

Compilation and prioritizing the strategies of Shahrekord Department of Education by using SWOT and QSPM method

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ABSTRACT

Organizations should keep themselves safe against the challenges, then guiding planning process plays an important role in success of each organization. The aim of the present study is to compile the strategy of Department of Education of Shahrekord, Iran. Today one of the keys for success of each organization is its analysis power. One of the most important tools for organizational analysis is SWOT which is considered as good tool and technique for analyzing internal and external factors. An efficient approach for strategic planning is to create SWOT and QSPM matrices. QSPM is used as a tool for comparing and prioritizing internal and external key factors, reducing the possibility of ignoring or inappropriately weighting these factors. In the present paper, after studying the internal and external factors by using QSPM matrix, strategic planning of Department of Education of Shahrekord will be done.

KEYWORDS: Strategic management, Strategy, SWOT matrix, QSPM matrix.

1. INTRODUCTION

Today, strategic planning(SP) has been considered by the respected experts and planners as one of the most efficient managerial approaches. In the current complex and varying world, SP is a guideline for helping the organizations in countering rapid environmental changes. In fact, comprehensive planning is an effective measure against ever changing and competing world; because it considers internal and external limitations and possibilities of the organization and makes its predictions based on it [1]. SP in the organizations mostly includes some steps including: measuring the present environment, defining the organization mission, determining the perspective of the organization, recognizing the strengths, weakness, opportunities and threats of the organization and periodical planning for switching the organization or institute from the current position into desirable situation [2]. SWOT analysis is one of the main tools of SP for adapting internal and external strengths and weakness with external opportunities and threats. This analysis presents a systematic analysis method for identifying these factors and choosing the strategy creating the best adaptation among them [3].

Given the importance of planning mainly SP in Department of Education of the country and also necessity of providing a strategy in Departments of Education in the provinces as the constituents of Ministry of Education and lack of adequate research about this are and interest of the investigators in studying this subject, external and internal environment of Department of Education of Shahrekord was studied by SWOT analysis method as the main ingredient of SP. Then the aim of the present study is to recognize the existing situation of Department of Education of Shahrekord through external and internal analysis and presenting a general guideline.

2.Theoretical principles and experimental history

2.1.Theoretical principles

2.1.1. Strategic Management

Strategic management(SM) is a series of decisions and managerial measures which determine the long-time performance of a firm. SM can be defined as strategic thinking, planning, organization, implementation, coordination and control of the activities which are done for adjusting the relations of the organization with the external environment and determining the direction of the organization in order to attain at the perspective [4].

2.1.2. Strategy

Strategy is defined as completing and coordinating a series of designed obligations and activities for exploiting a special advantage and profitability as a competitive advantage [5].

2.1.3. Compiling the strategy

Strategy compilation means determining the strategic variables and then modeling the intended subject in the matrix form or decision-making model which results in making a decision or guideline based on determination of main strategy identity of the organization. The formulation of the strategy helps determine how the aims are attained and the interaction between the organization and environment by choosing the most appropriate strategy.

2.1.4. SWOT matrix

SWOT analysis first was introduced by George Albert Smith and Ronald Chirstansin in 1950. While attaining at increasing success, this analysis was known as useful managerial tool in that time. But the most significant success was attained when Jack Volk used General Steel for studying GE strategies and increasing the productivity of his organization in 1980 (Carolina et al 2006) [6]. SWOT is acronym of Strength, Weakness, Opportunities, and Threats.

2.1.5. QSPM matrix

For determining the preference of the strategies, there exists an analytical method with which relational attraction of the strategies is specified. Quantitative Strategic Planning Matrix (QSPM) is one of the tools and methods allowing the strategists to objectively compare and evaluate the strategies with regarding to internal and external environmental factors of the respected field.

2.2. Literature

Studied the compilation of competitive strategies of the universities by using SWOT matrix of Chaloos Islamic Azad University and concluded that six evaluated sections including educational-investigational, student, administrative and monetary, cultural and reconstruction sections were evaluated as mean and four evaluated indices including social, economical, political and cultural indices were evaluated as mean. Integrating two mentioned conditions in SWOT matrix, it can be concluded that for shifting the university into the desirable condition, combination of conservative, defence and competitive guidelines and strategies should be used [7].

The current environmental condition of many firms is increasingly changing. For encountering such change, many views have been presented about the best method for compilation of the guideline. Guiding management with providential perspective considers the effective compilation of the guideline as vital and guiding factor of activities and aims of the organization [8].

SWOT matrix also has been used in many developed or developing countries in various areas. For example in China and England, it is employed for developing the business and in Scot and Bahrain for analyzing the behavior of the small firms.

3. Questions and Aims

3.1. Main Question

What are the proper strategies for Shahrekord Department of Education for compiling the strategy by using SWOT and QSPM matrices?

3.1.3. Secondary Questions

What are the strengths of Shahrekord Department of Education?

What are the weaknesses of Shahrekord Department of Education?

What are the environmental opportunities of Shahrekord Department of Education?

What are the environmental weaknesses of Shahrekord Department of Education?

3.2. Aims

3.1.2. Main Aim

Compilation of SP in Shahrekord Department of Education

3.2.2. Secondary Aims

Identify the strengths and weaknesses of Shahrekord Department of Education in compiling SP

Identify the environmental opportunities and threats of Shahrekord Department of Education in compiling SP

4. Conceptual Model

1. Start step: in this step, statement of organization mission is specified.
2. Input step in this step, main internal and external required information and factors which are required for compiling the strategy are specified. This step includes matrices for evaluation of internal and external factors, respectively.
3. Adaptation and comparison step: in this step, internal(strengths and weaknesses) and external(threats and opportunities) main factors are adapted by using SWOT and IE matrices so that the strategies are determined which are directed to organization mission and internal and external factors.
4. Decision-making step: in this step, various alternatives of the strategy are identified by using QSPM and evaluated in adaptation and comparison step, then their relational attraction will be determined

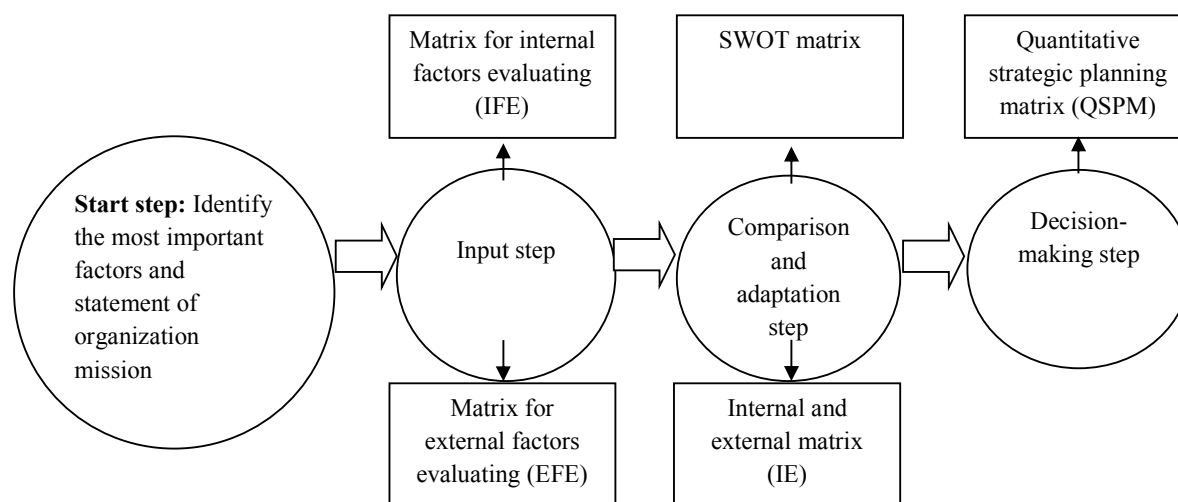


Diagram. 1. Comprehensive framework for strategy compilation

5. Materials and methods

The present study is in descriptive method in term of data collection and is case study. SWOT and QSPM are among the tools for prioritizing the results. For gathering the data, in addition to Delphi method (interview with managers and experts), library studies have been used.

6. Analysis

6.1. Start step: determine the mission statement

Mission statement is a document which discriminates an organization from other similar organizations. Mission of the organization shows the spectrum of the activity in term of product and market. Mission statement represents long-time perspectives of the organization for delivering some services [9].

6.1.1. Statement of Department of Education

For the statement of Department of Education, first the opinions of managers, experts and their related recommendations were collected through interviewing them. Then the mission statement was specified.

The philosophy of Shahrekord Department of Education is to respect the beneficiaries of this organization mainly managers, teachers, parents and satisfying them. Also increasing the number of educated people in the society and decreasing the number of illiterate people in the society, developing and generalizing the public education and providing the educational facilities for all people are among this philosophy.

6.2. Input step

For identifying the internal and external factors, some worksheets were provided where the managers and experts were asked to specify the internal and external factors. After collecting the worksheets and clustering them, internal and external factors were classified and the most important ones were considered as input.

6.2.1. Matrix for evaluating external factors (EFE)

This matrix is a tool allowing the strategists to evaluate the environmental, economical, social, political, cultural, legal and technological factors of the marketplace and competition in the intended time and is applicable for the governmental and private organizations in the firm and SBU level. Paradigm governing on this matrix is mostly prescriptive and applied in the various approaches as a tool for collecting the information of environment and industry environment. Matrix for evaluating the external factors is shown in Table 1.

Table. 1. External factor evaluation matrix (EFE).

External factors	Significance coefficient	grade	Final score
Opportunities of Department of Education	—	—	—
O1: presence of the required beds and grounds for using non-governmental participations and people-founded organizations	0.063	3	0.189
O2: presence of the respected experts of Department of Education in Education System	0.086	4	0.344
O3: exploiting the beneficiaries for building the schools.	0.065	4	0.26
O4: increasing the tendency of the families toward having active role in training the children	0.088	3	0.264
O5: developing the modern technologies of information and communications	0.01	4	.0.4
O6: considering the role of Department of Education in	0.072	4	0.288

establishing the perspective and comprehensive scientific map of the country			
O7: becoming the general culture of the society desirable in schedule	0.093	3	0.279
Threats of Shahrekord Department of Education			
T1: inadequate the budget and specialized credits to Department of Education system	0.109	2	0.218
T2: inconsistency between the requirements of a job and employee's facilities	0.061	2	0.122
T3: presence of cultural attack	0.111	1	0.111
T4: natural corrosion of schools buildings and educational facilities	0.063	1	0.063
T5: inconsistency between infrastructures of IT and relationships with the region needs	0.084	2	0.168
Score sum	1	2.706

6.2.2. Internal Factors Evaluation matrix (IFE)

This matrix is a tool for studying the internal factors. In fact, it evaluates the strengths and weaknesses of the organizational units. For providing an IFE, subjective judgments and views of the experts is relied upon. This tool has much application in collecting the inter-organizational information in SP in the governmental and private organizations. Dominant paradigm on this data collection tool is prescriptive, although integrative paradigm is also applicable. IFE is shown in Table 2.

Table2. Matrix for internal factors evaluating matrix (IFE)

Internal factors	Significance coefficient	grade	Final score
Strengths of Department of Education			
S1: presence of Educators University, Technical and Professional college and High Education Centers depended on Department of Education	0.051	3	0.153
S2: relational familiarity of the human resource with information and communication technology	0.040	3	0.12
S3: tendency and desire toward education and updating the education level and skills among the educators	0.047	4	0.188
S4: presence of regulations for classifying the teacher's jobs.	0.042	4	0.168
S5: movement toward organizing human resource consistent with professional and specialized competencies	0.045	4	0.18
S6: tendency toward distraction in decision-making about educational system	0.032	3	0.096
S7: presence of national document for everyone	0.036	3	0.108
S8: presence of health evaluation plan and preparation of novice students for entering the elementary school	0.025	3	0.075
S9: attention at the students with special needs in Education system	0.042	4	0.168
S10: systematizing the period of service educations	0.052	3	0.156
S11: using the industrial methods and modern methods in constructing the schools	0.039	3	0.117
Internal factors	Significance coefficient	grade	Final score
Weaknesses of Department of Education			
W1: high number of Tuition teachers	0.051	1	0.051
W2: lack and non-considering the design and equipping the schools proportional to individual needs and educational standards	0.052	2	0.104
W3: weakness and failure of HRM of Department of Education(attraction,training,promotion,)	0.057	2	0.114
W4: inconsistency between some aims and content of Education system with individual and national needs	0.045	2	0.09
W5: low penetration coefficient of modern technologies in all aspect of Department of Education	0.041	1	0.041
W6: inefficiency in distribution and optimum utilization of financial and credit resources	0.047	1	0.047
W7: inconsistency among schedules and individual and regional needs	0.045	1	0.045
W8: failure in covering those who are illiterate	0.052	1	0.052
W9: fatigue and lack of adequate safety of some educational areas and equipment	0.044	2	0.088
W10: preference of textbook as the only learning reference	0.054	1	0.054
W11: inconsistency between managers and parent and teachers institute	0.052	2	0.104
Score sum	1	2.31

6.3. Comprison and Adaptation

6.3.1. SWOT matrix

Given the identified internal and external factors in input step, selected strategies for each quadratic areas of SWOT matrix are presented in Table 3.

Table. 3. SWOT matrix of Shahrekord Department of Education

Internal factors	Strengths	Weaknesses
External factors		
Opportunities O1: presence of required beds and grounds for using the participations of non-governmental department and people-founded-organizations. O2: presence of experts of education in Education system O3: exploiting the beneficiaries for building the schools O4: increasing the tendency of the families toward playing the active role in training the children O5: developing the modern information and communication technologies O6: considering the role of Education in establishing the perspective and comprehensive scientific map of the country. O7: making the general culture of the society desirable for innovation in schedule	Oppressive strategies (OS) 1- encourage the personnel into following-up 2- considering competency-oriented and job fitness of the individuals 3- participation of the people in the sessions and group decision making for removing the problems.	Preservative strategies (WO) 1- increasing the budget and financial credits in order to develop the educational equipments, employ the expert personnel ,reconstruct the schools, buildings and technology equipments. 2- improve the relationships between managers, personnel and teachers and the parents in order to solve the problems 3- promote and reconstruct the safety equipments in the schools 4- increase period of service in order to update and increase the knowledge of the teachers and principals.
Threats T1: inadequate budget and specialized credits of Department of Education T2: inconsistency between the requirements for gaining the job and the facilities of the employees T3: presence of cultural attack T4: natural fatigue of the buildings of the schools and educational equipments T5: inconsistency between the infrastructure of IT and relationship with the region needs	Competitive strategies (ST) 1- allocate the budget for solving the existing problems 2- hold the scientific seminars in order to present the useful suggestions for improving the knowledge of the personnel	Defensive strategy (WT) 1- reduce the number of Tuition teachers and subsequently reduce the costs 2- employ the elites in order to design the educational standards and proper employment of the people in their correct specialization

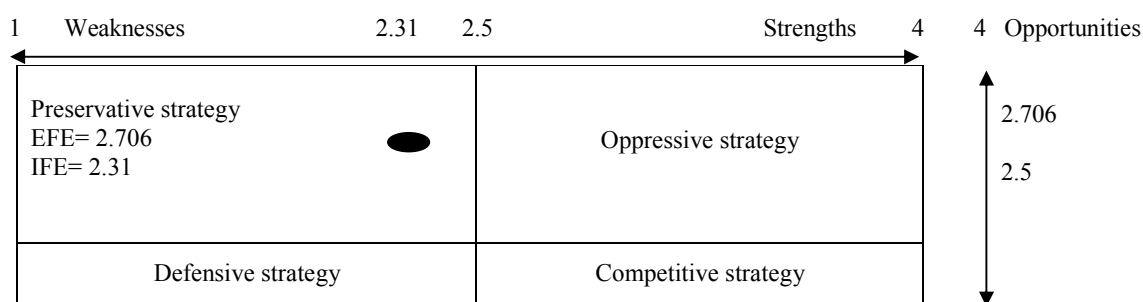
6.3.2. Internal and external matrix (IE)

IE matrix is applicable in formulating the strategy in firm level and various parts of a collection or produced products of an organization. In this matrix, the condition and situation of an organization in operative environment of an organization is studied in a schematic diagram as shown in diagram 2.

IE is based on two critical dimensions:

1-Sum weighted scores resulted from evaluating IE on axial x

2- Sum weighted scores on axial y

**Diagram 2.** Internal and external matrix (IE)

1 Threats

Threats

When the strategy is defensive, it means that the organization is in best condition and can use optimum opportunities in the best way, remove its weaknesses and prevent the external threats.

When evaluation vector coordinates of the organization are placed in the preservative region, it means that the organization should preserve its key strengths and competencies and doesn't expose itself to big risks. Conservative strategies often include the required preparations for promoting the productivity, etc.

In defensive method, a company should prevent the environmental threats. Defensive strategies include reduce or remove some activities, sale or submit some harmful department and homogenous variety.

And finally in competitive method, organization should implement the competitive strategies including horizontal consistency, penetration into the market, development of the market, development of the product and participation formation.

6.4. Decision making

6.4.1. Quantitative Strategic Planning Matrix (QSPM)

One of the main techniques for evaluating the strategic alternatives and specifying the relational attraction of the strategies used in decision making step is QSPM. It specifies the most appropriate strategic alternatives and in fact prioritizes them. For providing the quantitative strategic matrix, results of previous steps of comprehensive framework are used.

Since our case study is conservative one, its quantitative strategic planning matrix is obtained. QSPM is shown in table.4. Quadruple strategies are as the following:

Strategy 1: increase the financial budget and credits for developing the educational equipments, employing the expert personnel, reconstructing the schools and buildings

S 2: improve the relationship between principals, personnel, teachers and parents of the students in order to solve the problems

S3:promote and reconstruct the safety equipments in the schools

S4: increase period of service for updating and enhancing the knowledge of teachers and principals

Table. 4. Quantitative Strategic Planning Matrix (QSPM)

Strategy	Significance coefficient	Strategy 1		Strategy 2		Strategy 3		Strategy 4	
		Attraction coefficient	score	Attraction coefficient	score	Attraction coefficient	score	Attraction coefficient	score
External factors									
Opportunities									
O1: presence of the required beds and grounds for using non-governmental participations and people-founded organizations	0.063	3	0.189	4	0.252	1	0.063	1	0.063
O2: presence of the respected experts of Department of Education in Education System	0.086	2	0.172	1	0.086	1	0.086	2	0.172
O3: exploiting the beneficiaries for building the schools.	0.065	3	0.195	2	0.13	3	0.195	1	0.065
O4: increasing the tendency of the families toward having active role in training the children	0.088	1	0.088	4	0.352	2	0.176	1	0.088
O5: developing the modern technologies of information and communications	0.1	3	0.3	1	0.1	1	0.1	1	0.1
O6: considering the role of Department of Education in establishing the perspective and comprehensive scientific map of the country	0.072	1	0.072	1	0.072	1	0.072	2	0.144
O7: becoming the general culture of the society desirable in schedule	0.093	1	0.093	1	0.093	1	0.093	2	0.186
Threats									
T1: inadequate the budget and specialized credits to Department of Education system	0.109	4	0.436	2	0.218	3	0.327	2	0.218
T2: inconsistency between the requirements of a job and employee's facilities	0.061	2	0.122	1	0.061	1	0.061	2	0.122
T3: presence of cultural attack	0.111	1	0.111	1	0.111	1	0.111	1	0.111
T4: natural corrosion of schools buildings and educational facilities	0.063	4	0.252	1	0.063	3	0.189	1	0.063
T5: inconsistency between infrastructures of IT and relationships with the region needs	0.084	3	0.252	1	0.084	1	0.084	1	0.084
Score sum	1	—	2.282	—	1.622	—	1.557	—	1.416
Strategy	Significance coefficient	Strategy 1		Strategy 2		Strategy 3		Strategy 4	
Internal factors		Attraction coefficient	score	Attraction coefficient	score	Attraction coefficient	score	Attraction coefficient	score
Strengths									
S1: presence of Educators University, Technical and Professional college and High Education Centers depended on Department of Education	0.051	1	0.051	1	0.051	1	0.051	4	0.204

S2: relational familiarity of the human resource with information and communication technology	0.040	1	0.0400	1	0.040	1	0.040	2	0.08
S3: tendency and desire toward education and updating the education level and skills among the educators	0.047	1	0.047	1	0.047	1	0.047	1	0.047
S4: presence of regulations for classifying the teacher's jobs.	0.042	1	0.042	1	0.042	1	0.042	4	0.168
S5: movement toward organizing human resource consistent with professional and specialized competencies	0.045	2	0.09	1	0.045	1	0.045	2	0.09
S6: tendency toward distraction in decision-making about educational system	0.032	1	0.032	3	0.096	1	0.032	1	0.032
S7: presence of national document for everyone	0.036	1	0.036	2	0.072	2	0.072	1	0.036
S8: presence of health evaluation plan and preparation of novice students for entering the elementary school	0.025	1	0.025	1	0.025	1	0.025	1	0.025
S9: attention at the students with special needs in Education system	0.042	1	0.042	1	0.042	1	0.042	1	0.042
S10: systematizing the period of service educations	0.052	2	0.104	1	0.052	1	0.052	4	0.208
S11: using the industrial methods and modern methods in constructing the schools	0.039	3	0.117	1	0.039	4	0.156	1	0.039
Weaknesses									
W1: high number of Tuition teachers	0.051	2	0.102	1	0.051	1	0.051	1	0.051
W2: lack and non-considering the design and equipping the schools proportional to individual needs and educational standards	0.052	3	0.156	1	0.052	4	0.208	1	0.051
W3: weakness and failure of HRM of Department of Education(attraction, training, promotion)	0.057	2	0.114	2	0.144	1	0.057	3	0.171
W4: inconsistency between some aims and content of Education system with individual and national needs	0.045	1	0.045	1	0.045	1	0.045	1	0.045
W5: low penetration coefficient of modern technologies in all aspect of Department of Education	0.041	2	0.082	1	0.041	1	0.041	1	0.041
W6: inefficiency in distribution and optimum utilization of financial and credit resources	0.047	4	0.188	1	0.047	2	0.094	1	0.047
W7: inconsistency among schedules and individual and regional needs	0.045	1	0.045	1	0.045	1	0.045	3	0.135
W8: failure in covering those who are illiterate	0.052	1	0.052	2	0.104	1	0.052	1	0.052
W9: fatigue and lack of adequate safety of some educational areas and equipment	0.044	3	0.132	1	0.044	4	0.176	1	0.044
W10: preference of textbook as the only learning reference	0.054	1	0.054	1	0.054	1	0.054	4	.216
W11: inconsistency between managers and parent and teachers institute	0.052	1	0.052	4	0.208	1	0.052	1	0.052
Score sum	1	—	1.648	—	1.356	—	1.479	—	1.876

7. DISCUSSION AND CONCLUSION

SP is an attempt to making the fundamental decisions and the activities directing and forming the identity of an organization, its performance and the reason of its operation. Summing QSPM, table 5 is presented:

In conclusion, with regarding to the obtained score, preference order is as the following:

1. Increase the financial budget and credits for developing the educational equipments, employing the expert personnel, reconstructing the schools, buildings and technology equipments.

2. Increase period of service for updating and enhancing the knowledge of teachers and principals
3. Promote and reconstruct the safety equipments in the schools
4. Improve the relationship between principals, personnel, teachers and parents of the students in order to solve the problems.

Table. 5. Strategy rating

Strategies	IFE score	EFE score	Mean
Strategy 1	1.0648	2.283	1.965
Strategy 2	1.356	1.622	1.489
Strategy 3	1.479	1.557	1.518
Strategy 4	1.876	1.416	1.646

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