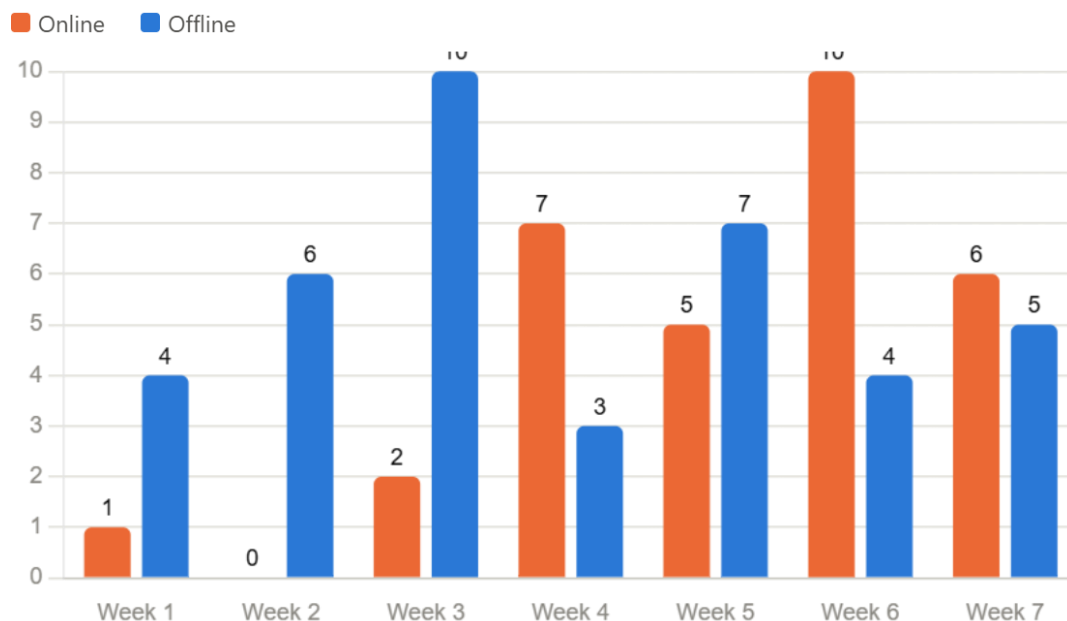


Figure 7. Comparison of Online and Offline Sales Performance

The weekly sales data presented in Table 2 indicate a significant shift in channel distribution patterns. During the first three weeks (July 1 - 24, 2024), offline channels dominated, accounting for an average of 73% of total units sold per week, indicating that face-to-face demonstrations were more effective during the product introduction phase. From the fourth to the seventh week, the contribution of online channels began to increase, reaching its highest level in the sixth week, with 10 units sold through online channels. This shift suggests that brand awareness developed through initial offline promotions began to

generate a positive impact on the performance of digital channels. Overall, total sales during the first seven weeks reached 70 units, with an average of 10 units per week, exceeding the weekly sales target of six units required to achieve the projected payback period.

The shift toward online channel dominance is consistent with the findings of Natania and Dwijayanti (2024), who concluded that the implementation of digital marketing strategies gradually increases the influence of online marketing channels as consumer brand awareness develops. Furthermore, Betti and Muhrim (2024) stated that combining online and offline marketing channels helps expand market reach compared with relying on a single channel.

Business Feasibility Analysis

The business feasibility analysis was conducted based on actual data from one production cycle, with a production target of 150 units and an initial capital investment of IDR 8,750,000.

Cost of Goods Manufactured (COGM)

$$COGM = IDR\ 8.750.000 \div 150 = IDR\ 58.333\ per\ unit \quad (6)$$

The COGM of IDR 58,333 per unit results in a unit profit margin of IDR 85,000 – IDR 58,333 = IDR 26,667, equivalent to 31.37% of the selling price. This margin positions “TEMATIK” competitively, particularly because its selling price of IDR 85,000 is lower than that of all major competitors.

Break Even Point (BEP)

$$BEP = IDR\ 8.750.000 \div IDR\ 85.000 = 103\ unit \quad (7)$$

In this study, the cost of IDR 8,750,000 was treated as the total cost of a single production cycle involving 150 units, encompassing all operational cost components without formally separating fixed and variable costs for accounting purposes. Therefore, the break-even analysis was calculated using an initial-stage business feasibility approach. The BEP calculation indicates that the “TEMATIK” business will reach its break-even point after selling 103 of the 150 units produced, equivalent to 68.7% of the total capacity of a single production cycle.

B/C Ratio

$$B/C\ Ratio = IDR\ 12.750.000 \div IDR\ 8.750.000 = 1,46 \quad (8)$$

The B/C Ratio of 1.46 (>1) indicates that the business is financially feasible. A B/C Ratio greater than 1 indicates that every IDR 1 invested generates more than IDR 1 in returns, making it an important indicator for assessing the financial feasibility of a project (Susanti et al., 2024).

Return on Investment (ROI)

$$ROI = (IDR\ 4.000.000 \div IDR\ 8.750.000) \times 100\% = 45,7\% \quad (9)$$

The ROI of 45.7% indicates a relatively high rate of return on invested capital, reflecting the efficiency of capital utilization in the production and distribution processes.

Payback Period

$$Payback\ Period = (IDR\ 8.750.000 \times 3\ bulan) \div IDR\ 4.000.000 = 6,6\ bulan \quad (10)$$

The initial investment is projected to be recovered within 6.6 months, or approximately two production cycles. With an actual average sales volume of 10 units per week, exceeding the target of 6 units per week, the investment recovery period may potentially be shorter than projected.

Table 3. Summary of Business Feasibility Analysis

Indicator	Calculation	Result	Interpretation
COGM	IDR 8,750,000 ÷ 150	IDR 58,333/unit	-
Selling Price	-	IDR 85,000/unit	-
Unit Margin	IDR 85,000 - IDR 58,333	IDR 26,667 (31.37%)	-
BEP	IDR 8,750,000 ÷ IDR 85,000	103 units	68.7% of production capacity
Projected Revenue	IDR 85,000 × 150	IDR 12,750,000	One-cycle target
Actual Revenue	IDR 85,000 × 70	IDR 5,950,000	First seven weeks
B/C Ratio	IDR 12,750,000 ÷ IDR 8,750,000	1.46	Feasible (>1)
ROI	(IDR 4,000,000 ÷ IDR 8,750,000) × 100%	45.7%	High
Payback Period	(IDR 8,750,000 × 3) ÷ IDR 4,000,000	6.6 months	Approximately two cycles

Overall, the results of the business feasibility analysis indicate that the digital business model of the “TEMATIK” Math Board Game is financially feasible. The B/C Ratio of 1.46 indicates that each unit of monetary expenditure generates a return of IDR 1.46, demonstrating the financial feasibility of the business. Meanwhile, the ROI of 45.7% indicates a relatively high rate of return on investment, while the Payback Period of 6.6 months demonstrates the relatively rapid recovery of the initial investment.

The findings of this study are consistent with the research conducted by Susanti et al. (2024), which found that the implementation of the Business Model Canvas has a significant positive impact on the financial performance of small and medium-sized enterprises through the integration of its nine business model components, thereby improving business efficiency and profitability. In addition, a study by Ibrahim et al. (2022) on education technology-based startups concluded that business development can be considered financially feasible when positive results are demonstrated through financial indicators such as the Payback Period and Profitability Index. These findings further support the argument that combining the Business Model Canvas with financial feasibility analysis represents an effective approach for evaluating the sustainability of technology-based businesses.

5. CONCLUSION

This study analyzed the digital business model and digital marketing strategy implementation of the “TEMATIK” Math Board Game using the Business Model Canvas (BMC) framework and business feasibility analysis. The BMC mapping indicates that “TEMATIK” has a strong value proposition as a mathematics board game that integrates physical printed media with an Android-based educational game application, covering mathematics materials for Grades 1 - 6 of elementary school in accordance with the applicable curriculum, while offering a competitive price.

The hybrid digital marketing strategy implemented through the Shopee marketplace, Instagram, WhatsApp, and direct visits to elementary schools demonstrated a shift in channel distribution from offline dominance during the first three weeks toward an increasing contribution from online channels between the fourth and seventh weeks, with total sales reaching 70 units during the first seven weeks. Based on the financial feasibility projections, the business is estimated to reach its break-even point after selling 103 units. The business feasibility analysis resulted in a B/C Ratio of 1.46, an ROI of 45.7%, a COGM of IDR 58,333 per unit, and a Payback Period of 6.6 months. Overall, these findings confirm that the digital business model of “TEMATIK” is financially feasible and has strong potential for further development as a scalable education-based technopreneurship product.

6. ACKNOWLEDGEMENT

Based on the results of the analysis, the “TEMATIK” business management team is recommended to optimize the use of paid advertising features on Shopee and Instagram and to consistently develop product demonstration content on social media to increase sales conversion. Future research is recommended to expand the analysis by incorporating additional indicators, such as Customer Lifetime Value (CLV) and Net Promoter Score (NPS), and to examine the effectiveness of each marketing channel separately using a data-driven analytics approach. For MSMEs and higher education institutions, this study can serve as a reference for designing BMC-based digital business models and hybrid marketing strategies for technology-based educational products.

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