BUSINESS DEVELOPMENT STRATEGY MODEL USING EFE, IFE AND IE ANALYSIS IN A HIGH-TECH COMPANY: AN EMPIRICAL STUDY

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ABSTRACT

This study has identified the key organizational and environmental factors affecting the strategy formulation process. Strategic planning activities using a matrix analysis were applied as a strategic tool to assess the internal and external factors affecting our company. Data was collected and produced 16 key external factors and 15 key internal factors which were included for analysis. These factors were categorized and compiled into SWOT factors and used to develop External Factor Evaluation (EFE) and Internal Factor Evaluation (IFE) matrices. An Internal-External (IE) matrix was then used to consolidate in one model the current position of the divisions in formulating the business strategy at a more comprehensive level. Results show that our company should focus on the intensive and aggressive strategies.

Keywords: Strategy formulation, Matrix analysis, External factors, Internal factors, Strategic Planning.

INTRODUCTION

The effect of the global growth of the information technology industry over recent decades is reflected in the United Arab Emirates; the UAE demonstrates a deep engagement in developing the field of information and technology, continuously undertaking measures to achieve this (Aburayya et al., 2020a&b; Al Khayyal et al., 2020; Alketbi et al., 2020; AlMehrzi et al., 2020; Bettayeb et al., 2020; Al-Hamad et al., 2021; Joghee et al., 2021; Leo et al., 2021; Nuseir et al., 2021). The aim of this paper is to study this major trend. We have chosen an IT firm (XYZ) which provides tailored solutions which aspire to be life changing, encompassing both growth and diversity. The firm is well known for providing IT solutions to the public and private sectors. It specializes in software development and helps organizations to create their own e-commerce business and reduce costs.

IT firms are high on the agenda of the UAE's economic development, which aims to boost the adoption of smarter productivity levels across all segments of the economy (Al-Jarrah et al., 2012; Al-Gasaymeh et al., 2015&2020; Alshehhi et al., 2020; Assad & Alshurideh, 2020a&b; Al Batayneh et al., 2021; Yousuf et al., 2021; Alshamsi et al., 2021). Based on data from the Dubai Chamber of Commerce, sales of IT services in the UAE reached a record AED 11.4 billion in 2018. On this scale, business actors strive to aggressively compete and contribute towards improving their efficiency in the market. With such rapid growth, a high-tech firm's strategy formulation is important, if not essential, for successful long-term development.

The aim of this paper is to investigate the organizational environment using strategic planning activities. In order to develop a suitable strategy, it is necessary to apply an appropriate analytical strategy tool to analyze the company's situation, guiding management in setting

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priorities and goals, and allocating resources to increase operational efficiency. Matrix analysis using Internal Factor Evaluation (IFE) and External Factor Evaluation (EFE) is a widely accepted strategic instrument to analyze organizational and environmental factors affecting a company and identify the most appropriate strategy (David, 2013). An Internal-External (IE) matrix is then used to analyze the current position of the divisions in formulating strategies for the future (David, 2013; Budiono, 2017). This model has been shown to improve the business strategy at a more comprehensive corporate level (David, 2013). It shows the parameters of internal strength and external business factors facing the company. The objective of this research is the planning and formulation of a business strategy for our chosen company, with the aim of guiding the firm in codifying the strategy using effective tools such as EFE, IFE and IE matrices.

BUSINESS DEVELOPMENT STRATEGY

A strategy is defined as a set of actions that managers should take in consideration in the formulation and implementation of cross-functional decisions designed to achieve the organizational goals (Pearce & Robinson, 2013). A strategic plan is an organizational process of determining the strategy and direction in making a decision using the company's resources (Wang et al., 2011). Many successful organizations understand the importance of identifying a strategic planning process that helps them analyze their situation to increase their operational efficiency, guide management in setting business priorities and goals, and allocate their resources, in order to gain and maintain a competitive advantage. This tool can be used to modify approaches for better decision making and assess progress, helping the business to move forward proactively (Brews & Purohit, 2007; Altamony et al., 2012; Alshraideh et al., 2017; Ahmad et al., 2021a&b; Alaali et al., 2021; Al-Dmour et al., 2021). With an aim to develop and maintain their strategic business development, companies should conduct internal and external assessment of the environment for a better understanding of the factors affecting their strategic decisions (Alamanda et al., 2019). Internal assessment is defined as an extensive evaluation of the internal strengths and weaknesses considered as factors controllable by the firm, and include the organizational culture and structure, operational efficiency and company resources. External assessment is an evaluation of the opportunities and potential threats that can arise in the external environment. These factors can include competitors, customers, social change, and new government rules and regulations (Osita et al., 2014).

By analyzing the company's external and internal factors, and on the basis of regularly collected data, three matrices (EFE, IFE and IE) will be developed in order to identify clearly the advantages of our company over competitors, and potential threats (Dincer, 2004, Haryani et al., 2018). According to Senthilkumar et al. (2014), the advantage of considering EFE and IFE matrices is to enable the company to determine the impact of the external and internal factors on the business, to better manage the business and to build an effective strategy. In order to access the importance of strategic planning activities, we have selected an IT firm (XYZ) which provides tailored life-changing solutions through growth and diversity. XYZ is well known for providing IT solutions to the public and private sectors, specializing in software development and helping organizations to create their own e-commerce business and reduce costs.

METHODOLOGY

In this research, we have used the case study approach applied in a particular context and using various data sources. We have used survey techniques designed in the form of questionnaires. Also, we have conducted in-depth interviews with some key informants in the field. The survey identified 16 key external and 15 key internal factors for analysis. These factors were categorized and compiled into SWOT factors and used to develop EFE and IFE matrices (Haryani et al., 2018). The definitions of the variables were used to determine the scale of the variables. Following David's (2013) model, the measurements of the variables were rated and ranked as follows:

- Coefficient weight is given to each factor to reflect its relative importance. The purpose is to assign the highest weight to the factor that has most impact on the organization, from a score of 0.0 (not important) to a value of 1.0 (very important). The sum of these coefficients should be equal to 1.
- The rating is determined after completing a questionnaire taking into consideration the following:
- For IFE matrix: 1= major weakness; 2= minor weakness 3= minor strength; 4 = major strength.
- For EFE Matrix: the rating reflects the response of the company to the external factors, where 1= low response; 2=average response; 3= good response and 4= high response.
- The final value of each factor is obtained by multiplying the values of the weights and ratings
- The total weighted score is obtained after the calculation of the total final score for each factor.

Primary data was obtained from respondents' responses to the items in the questionnaire. The Likert scale was used to determine the strengths or weaknesses of the company with regard to internal and external factors by determining the result for each question. We have used secondary data collected from articles indexed in journals, scientific and academic papers covering the theory and practice of strategic management; internal and external factor evaluations and IE matrix were also considered in the analysis.

RESULTS AND DISCUSSION

External Factors Evaluation (EFE) Matrix

This matrix identifies the key external factors organized into opportunities and threats and the company's reaction to them. The company can choose to respond to these factors by using either a defensive or an offensive strategy. It is advised to take advantage of the opportunities from the external environment and reduce to their lowest possible level the negative impact from the potential threats (David, 2013). The results of calculating the EFE matrix are shown in Table 1.

Table 1 EFE MATRIX					
	Key External Factors	Weight	Rating	Weighted Score	
	Opportunities				
1.	Partnerships with key industry players	0.09	4	0.36	
2.	UAE vision to support the 'greener image'	0.08	4	0.32	
3.	Bigger need for IT solutions	0.08	4	0.32	
4.	Introduction of new government technological strategies	0.07	3	0.21	
5.	New products development in the IT field	0.06	4	0.24	
6.	Adaptability to future needs	0.06	3	0.18	
7.	Demand for high tech has been growing with the corona virus lockdown	0.06	4	0.24	
8.	Fast moving environment to innovation	0.06	4	0.24	
9.	International expansion	0.04	3	0.12	
	Threats				

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1. Security concerns (data security)	0.07	4	0.28
2. Dependance on specific customers	0.06	3	0.18
3. Increased research and development costs	0.06	4	0.24
4. New competitors are likely to enter the market	0.06	3	0.18
5. Regulatory environment changes	0.06	4	0.24
6. Competitors effort in terms of marketing	0.05	2	0.1
7. Competitor dynamics in the market	0.04	3	0.12
Total	1.00		3.57

The highest achievable score is 4.0, indicating that the company is responding strongly to the external factors. The EFE calculation score for XYZ is 3.57, which means the company response to the opportunities and threats is very good. In other words, our company is taking advantages of the current opportunities and minimizing the effect of the threats. Our company recognizes the great opportunity of partnering with key industry players; business threats such as the potential entry of new competitors will always occur, but this can be taken as a motivation for the company to aggressively compete and create innovations according to the market needs.

Internal Factors Evaluation (IFE) Matrix

The IFE matrix is an analytical strategic formulation tool helping to evaluate the organization's internal environment and categorize factors into strengths and weaknesses. The internal audit identified 15 organizational strengths and weaknesses. The proposed matrix was built on the information found from the surveys and interviews, with the results shown in Table 2.

Table 2 IFE MATRIX						
Key Internal Factors	Weight	Rating	Weighted Score			
Strengths						
1. Innovative and tailored solutions	0.09	4	0.36			
2. Strong leadership position and branded name for the last 20 years	0.09	4	0.36			
3. Massive customer base	0.08	4	0.32			
4. Strong employee morale	0.08	4	0.32			
5. Launching functional products- unique products	0.08	4	0.32			
6. Efficiency in cost optimization	0.07	4	0.28			
7. International standards	0.07	4	0.28			
8. Effective handling of marketing demand	0.07	4	0.28			
9. Solid values and company culture	0.05	3	0.15			
Weaknesse	es					
1. Complex intellectual problems issues	0.07	2	0.14			
2. Maintenance costs	0.06	2	0.12			
3. Organizational transformation	0.06	2	0.12			
4. High research and development cost	0.05	2	0.1			
5. Difficulty of integration with some local software	0.04	2	0.08			
 Provisioning of systems and applications is slow sometimes 	0.04	1	0.04			
Total	1		3.27			

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The IFE matrix helps in understanding the company's internal position. Values can range from a lowest score 1.0 to the highest score 4.0, with an average of 2.5. A value scoring below 2.5 shows a weak internal position, whereas a result above 2.5 represents a strong internal position. According to this matrix, calculating the total weighted score gives an average result of 3.27, evidence of a very good internal position. From the analysis of its strengths, the company is effectively implementing most of the strong factors. This is indicated from its emphasis on innovation and commitment to both customers and employees. This is supported by major strengths in their international standards, their efficiency in cost optimization and their effective handling of marketing demand. On the other hand, most of the weaknesses are minor except for W(6) which shows slow provisioning of systems and applications.

Internal-External (IE) Matrix

The IE matrix is a comprehensive model applied to identify and analyze the different divisions of an organization with regard to the revenue and percentage profit based on the internal and external factor evaluations total scores. This matrix has nine cells that show the position of the organization (David, 2013), classifying IFE total weighted score as weak, average or strong on one axis, and EFE value as low, medium or high on the vertical axis. It is important to note that the revenue and percentage profit can be arranged by the size of the divisional marker within the matrix (David, 2013). According to the scores from the IFE and EFE matrices, 3.27 and 3.57, the IE matrix is as shown in Figure 1.



FIGURE 1 IE MATRIX

Based on figure 1, our company is placed in the first division of cell 1 showing that it is in a growth and build strategy, meaning intensive and aggressive tactical strategies. In this position, the company is recommended to follow market penetration, market development, or product development strategies. We also suggest, from an operational perspective, deploying backward integration and forward integration or horizontal integration. Market penetration can be developed with the aim of expanding the market share for the tailored services provided in the current market as part of the marketing efforts strategy. For market development, the company can introduce their current IT solutions into new geographic areas in order to expand their activities. Product development can also be an appropriate strategy to increase sales by improving or modifying their present services.

CONCLUSION

The strategic planning activities of the company allow determining the strategy and direction using their resources. They help to analyze the situation in increasing operational efficiency, guiding the management in setting the company's priorities and goals and allocating resources to achieve and maintain a competitive advantage (Al Kurdi et al., 2021; AlSuwaidi et al., 2021; Kabrilyants et al., 2021; Obeidat et al., 2021; Odeh et al., 2021). Strategic planning also allows top management to modify approaches for better decision making and evaluating progress, helping the company to move forward proactively. In order to determine the organizational goals efficiently we conducted several strategical analyses: EFE, IFE and IE matrices. The EFE matrix allowed us to assess the company's response towards its opportunities and threats, which proved to be effective as explained by the total weighted score of 3.57. Nevertheless, we noticed a minor inefficiency in responding to some threats, such as competitors' efforts in terms of marketing and the potential entry of new competitors. These responses did not affect the total weighted score since they are not considered as important factors. The IFE matrix helps in understanding the company's internal situation, as it summarizes the information collected from the analysis of the internal environment and uses it in further steps. After conducting the external and internal analyses, we reached the matching stage, which considers both internal and external factors. After designing our IE matrix, we found that the business development should focus on intensive and aggressive strategies, such as market penetration, market development, and product development strategies, by optimizing the company's strengths, taking benefits from the opportunities and overcoming the threats.

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