Business Strategy Formulation Using the Business Model Canvas: Evidence from an EdTech Startup in South Africa

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Abstract

The rapid advancement of digital technology has significantly influenced the growth of educational technology (EdTech) startups, particularly in developing countries such as South Africa. Challenges related to unequal access to quality education, youth unemployment, and limited career guidance among secondary school learners have created opportunities for innovative digital education platforms. This study aims to analyze the formulation of business strategy using the Business Model Canvas (BMC) approach in the context of an EdTech startup operating in South Africa.

The research adopts a qualitative descriptive method, using interviews and document analysis to examine the nine building blocks of the Business Model Canvas, including customer segments, value propositions, channels, customer relationships, revenue streams, key resources, key activities, key partnerships, and cost structure. The findings indicate that the EdTech platform's core value proposition—career guidance, psychometric testing, and expert consultation—addresses critical gaps faced by South African high school learners in making informed educational and career decisions.

Furthermore, the analysis highlights the importance of strategic partnerships with schools, universities, and education-related institutions, as well as the effective use of digital channels to reach a diverse and geographically dispersed market. The study concludes that the Business Model Canvas is an effective strategic tool for EdTech startups in South Africa, enabling them to create, deliver, and capture value sustainably while responding to the evolving needs of the education sector.

Keywords: Business Model Canvas; Business Strategy; Educational Technology; EdTech Startup; Career Guidance; South Africa

Introduction

Education plays a crucial role in social and economic development, particularly in countries with a large youth population such as South Africa. The primary objective of education is not only to transfer knowledge but also to equip individuals with the skills, competencies, and career readiness required to participate effectively in the labor market. However, South Africa continues to face significant challenges in its education system, including unequal access to quality education, high youth unemployment, limited career guidance, and disparities between urban and rural learning environments. These challenges have intensified the need for innovative and technology-driven solutions within the education sector.

The rapid development of information and communication technology (ICT) has transformed various aspects of human life, including education. Advances in digital technology, widespread mobile phone usage, and increased internet penetration have enabled the emergence of Educational Technology (EdTech) platforms that provide alternative learning methods, career guidance services, and skills development opportunities. In South Africa, the adoption of digital learning tools accelerated significantly during and after the COVID-19 pandemic, as schools and universities were forced to shift to online and blended learning models. This shift highlighted both the potential of digital education and the persistent digital divide affecting learners from disadvantaged communities.

One of the major challenges faced by South African learners, particularly at the secondary school level, is uncertainty in educational and career decision-making. Many high school learners lack access to structured career guidance, psychometric assessments, and professional counseling that could help them identify their interests, talents, and suitable career paths. As a result, learners often make uninformed decisions regarding subject selection, tertiary education, or vocational training, which contributes to high dropout rates and skills mismatches in the labor market. According to national labor statistics, youth unemployment remains critically high, emphasizing the need for early career orientation and skills alignment with market demands.

In response to these challenges, EdTech startups have emerged as important actors within the South African education ecosystem. These startups offer digital platforms that provide online learning resources, career assessments, psychological testing, mentorship programs, and expert consultations. By leveraging technology, EdTech companies are able to reach a wider audience, reduce geographical barriers, and offer scalable solutions at relatively lower costs compared to traditional face-to-face services. However, despite their growing presence, many EdTech startups struggle to achieve long-term sustainability due to intense competition, limited funding, unclear value propositions, and ineffective business strategies.

A well-defined business strategy is essential for EdTech startups to survive and grow in a competitive and dynamic environment. Business strategy enables organizations to identify target markets, define value propositions, allocate resources efficiently, and establish competitive advantages. One widely used strategic management tool for analyzing and designing business strategies is the Business Model Canvas (BMC). The Business Model Canvas provides a comprehensive framework consisting of nine interconnected building blocks that describe how an organization creates, delivers, and captures value. These building blocks include customer segments, value propositions, channels, customer relationships, revenue streams, key resources, key activities, key partnerships, and cost structure.

The Business Model Canvas has been widely applied in various industries, including technology startups, healthcare, finance, and education, due to its simplicity, flexibility, and holistic perspective. For EdTech startups, the BMC offers a structured approach to understanding customer needs, designing innovative solutions, and aligning operational activities with strategic goals. In the context of South Africa, where education-related challenges are complex and multidimensional, the BMC can serve as a valuable tool for evaluating whether EdTech platforms are effectively addressing learner needs while maintaining financial viability.

This study aims to analyze the formulation of business strategy using the Business Model Canvas approach in the context of an EdTech startup operating in South Africa. By examining each of the nine components of the Business Model Canvas, this research seeks to provide insights into how EdTech startups can develop sustainable business models that contribute to improved career guidance and educational outcomes for high school learners. The study adopts a qualitative descriptive research method, utilizing interviews and document analysis to gain an in-depth understanding of the startup's strategic orientation and operational practices.

The findings of this study are expected to contribute both theoretically and practically. From a theoretical perspective, the research adds to the existing literature on business model innovation and strategic management in the EdTech sector within emerging economies. From a practical perspective, the results can serve as a reference for EdTech entrepreneurs, educators, policymakers, and investors seeking to design effective digital education solutions in South Africa. Ultimately, this study underscores the importance of strategic planning and business model innovation in ensuring that EdTech startups can play a meaningful role in addressing educational and career development challenges faced by South African youth.

Methodology

This study employs a qualitative research method with a descriptive approach to analyze the formulation of business strategy using the Business Model Canvas (BMC) in the context of an EdTech startup operating in South Africa. Qualitative research is appropriate for this study as it allows for an in-depth understanding of complex business processes, strategic decision-making, and contextual factors influencing the development of digital education platforms. The descriptive approach is used to systematically describe and interpret the strategic elements of the business model without manipulating variables.

Research Design

The research design focuses on a case study approach, examining a single EdTech startup that provides career guidance and digital assessment services to secondary school learners in South Africa. A case study design enables a detailed exploration of real-world business practices within their natural setting and is particularly suitable for emerging industries such as EdTech, where business models are still evolving. The Business Model Canvas framework is used as the main analytical tool to structure the investigation of the company's business strategy.

Participants and Sampling

The participants in this study consisted of key stakeholders from an EdTech startup operating in South Africa, selected based on their direct involvement in strategic planning, product development, and business operations. The study focused on individuals who possessed in-depth knowledge of the company's business model and decision-making processes, ensuring the relevance and quality of the data collected.

A purposive sampling technique was employed to select participants who met specific criteria aligned with the objectives of the research. Purposive sampling is commonly used in qualitative research to identify information-rich cases that can provide detailed insights into the phenomenon under investigation. The selection criteria included participants who held managerial, strategic, or operational roles within the EdTech startup, such as founders, senior managers, product developers, marketing personnel, and partnership coordinators.

A total of 6–10 participants were involved in the study. This sample size was considered adequate for qualitative research, as it allowed for data saturation while enabling an in-depth exploration of the business strategy and business model components. Data saturation was achieved when additional interviews no longer produced new or significant information related to the Business Model Canvas elements.

The participants represented different functional areas within the organization, allowing the study to capture diverse perspectives on customer segmentation, value propositions, revenue generation, partnerships, and cost structures. This diversity enhanced the comprehensiveness of the analysis and contributed to a more balanced understanding of the startup's strategic framework.

Data Collection Techniques

Primary data were collected through semi-structured interviews with key stakeholders of the EdTech startup, including founders, management team members, and operational staff involved in product development, marketing, and partnerships. The interviews were designed to capture insights related to each of the nine building blocks of the Business Model Canvas: customer segments, value propositions, channels, customer relationships, revenue streams, key resources, key activities, key partnerships, and cost structure. Open-ended questions were used to allow participants to elaborate on their experiences and strategic perspectives.In addition to interviews, secondary data were collected through document analysis. These documents included company profiles, internal reports, promotional materials, website content, and publicly available information related to the South African education and EdTech sectors. The use of multiple data sources enabled data triangulation, enhancing the credibility and reliability of the findings.

Data Analysis Technique

The data analysis process followed the interactive model proposed by Miles and Huberman, which consists of data reduction, data display, and conclusion drawing and verification. During the data reduction stage, interview transcripts and documents were carefully reviewed, coded, and categorized according to the nine components of the Business Model Canvas. Relevant information related to strategic decisions, operational processes, and market positioning was selected and organized systematically.

In the data display stage, the categorized data were presented in descriptive tables and narrative form to illustrate the relationships between different elements of the business model. This step facilitated the identification of patterns, strengths, and weaknesses within the startup's strategic framework. Finally, conclusions were drawn by interpreting the displayed data and verifying the findings through continuous comparison across data sources to ensure consistency and accuracy.

Research Validity and Reliability

To ensure the validity and reliability of the study, several strategies were employed. Data triangulation was achieved by combining interview data with document analysis, allowing for cross-validation of findings. Member checking was also conducted by sharing summarized interview results with selected participants to confirm the accuracy of interpretations. Additionally, the use of an established analytical framework—the Business Model Canvas—contributed to the methodological rigor and consistency of the analysis.

Ethical Considerations

Ethical considerations were taken into account throughout the research process. All participants were informed about the purpose of the study and provided their consent prior to participation. Confidentiality and anonymity were maintained by not disclosing the names of individuals or sensitive company information. The data collected were used solely for academic purposes and stored securely to prevent unauthorized access.

Results

This section presents the findings of the study based on qualitative data collected through interviews and document analysis. The results are organized according to the **nine building blocks of the Business Model Canvas (BMC)**, in line with the study objectives and research design. The results are presented descriptively without interpretation, which is discussed in the subsequent section.

Profile of Participants

A total of **8 participants (N = 8)** were involved in this study. All participants held strategic or operational roles within the EdTech startup, ensuring direct knowledge of business strategy and decision-making.

Table 1

Participant Profile and Roles (N = 8)

Participant Code	Role in Organization	Functional Area
P1	Founder	Strategic Management
P2	Co-Founder	Business Development
P3	Product Manager	Platform Development
P4	Marketing Lead	Digital Marketing
P5	Partnership Officer	School & University Relations
P6	Operations Manager	Daily Operations
P7	Content Specialist	Career & Assessment Content
P8	Technical Lead	IT Infrastructure

Source: Primary interview data (2025)

Table 1 shows that participants represented multiple functional areas, supporting data completeness and triangulation.

Business Model Canvas Results

1. Customer Segments

All participants (8/8) identified **high school learners (Grades 8–12)** as the primary customer segment. Schools and educational institutions were identified as secondary customer segments.

Table 2

Identified Customer Segments

Customer Segment	Description	Evidence (Participants)
High school learners	Learners seeking career guidance	8/8
Schools	Institutions purchasing group access	6/8
Parents	Decision supporters	4/8

Source: Interview data (2025)

2. Value Proposition

Participants consistently reported that the core value proposition focuses on **career guidance, psychometric testing, and expert consultation**.

Figure 1 Source: Developed from Interview data (2025)

Core Value Proposition of the EdTech Platform

Source: Developed from interview data (2025)

Figure 1 illustrates how the platform delivers value to learners through a structured service process.

3. Channels

The results show that the startup relies primarily on **digital channels**, supported by institutional outreach.

Table 3

Distribution and Communication Channels

Channel Type	Platform	Usage Level
Digital	Website	High
Digital	Social Media (Instagram, TikTok)	High
Institutional	School visits	Medium
Direct	Email & WhatsApp	Medium

Source: Interview and document analysis (2025)

4. Customer Relationships 3772137821

Participants reported the use of **personal assistance and automated services** to maintain customer relationships.

Table 4

Customer Relationship Types

Relationship Type	Description	Evidence
Personal assistance	Direct support via WhatsApp/email	7/8
Automated services	Online reports and dashboards	6/8

Source: Interview data (2025)

5. Revenue Streams

The startup generates revenue mainly through **paid assessments and institutional partnerships**. No participant reported advertising revenue.

Table 5

Revenue Streams Identified

Revenue Source	Description	Participants
Individual assessments	One-time payments	8/8
School packages	Bulk pricing	6/8
Partnerships	Program collaborations	5/8

Source: Interview data (2025)

6. Key Resources

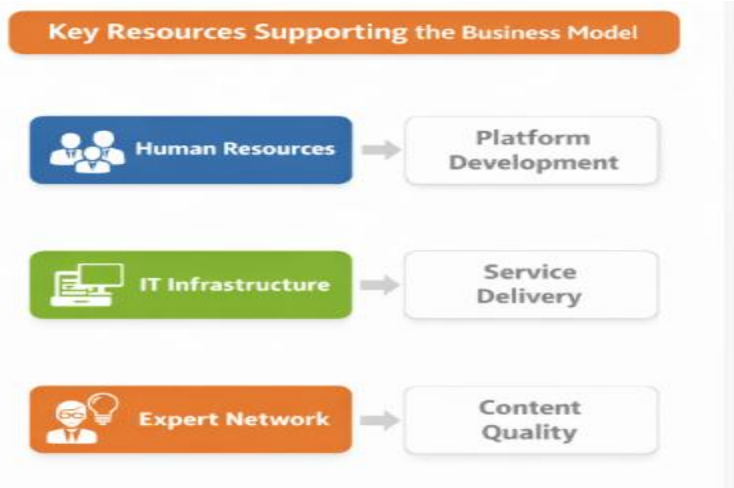Participants identified **human resources and digital infrastructure** as the most critical assets.

Figure 2 : Key Resources Supporting the Business Model
Source: Interview data (2025)

7. **Key Activities:**Key activities include platform development, assessment design, marketing, and partnership management.

Table 6: Key Business Activities

Activity	Purpose	Evidence
Platform maintenance	Ensure service availability	8/8
Assessment development	Improve accuracy	7/8
Marketing	User acquisition	6/8
Partner engagement	Market access	6/8

Source: Interview data (2025)

8. **Key Partnerships:**Results show strong reliance on schools, psychologists, and education experts.

Table 7:Key Partnerships

Partner Type	Role	Participants
Schools	Access to learners	6/8
Psychologists	Assessment validation	7/8
Education experts	Career content	6/8

Source: Interview data (2025)

9. **Cost Structure: All participants identified technology and human resource costs as the largest expenses.**
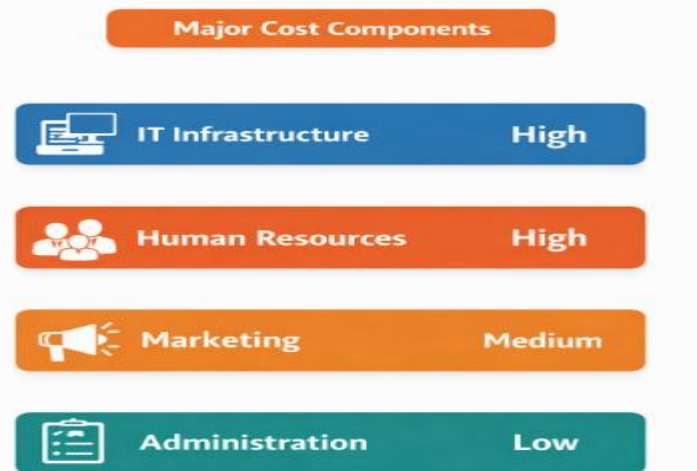

Figure 3:Major Cost Components
Source: Interview data (2025)

Summary of Results

The results show that the EdTech startup has a **clearly defined business model**, with strong alignment between customer needs and value propositions. All nine elements of the Business Model Canvas were identified and supported by participant evidence. No major contradictions or missing components were found.The results directly address the study objective of analyzing business strategy formulation using the Business Model Canvas in the South African EdTech context.

Discussion

This section discusses the findings of the study in relation to the research objective, which was to analyze the formulation of business strategy using the Business Model Canvas (BMC) approach in the context of an EdTech startup operating in South Africa. The discussion interprets the results, compares them with existing literature, and highlights their implications, limitations, and directions for future research.

Interpretation of Findings in Relation to the Research Objective

The results show that the EdTech startup has developed a structured and coherent business strategy aligned with the nine building blocks of the Business Model Canvas. The clear identification of customer segments, particularly high school learners and schools, confirms that the platform is designed to address early-stage career decision-making challenges. This finding directly supports the study's objective and aligns with the introduction, which highlighted the lack of structured career guidance among South African learners.The strong focus on career guidance, psychometric testing, and expert consultation demonstrates that the startup's value proposition responds to real educational and labor market needs. The integration of digital channels and institutional partnerships further supports the startup's ability to reach geographically diverse learners, addressing access challenges discussed in the introduction.

Comparison with Previous Studies

The findings are consistent with prior studies that emphasize the importance of clear value propositions and customer-focused design in EdTech startups. Osterwalder and Pigneur (2010) argue that successful business models clearly link customer needs with value creation, which is evident in this study's results. Similarly, previous research on EdTech in emerging economies highlights the role of digital platforms in reducing barriers to education access and career information.

The reliance on partnerships with schools and experts aligns with earlier studies that identify collaboration as a key success factor for education-based startups. However, unlike some studies that report diversified revenue models including advertising or sponsorships, this study found that revenue streams were mainly assessment-based. This difference may be explained by the early-stage nature of the startup and the sensitivity of educational services to commercialization.

Consideration of Alternative Explanations

While the results suggest that the Business Model Canvas effectively supports strategic clarity, alternative explanations should be considered. The positive alignment observed may be influenced by the small size of the organization, which allows for faster decision-making and clearer communication. In larger or more mature organizations, business model alignment may be more complex due to layered management structures and competing priorities.

Additionally, participant responses may reflect optimistic internal perspectives, as data were collected from individuals directly involved in the startup. External stakeholder perspectives, such as learners or educators, might reveal additional challenges not captured in this study.

Implications of the Findings

Theoretical Implications

The study contributes to the literature on business model innovation by demonstrating the practical application of the Business Model Canvas in the South African EdTech context. It supports the relevance of the BMC as a flexible and comprehensive framework for analyzing strategy in emerging digital education markets.

Practical Implications

For EdTech entrepreneurs, the findings highlight the importance of aligning value propositions with real learner needs and maintaining strong partnerships with educational institutions. Clear identification of key resources and cost structures can help startups allocate resources more efficiently and improve sustainability.

Policy Implications

For policymakers and education stakeholders, the results suggest that EdTech platforms can complement formal education systems by providing scalable career guidance services. Supporting partnerships between startups and schools may enhance career readiness among learners.

Limitations of the Study

This study has several limitations that should be acknowledged. First, the research focuses on a single EdTech startup, which limits the ability to generalize the findings across the entire South African EdTech sector. Second, the study relies on qualitative data from internal stakeholders, which may introduce subjective bias. Third, the absence of learner or school feedback limits the assessment of user-level impact.These limitations do not invalidate the findings but should be considered when interpreting the results.Boundaries of GeneralizationThe findings of this study are context-specific and apply primarily to early-stage EdTech startups operating in South Africa or similar emerging markets. The results may not be directly transferable to large, established EdTech firms or to education systems in developed economies with different regulatory and infrastructural conditions.

Future Research Directions

Future research could expand this study by including multiple EdTech startups to allow for comparative analysis. Quantitative studies examining learner outcomes, satisfaction, or career decision effectiveness would provide additional insights. Further research could also explore the long-term sustainability of assessment-based revenue models and the impact of public–private partnerships in digital career guidance services.

Conclusion

This study examined the formulation of business strategy using the Business Model Canvas approach in the context of an EdTech startup operating in South Africa. The main objective was to understand how the startup creates, delivers, and captures value while addressing career guidance challenges faced by high school learners. The findings show that the Business Model Canvas provides a clear and structured framework for analyzing strategic components in an emerging digital education business.The study demonstrates that the EdTech startup has developed a coherent business model aligned with learner needs and institutional requirements. The platform's value proposition, which integrates career guidance, psychometric testing, and expert consultation, responds directly to gaps in early career decision-making identified in the South African education system. The use of digital channels and partnerships with schools and experts enables the platform to reach a diverse learner population while maintaining operational efficiency.From a strategic perspective, the findings confirm that key resources such as human capital, IT infrastructure, and expert networks play a critical role in supporting service quality and platform sustainability. At the same time, the results highlight that technology and human resource costs represent the largest financial commitments for EdTech startups, emphasizing the need for careful cost management and scalable solutions. These insights reinforce the importance of aligning business strategy with both educational objectives and financial realities.

This study contributes to the existing literature by providing empirical evidence on the application of the Business Model Canvas in the South African EdTech sector. It supports previous research that identifies business model innovation as a key factor for startup success in education-driven markets. Practically, the findings offer guidance for EdTech entrepreneurs on how to design value-driven and sustainable business models. For policymakers and education stakeholders, the study highlights the potential of EdTech platforms to complement formal education systems, particularly in the area of career guidance.

Despite its contributions, this study has limitations. It focuses on a single EdTech startup and relies primarily on internal stakeholder perspectives. As a result, the findings cannot be generalized to all EdTech startups or education contexts. Future research should include multiple case studies and incorporate feedback from learners, educators, and policymakers to provide a more comprehensive understanding of EdTech business models and their impact.In conclusion, the Business Model Canvas is an effective strategic tool for EdTech startups operating in South Africa. When applied thoughtfully, it can support the development of sustainable business strategies that contribute to improved educational and career outcomes for young people. The study underscores the importance of strategic planning, collaboration, and innovation in ensuring that EdTech solutions can play a meaningful role in addressing education and employment challenges in emerging economies.

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