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IMPLEMENTATION OF SWOT ANALYSIS AND QUANTITATIVE STRATEGIC PLANNING MATRIX ON A LOW-COST PRIVATE SCHOOL

Abstract: A newly established private school has to face various challenges since it has to compete with the existing public and private schools. Competing with other schools will not be easy since parents and students would prefer schools that have been around for a longer time with good reputations. This study aimed to formulate strategies for a low-cost newly established private school using SWOT analysis to understand the strengths, weaknesses, opportunities, and threats using the Internal Factors Evaluation (IFE) and External Factors Evaluation (EFE) Matrices. The internal-external matrix along with the SWOT matrix could determine the strategies to match the school's position internally and externally. Then, the quantitative strategic planning matrix (QSPM) evaluated the score of the strategies and the priority was on the strategies with the highest score. From the result of the study, it can be concluded that advertising the school using various social media and building the crucial facilities first can be used for market penetration and product development.

Keywords: Market penetration, Product development, QSPM, Strategy, SWOT.

1. INTRODUCTION

Education is an essential aspect of modern society in Indonesia. Although the Indonesian government provides free 9-year education through public schools for the citizens, many parents prefer to enroll their children in private schools. This might be caused by the perception that the quality of education in public schools is only at a minimum standard due to limited funding (Hendajany, 2016). As a result, private schools are inevitably on the rise in Indonesia. Since good quality education is in high demand in Indonesia, many foundations grab this opportunity to build new private schools. However, joining the competition can be challenging for low-cost newly established private schools. Most parents will opt for private schools that have been established for a longer time because they already have a good reputation for providing quality education. The difficulty of striving in the competition leaves the low-cost newly established private schools with very few students. With a little number of students enrolled in the program, the school will have difficulty covering the expenses to offer the best education. In addition, further advanced development will be difficult to be done (Heyneman & Stern, 2014).

Strategic management can be used by private schools in order to survive in the competition (Abdolshah et al., 2017). Internal and external factors should be taken into consideration in developing the strategies because the strategies will depend on the capabilities of the institutions and the limitations of the external environment (Ansoff et al., 2019). Other than that, in choosing a strategy, not all the designed strategies can be implemented at the same time. The school may have limitations in terms of time, cost, and resources that are available or constrained. Therefore, private schools need to know their strengths and weaknesses along with the opportunities and threats that may affect decision-making (Fahim et al., 2021). Then, the most effective strategies can be developed by considering those analyses.

The objective of this study is to identify the optimum strategy for a low-cost newly established private Islamic school in Indonesia to increase its competitiveness. The quantitative strategic planning matrix (QSPM) can be used to choose the best strategy for the decision-making process since it can effectively assess both internal and external changes (Leliga et al., 2019). After identifying the internal and external factors of the organization using SWOT (strengths, weaknesses, opportunities, threats) analysis, the significant factors and most favorable strategies will be selected. The QSPM is powerful because it examines the set of strategies sequentially or simultaneously, has no limit on the number of strategies to be evaluated, and integrates internal and external factors before the decision-making stage (David & David, 2015). This paper is structured as follows: section 2 describes the methods of collecting and processing data. Section 3 explains the findings of the study and discusses the alternative strategies. In this section, the findings in each step of data processing are explained and analyzed. Moreover, a discussion of each finding in the study is also presented. Finally, section 4 concludes the paper.

2. LITERATURE REVIEW

Developing suitable strategies for an organization requires a thorough analysis from the inside and outside of the organization. In this study, the development of the strategies is done by using internal factors evaluation matrix (IFEM), external factors evaluation matrix (EFEM), internal-external matrix (IEM), strength-weakness-opportunity-threat (SWOT) analysis, and quantitative strategic planning matrix (QSPM).

2.1. Internal Factors Evaluation Matrix

The internal factors evaluation matrix (IFEM) can be used to identify the internal factors of an organization that consists of strengths and weaknesses. Each internal factor has a weight that will subsequently be graded according to how important they are to the organization. The importance of each internal component is determined by the score. The assessment of the internal factors is based on the organization's capability in managing operations and resources (management), finance (financing its needs), production and operations (implementing production and operations plans), research and development (developing innovations for the growth of the organization), and management information system to communicate with employees throughout the overall systems (David & David, 2015).

2.2. External Factors Evaluation Matrix

The external factors evaluation matrix (EFEM) is similar to the IFEM, except for the factors being assessed. In this matrix, the external factors that consist of opportunities and threats are assessed. These factors should be identified by using microenvironment and macroenvironment analyses (Kotler & Armstrong, 2012). Microenvironment factors can have a positive or negative impact on the organization's ability in creating values such as the customers, competitors, and the public. While macroenvironment factors include the broader-social factors that can affect the microenvironment factors such as demography, economy, technology, politics, culture, and nature (Kotler & Armstrong, 2012).

2.3. Internal-External Matrix

This matrix is useful to position the organization based on the scores of its IFEM and EFEM. There are three main categories in the IEM, namely: 1) grow and build; 2) hold and maintain; and 3) harvest and divest. The suitable strategies for the grow and build category are intensive (market penetration, market development, and product development) and integration (backward, forward, and horizontal integrations) strategies. The intensive strategies are also suitable for the hold and maintain category. As for the harvest and divest category, the suitable strategies are either diversification or liquidation (Hasibuan & Amela, 2019).

2.4. SWOT Analysis

SWOT analysis is an effective tool for strategic planning (Benzaghta et al., 2021). The goal of a SWOT analysis is to maximize an organization's strengths and opportunities while minimizing its weaknesses and threats. The steps of constructing the SWOT matrix are: 1) compile a list of opportunities and external threats of the company as well as the company's internal strengths and weaknesses; 2) formulate strength-opportunity (SO) strategies to maximize internal strengths and gain external opportunities; 3) formulate weakness-opportunity (WO) strategies to use external opportunities to minimize internal weaknesses; 4) formulate strength-threat (ST) strategies to reduce the impact of external threats by using internal strengths; and 5) formulate weakness-threat (WT) strategies as defensive strategies to reduce weaknesses and external threats.

2.5. Quantitative Strategic Planning Matrix

After listing the possible strategies to be implemented, the next step is to decide which strategies should be prioritized using the QSPM. This method can choose the strategies optimally by quantifying the strategies and considering the internal and external and external factors (Leliga et al., 2019). In the first column of the matrix, all the external and internal factors are listed based on their categories (strength, weakness, opportunity, and threats). Weighted scores for each factor are inserted in the second column. The next columns of QSPM include a variety of strategies, which are WO, ST, WT and SO that are obtained from the SWOT matrix. Each column of strategies is divided into two sub-columns. Sub-columns contain the attractiveness score (AS) and the total attractiveness score (TAS). The ratings of AS are determined based on the attractiveness of a strategy relative to the factors obtained (Gupta et al., 2015). The rating of AS ranges from 1 to 4 with 1 (not interesting/not suitable for the corresponding factor), 2 (slightly interesting/slightly suitable for the corresponding factor), 3 (interesting enough/suitable enough for the corresponding factor), and 4 (very interesting/very suitable for the corresponding factor). TAS is obtained by multiplying AS with the weighted score of the internal and external factors.

3. METHODOLOGY

The data collection was done by conducting interviews and administering questionnaires to the head of the foundation, the principal of the school, and the head of administration considering their knowledge of the school's operation and development. In addition, a total of 152 parents in the neighborhood (52 of them were the parents of the students enrolled in this school) participated by filling out the questionnaire through Google Forms. The questionnaire includes the demographic data of the participants and five indicators, namely the effectiveness of advertisement, trends of advertising media, school selection criteria, perceived quality of the private school in the study, and perceived competitiveness of the school in the study.

The collected data were then used to formulate the strategy matrices. The qualitative data from the interviews were utilized to identify the internal and external factors that will affect strategic decision-making. Additionally, qualitative data was also used to build the SWOT analysis. Whereas the quantitative data from the questionnaire were used for the internal factors evaluation matrix (IFEM), external factors evaluation matrix (EFEM), internal-external matrix (IEM), and QSPM.

4. RESULTS AND DISCUSSION

The IFEM was used to quantify the strengths and weaknesses of the school in order to identify the significance level of a factor in strategic decision-making. The rating of the factors can be 4 (major strength), 3 (minor strength), 2 (minor weakness), or 1 (major weakness). The weight and rating of the factors were based on the questionnaire filled out by the top management of the school. The most important strength of this private school is that it offers complete and exclusive facilities with a weight of 0.0863. Whereas the most serious weakness is that the building and facilities are still in progress with a weight of 0.065. Table 1 shows the results of the IFEM. From the table, it can be seen that the top management rated all but one strength factor with 4.00, this means the top management considers most of their strengths as their major strength that will contribute to the success of the school. Similarly, the top management rated all weaknesses with 2.00, meaning that the top management considers all of their weaknesses as minor weaknesses and will not be difficult to overcome them in developing the school.

The EFEM was used to quantify the opportunities and threats of the school to see how significant these factors are in strategic decision-making and how well the school responds to the identified factors. The rating of the factor is 4 if the organization's response to that factor is excellent or very good, 3 if the organization's response is good or above average, 2 if the organization's response is ordinary or just average, and 1 if the organization's response is poor or below average. The most important opportunity of this school is high public interest with a weight of 0.086. At the same time, the rating for that factor is 3.67, which means that the response of the school management to this main opportunity is almost excellent or above average. It shows that the school is aware of its best opportunity and responds to it very well. Meanwhile, the largest weight for the threats is the fact that many prestigious Islamic schools are around the area with a weight of 0.083. However, the rating of this threat is 3.00, meaning that the school is aware of this threat and responds to it well by building exclusive facilities, offering competitive tuition fees, and hiring only the best teachers. The EFEM is shown in Table 2.

Table 1: Internal Factors Evaluation Matrix (IFEM)

Internal Factors	Weight	Rating	Weighted Score
Strengths			
Strong commitment of top management to establish the school as promised (S1)	0.084	4.00	0.336
Integration of the school with other businesses owned by the foundation (S2)	0.060	4.00	0.241
Complete and exclusive facilities offering (S3)	0.086	4.00	0.345
More affordable fee compared to competitors (S4)	0.071	3.67	0.261
Prioritization of religious programs while using international language as the communication means (S5)	0.083	4.00	0.333
Various extracurricular activities offering (S6)	0.059	4.00	0.234
High-quality teachers obtained from a tough selection process (S7)	0.083	4.00	0.333
High-quality learning tools and comfortable classes (S8)	0.077	4.00	0.307
Good management and healthy culture among employees (S9)	0.068	4.00	0.272
Weaknesses			
Management roles are not fully established (W1)	0.062	2.00	0.124
Usage of conventional advertising media (W2)	0.062	2.00	0.124
Building and facilities are still in progress (W3)	0.065	2.00	0.130
Extracurricular activities are not fully implemented (W4)	0.047	2.00	0.094
Not yet accredited (W5)	0.047	2.00	0.094
No external achievement from students and alumni (W6)	0.047	2.00	0.094
Total IFE Score			3.322

Table 2: External Factors Evaluation Matrix (EFEM)

External Factors	Weight	Rating	Weighted Score
Opportunities			
Strategic location (O1)	0.080	4.00	0.321
Good relationship with the local government (O2)	0.074	3.00	0.221
Majority of the citizens are Muslim (O3)	0.063	3.67	0.231
Good credit rating from the banks (O4)	0.074	3.00	0.221
High public interest in an Islamic school (O5)	0.086	3.67	0.313
Increasing usage of social media (O6)	0.076	3.00	0.228
Good customer satisfaction level (O7)	0.084	3.67	0.310
Threats			
Reduced income due to COVID-19 and natural disaster (T1)	0.080	2.67	0.214
Disturbed teaching and learning activities due to COVID-19 (T2)	0.068	3.00	0.205
Few numbers of student enrolled (T3)	0.081	1.33	0.108
Many prestigious Islamic schools around (T4)	0.083	3.00	0.250
Many branches of other Islamic schools (T5)	0.075	2.00	0.150
More advanced advertising media by other Islamic schools (T6)	0.076	2.00	0.152
Total EFE Score			2.924

The next step is to match the internal and external factors by using the IEM. Based on the IFE score, the school has a strong internal position and is able to take advantage of its strengths to overcome its weaknesses. On the other hand, the EFE score of the school shows that external factors have a medium impact on the school. In the IEM, the IFE and EFE scores are used as the x- and y-axis, as shown in Figure 1. The IE Matrix shows that Al Madinah Islamic School is positioned in region IV, which is categorized as Grow and Build zone (Hasibuan & Amela, 2019). Therefore, the suitable types of strategies include intensive strategies (market penetration, market development, and product development) and integration strategies (backward integration, forward integration, and horizontal integration).

Based on the result of IEM, market penetration and product development can be used as strategies to develop this low-cost private school. Market penetration strategy can be used to increase the school's marketing performance by improving the efforts for advertising and promoting the school to capture a larger market share. While product development strategy can be done by developing the facilities, learning programs, extracurricular, and other quality aspects of the school. Market development is not chosen because it is more related to developing or enlarging the market area. In fact, the school management decided to limit its market area around the neighborhood for the first three years. Therefore, enlarging the market to other cities is not reasonable for the current condition and market penetration is more critical to increase the reputation of the school in the current market. Besides that, the integration strategies are not chosen because it is simply

not possible, for now, to integrate the businesses with other external parties. At the same time, the school is under a foundation that owns other businesses. Therefore, integration with other external parties is not needed.

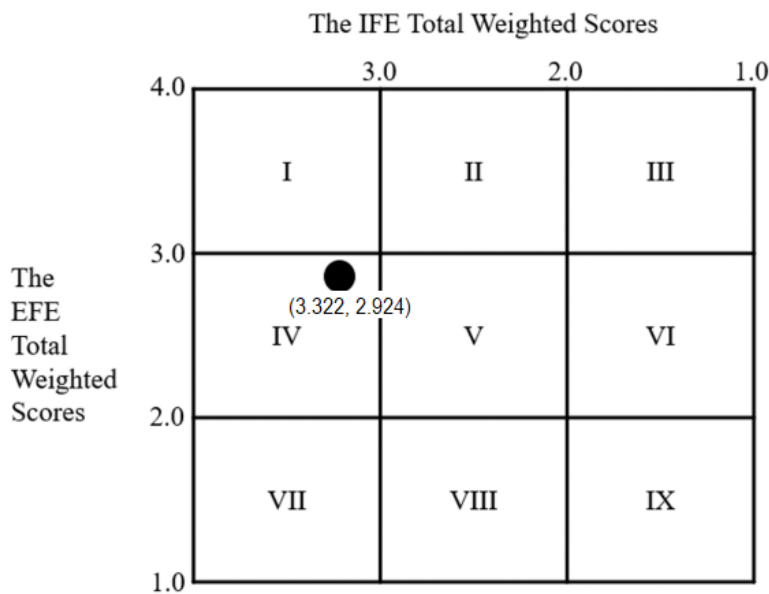


Figure 1: Internal-External Matrix (IEM)

For the SWOT analysis, the strategies were created as the result of the interviews with the top management. The strategies were designed based on the internal and external factors obtained from the discussion with the top management and the results of the questionnaire. As explained in the IEM, the strategies are divided into two sets, which are market penetration and product or school development. In the SWOT analysis shown in Table 3, strategies in the market penetration are symbolized as MP1-6 and for product development as PD1-7.

Table 3: SWOT Analysis

Symbol	Strength-Opportunity Strategies	Symbol	Weakness-Opportunity Strategy
MP1	Open several facilities (e.g., multipurpose hall, swimming pool, mini zoo) for public (S2, S3, O1, O5)	PD1	Develop software or application for school data management (W1, W3, O4)
MP2	Hold school open house for public (S2, S3, O1, O3, O5)	MP6	Advertise the school using various social media (W2, O5, O6)
MP3	Conduct community service program (S2, O3, O5)		
MP4	Provide shuttle car service for students (S2, O1, O5, O7)		
MP5	Produce products with the school brand (S1, S2, O4, O5)		
Symbol	Strength-Opportunity Strategies	Symbol	Weakness-Opportunity Strategy
PD2	Build the crucial facilities first (S1, S3, T3, T4)	PD5	Prepare and send the students to external competitions (W5, W6, T4, T3)
PD3	Provide international language training for students' preparation (S5, S7, T4)	PD6	Provide teachers and staff certification programs to prepare for accreditation (W5, T3, T4, T5)
PD4	Implement routine moral and religious programs for students and teachers (S1, S5, S7, T4)	PD7	Provide extra classes for students with low academic performance (W6, T4)

The market penetration strategies consist of the actions that can be taken to increase the marketing effort of the school through better advertisement and promotions. The strategies include open several facilities for the public, hold a school open house for the public, conduct a community service program, provide shuttle service for students, produce products with the school brand, and advertise the school using various social media. These strategies are expected to raise the awareness of the parents in the neighborhood of the existence of the school.

As for the product development strategies, the school can develop software or application for school data management, build the crucial facilities first, provide international language training as a students' preparation program, implement routine moral and religious programs for students and teachers, prepare and send the students to external competitions,

provide teachers and staff certification programs to prepare for accreditation, and provide extra classes for students with low academic performance. These strategies can be used to improve the quality of the school and the capability of the school to provide better services.

Table 4: QSPM Analysis

Priority	Strategies	Total TAS
Market Penetration Strategies		
1	Advertise the school using various social media	6.399
2	Hold school open house for the public	6.116
3	Open several facilities (e.g., multipurpose hall, swimming pool, mini zoo) for public	5.676
4	Provide shuttle car service for students	5.151
5	Produce products with the school brand	5.078
6	Conduct community service program	4.837
Product (School) Development Strategies		
1	Build the crucial facilities first	6.732
2	Prepare and send the students to external competitions	5.915
3	Provide teachers and staff certification programs to prepare for accreditation	5.883
4	Provide extra classes for students with low academic performance	5.627
5	Develop software or application for school data management	5.027
6	Implement routine moral and religious programs for students and teachers	4.951
7	Provide international language training for students' preparation	4.626

The QSPM analysis as presented in Table 4 shows that the highest TAS for market penetration strategies is on advertising the school using various social media. It means that to increase the marketing effort, the school can prioritize developing advertisements through social media first over other market penetration strategies. It can be done by creating Instagram, Facebook, and YouTube accounts because these social media are identified as the most used social media. After that, the school can start preparing the contents, posting the advertisement, and updating the students' activities actively and routinely. The update about the students' activities can be done after the government allows the school to be conducted face-to-face. This strategy can be done together with the current marketing strategies that were previously considered effective including promoting through other businesses of the foundation, spreading brochures, making banners, and developing a website.

For the product development strategy, the prioritized strategy is building the crucial facilities first with a TAS of 6.732. It means that it is essential for the school to finish the crucial facilities first before other facilities to both support the learning activities and increase competitiveness. The crucial facilities include the laboratories and sports or assembly field. It can be done by accelerating the process of building. If the process cannot be accelerated, the school can start preparing, planning, or choosing the type and vendor of the equipment so that they can quickly finish the facilities once the building is ready.

Due to the fact that the school is newly established, there was a lack of important data such as the financial data recorded in the system. Therefore, the suggested strategies from the analysis might not match the school's financial capability. Another limitation of this study is that this study only focused on determining effective strategies without considering their successful implementation. Future follow-up studies to see the effectiveness of the strategies will help the low-cost newly established private school in implementing effective strategies based on its financial capabilities.

5. CONCLUSION

This study evaluated the current internal and external factors of a low-cost newly established private school. The strengths, weaknesses, opportunities, and threats of the school were used to formulate strategies to increase its competitiveness. The internal factors evaluation matrix (IFEM) was created based on the views of the top management on their strengths and weaknesses. The external factors evaluation matrix (EFEM) was created based on the school's opportunities and threats. The internal-external matrix (IEM) was then built based on the IFEM and EFEM scores. Based on the results of the IEM, the school is categorized in the grow and build category and thus, intensive strategies, namely market penetration and product development were chosen. Then, a SWOT analysis was done to determine various possible strategies according to market penetration and product development strategies. Finally, the quantitative strategic planning matrix (QSPM) was used to analyze which strategies should be prioritized by the school. The TAS scores in QSPM showed that advertising the school using various social media is the best market penetration strategy. Whereas building the crucial facilities first is the best product development strategy. However, this study did not take into consideration the capabilities of the school to implement the strategies successfully. Future follow-up studies might help the school to make better strategies based on its financial and infrastructure capabilities.

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