

Developing Strategies for Operational Budgeting of Regional Water Joint Stock Companies in Iran: (A Case Study of Yazd Regional Water Corporation)

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ABSTRACT

Budget is the foremost deed the governments annually develop and implement in form of a financial program to achieve their objectives and realize their policies. The executive agencies including companies and organizations rely on budget to control their activities and avoid any deviation from their specified programs. The present study deals with the issue of how to develop the strategies for operation budgeting in Yazd Regional Water Corporation. This study has been extracted from a descriptive-survey research with practical objectives. In developing the strategies for the operational budgeting system of the mentioned company and identifying and examining the strategies appropriate to the company, SWOT pattern has been used to analyze the strong points and weak points (the internal factors), the opportunities and threats (the external factors). Identification of the internal and external factors influential on the operational budgeting and precluding duplication and waste of resources aims at enhancing efficiency and effectiveness of the budgeting. With regard to the scores of the external factors (2.32) and the internal factors (2.75) and their analyses, we can locate the company in ST competitive strategy position matching IE matrix. In the other words, the appropriate strategy for developing the operational budgeting of the above-mentioned company is adjusting the financial structure to total cost accounting system which obtained the top score (6/12) among the strategies of this region of the table and is considered to be the premier strategy according to the quantitative strategy planning matrix (QSPM).

KEYWORDS: Strong points, weak points, opportunities, threats, SWOT matrix

1. INTRODUCTION

The government usually performs all of its financial activities in the frame of budget law. Therefore, the budget plays a pivotal role in national economic development (Farajvand, 2004: 16). Nowadays, operational budgeting as a basis of enhancing efficiency and productivity of the executive agencies has been widely welcomed (Almasi, 2009: 133). This type of budgeting includes the annual programming along with the annual budget which indicates the relation between the amounts of the allocated funds to each program and the results of performing it. Operational budgeting adds the factors pertaining to thrift and saving and efficiency to the traditional aspects of budgeting. In operational budgeting the operations are categorized in way to express the objectives transparently and the relation between the input and output to be taken into the account in its costing method (Aghayi, 2005: 273).

However, experience shows that setting a budget which can integrate the operational programs, strategic program and the financial program of a company or an institute was of great importance for the educational and service companies. This issue is still significant and its importance will endure. However, most of the companies and institutes do not benefit from the strategic programming as a basis and fundament of setting a suitable operational program. Because of the disuse of the results of the strategic programming in developing a suitable operational program, the operational program is very topical/ localized and the measures the company has to take during its operational period in order to be more prosperous in prospective periods are not taken into consideration (Mehraban, 2009: 6). Therefore, it is essential to determine the role of the internal and external factors at the time of setting an operational budget and develop an operational budgeting accordingly.

According to the Article 138 of the Law of Iran's Fourth Program of Economic, Social and Cultural Development, the Management and Programing Organization is bound to take some measures with cooperation of the other relevant authorities for budgeting system reformation using the available methods operationally and

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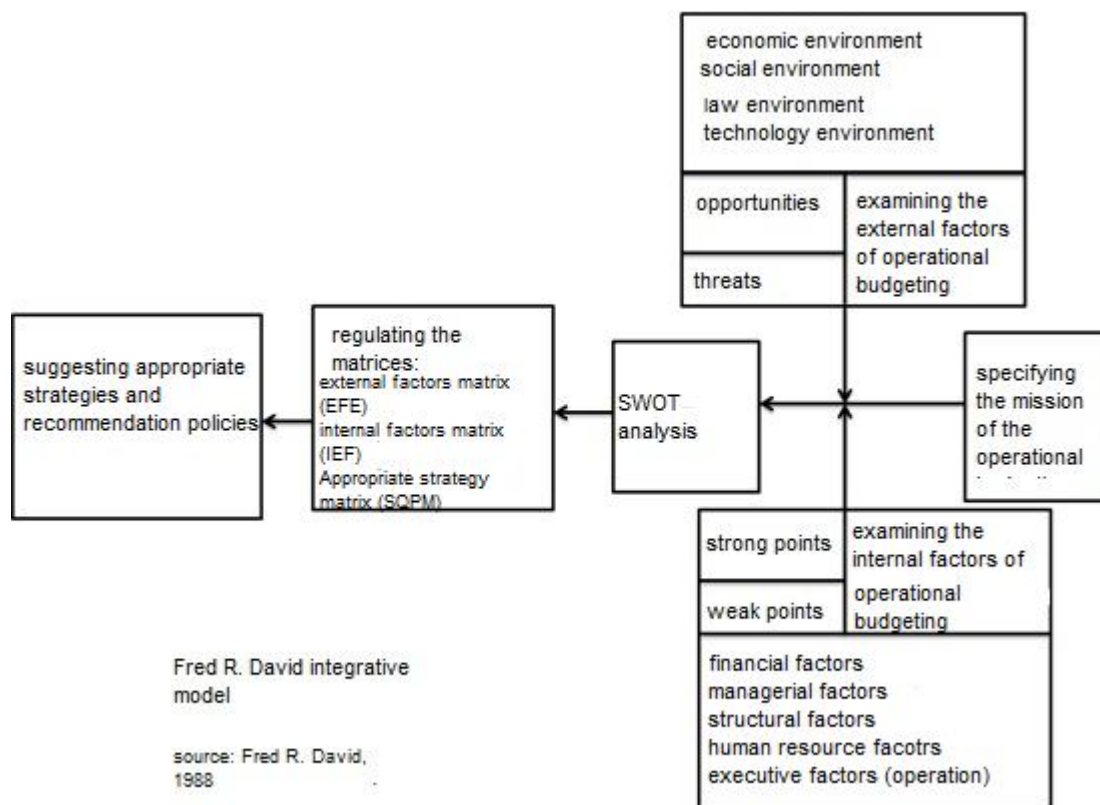
purposefully. However, to have the required efficiency, this type of budgeting should rely on a coherent and strategic program which includes long term, medium term and short term objectives

Since the current budgeting method used in Yazd Regional Water Joint Stock Company is void of the required efficiency and suffers from a variety of shortcomings, the company intends to reform the method and develop an operational budgeting. To achieve this goal, we have to identify the appropriate strategy for developing the operational budgeting in Yazd Regional Water Joint Stock Company.

Research primary objectives includes developing the operational budgeting strategy in Yazd Regional Water Joint Stock Company according the Strategic Management Model offered by Fred R. David

The peripheral objectives include developing an appropriate strategy for operational budgeting for the company's operational units (factors including financial, managerial, executive, human resources and the organizational structure).

In the research operational model the mission of the operational budgeting section of Yazd Regional Water Joint Stock Company is specified according to the diagram 1.1 below. Afterwards, the internal and external factors pertinent to operational budgeting section are discussed and the SWOT analysis is performed using the results gained at this phase. In addition, the internal and external factors are compared setting their matrices. Finally, the quantitative strategy planning matrix is formed to decide on the best strategy. This phase is performed separately for each internal factor concerning the operational budgeting to identify their appropriate strategy.



Research questions

Primary question

What is the appropriate strategy for developing an operational budgeting in Yazd Regional Water Joint Stock Company?

Secondary Question

What is the appropriate strategy for an operational budgeting for the company's operational units (factors including financial, managerial, executive, human resources and organizational structures)?

METHODOLOGY OF RESEARCH

This research is a practical study in terms of its objectives and a descriptive-survey study in terms of its methodology. To carry out the research, Fred .R David's Strategic Management Model has been used.

The data collection has been done using a questionnaire and conducting interviews. To develop the questionnaire, numerous interviews have been conducted with the certified experts and practitioners about the issues concerning budget. Finally, 26 questions have been posed concerning the research. To extract the data and determine the weak points, strong points, opportunities and the threats of the company., SWOT matrix in a form of David's integrative model has been used Finally, the general strategic position of the organization and the other sections and their strategies has been specified.

Internal strong and weak points

Internal strong and weak points are among the controllable activities of the organization which are performed either immaculately or poorly (Parsayian & Arabi 2009: 36).

External opportunities and threats

External opportunities and threats refer to the economic, social, legal, technological and competitive events and trends which can lead to organization's stupendous profit or enormous loss. Opportunities and threats are considerably out of the organization's control (Parsayian & Arabi 2009: 35).

SWOT matrix

This matrix is one of the main tools used by managers to compare the data and suggest these four types of strategies: SO, WO, St and WT (Parsayian & Arabi 2009: 35).

Method of Analysis

In external factors evaluation matrix and also in internal factors evaluation matrix, the opportunities, threats, strong points and weak points related to the operational budgeting in Yazd Regional Water Joint Stock Company are examined. The coefficient and score columns are applied by the organization's senior managers (the strategists). In ranks column the foremost opportunities and strong points are determined by the rank 3 and 4 (the best opportunities and strong points with the score 4) and in the threats and shortcomings column the worst and the most serious threats and shortcomings are specified with the rank 1 and 2 (the worst and the most serious threats and shortcomings with the score 1). Then, the coefficient column is multiplied by the rank column and the score of each factor is calculated. In total row, the total score of the external factors are specified.

If the total score of the company in external factors evaluation matrix exceed 2/5, it means that the opportunities will dominate the threats. In the case that it is less than 2/5, it indicates that the threats dominate the opportunities. If the total score of the company in external factors evaluation matrix exceed 2/5, it means that the strong points will dominate the weak points. In the case that it is less than 2/5, the dominating of the weak points over the strong points is conveyed.

Tables 1.2 External Factors Evaluation Matrix (EFE)

mean of the number of the cases)total score	Mean of Score	Rank	Coefficient	External factors
1.62	401 %	3.75	107 %	Opportunities
70 %	118 %	1.17	098 %	Threats
2.32				Total

The total score of external factors evaluation matrix in table 1.2 is less than 2/5, thus it indicates that Yazd Regional Water Joint Stock Company has employed a very inappropriate strategy for the external factors and it should change its procedure regarding this issue.

Tables 1.3 Internal Factors Evaluation Matrix (IFE)

mean of the number of the cases)total score	Mean of Score	Coefficient	Coefficient	Internal factors
2.01	536 %	3.1	65 %	Internal strong points
0.74	395 %	1.30	57 %	Internal weak points
2.75				Total

The total score in table 1.3 exceeds 2/5 which signifies that the organization enjoys strong points in terms of the internal factors. Therefore, Yazd Regional Water Joint Stock Company is higher than the average in terms of the internal factors.

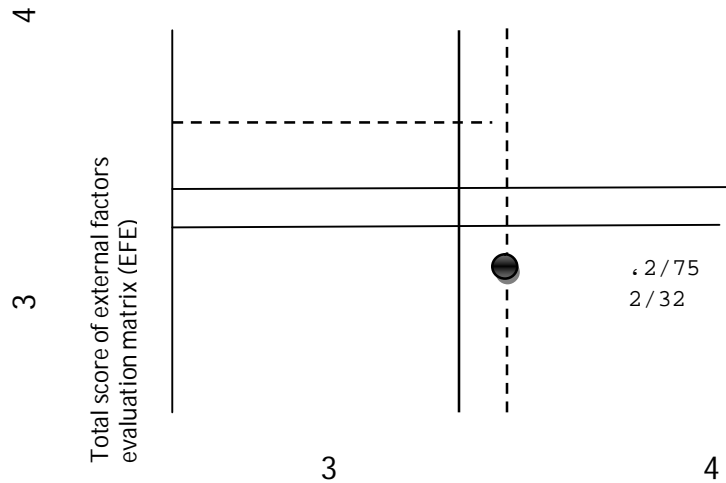
Comparison phase

At this phase, SWOT matrix is used to categorize the weak points and the strong points in the one hand and categorize the opportunities and threat on the other hand. Then after finding their meeting point, the possible strategies are determined in four categories including aggressive strategy (SO), conservative strategy (WO), competitive strategy (ST) and defensive strategy (WT).

Internal and external matrices

To analyze the internal and the external factors simultaneously, a tool called internal and external matrices is used. In this four-cell matrix indicated in diagram 1.4, the scores of the internal and external matrices are located vertically and horizontally to determine at which points they meet. The meeting point shows the position of the operational budgeting section in Yazd Regional Water Joint Stock Company in order to adopt the appropriate strategy.

Diagram 1.4 The company's internal and external matrix (IE)



With regard to the fact that, the company position according to the diagram 1.4, the appropriate strategies

1. Attracting the investment form the private sector
2. Staffs' specialized training for using suitable operational budgeting software
3. Adjusting the financial structure to total cost accounting system

Decision making phase

For the decision making phase quantitative strategic planning matrix (QSPM) is used which is indicated in the table below. To develop this matrix the analyses conducted on the phase of comparison of internal and external factors of the company's operational budgeting is used in order to specify the applicable strategy objectively.

In table 1.5 the decision making phase, the important opportunities, threats, strong points and weak points of the company's operational budgeting section are indicated in the left column. Afterwards, the senior managers give each strategy an attractiveness score separately. By multiplying this score by the coefficient the total attractiveness score for each strategy is calculated. In total row, the total attractiveness score for each strategy is calculated. The highest score indicates the premier strategy.

Table 1.5 Priorities of the strategies resulted from Quantitative strategic planning Matrix (QSPM) table

Priority	Strategies	score
1	First strategy: adjusting the financial structure to total cost accounting system.	6/12
2	Second strategy: staffs' specialized training for using suitable operational budgeting software.	5/34
3	Third strategy: attracting the investment form the private sector	4/35

Financial factors evaluation matrix

The table indicates the financial factors evaluation matrix related to the company's operational budgeting section. The same procedure as the internal factors evaluation matrix discussed in the previous table is conducted here in order to determine whether the company's operational budgeting section is weak or strong in terms of the financial factors. If the calculated score exceed 2/5, the company's operational budgeting section is strong and it is weak in the case that the score is less than 2/5. This procedure is carried out for each managerial, executive, human and structural factors of the operational budgeting section in the organization.

Table 1.6 Financial factors evaluation matrix

Score	Rank	Coefficient	Financial factors
1	4	0/25	Optimal use of the assets and cash flow
1/2	4	0/30	Ability to attract financial resources
0/6	3	0/20	Financial structure flexibility
0/25	1	0/25	deficit in the budget and the organization's allocated funds
3/05		1	Total

Since the total score in the table 1.6 exceeds 2/5, it is conveyed that the organization is strong in terms of the financial factors and higher than the average. In the other words, the appropriate strategy for the financial factors is the competitive strategy (ST).

Table 1.7 managerial factors evaluation matrix

Score	Rank	Coefficient	managerial factors
1/12	4	0/28	Conducting appropriate programming
0/66	3	0/22	appropriate and timely decisions
0/36	2	0/18	lack of providing adequate human resources
0/28	2	0/14	Poor performance evaluation
0/36	2	0/18	Failure to motivate the staffs
2/78		1	Total

Since the total score in the table 1.7 exceeds 2/5, it is conveyed that the organization is strong in terms of the managerial factors and higher than the average. In the other words, the appropriate strategy for the managerial factors is the competitive strategy (ST).

Table 1.8 Structural factors evaluation matrix

Score	Rank	Coefficient	Structural factors
1/84	4	0/46	Management information system (MIS) in the organization
0/56	1	0/54	Lack of appropriate structure for cost estimation
2/4		1	Total

Since the total score of the structural factors in the table 1.8 is less than 2/5, the matrix indicates that the company has adopted an inappropriate strategy for the structural factors and it should change its procedures in this regard. In the other words, the appropriate strategy for the structural factors is the defensive strategy (WT).

Table 1.9 Human factors evaluation matrix

Score	Rank	Coefficient	Human factors
2/4	4	0/6	The capacity to perceive the specialized training by the staffs
1/2	3	0/4	Proper connection between the job conditions and the employee
3/6		1	Total

Since the total score in the table 1.9 exceeds 2/5, it is conveyed that the organization is strong in terms of the human factors and higher than the average. In the other words, the appropriate strategy for the human factors is the competitive strategy (ST).

Table 1.10 executive factors evaluation matrix

Score	Rank	Coefficient	executive factors
1/4	4	0/35	Presence of a financial system to maintain financial and budgetary records and documents
0/3	1	0/3	Failure to estimate budget accurately using appropriate operational budgeting methods
0/35	1	0/35	Lack of a total price system for goods and services
2/05		1	Total

Since the total score of the executive factors in the table 1.10 is less than 2/5, the matrix indicates that the company has adopted an inappropriate strategy for the executive factors and its procedures should be changed in this regard. In the other words, the appropriate strategy for the executive factors is the defensive strategy (WT).

Internal and external matrices

To analyze the internal and the external factors simultaneously, a tool called internal and external matrices is used. In this four-cell matrix indicated in diagram 1.11, the scores of the internal and external matrices are located vertically and horizontally to determine at which points they meet. The meeting point shows the position of each factor of the operational budgeting section in Yazd Regional Water Joint Stock Company in order to adopt the appropriate strategy. In this matrix the point A indicates the financial factors, the point B shows the managerial factors, and the point C shows the structural factors. The points D and E specify the human and executive factors respectively.

Table 1.12 Internal Factors Strategy regarding the Region 3 (ST) of SWOT matrix

number	Internal factors	Suggested strategies
1	Financial factors	Attracting investments of private sector
2	Managerial factors	Specialized training of the personnel for using suitable operational budgeting software
3	Human factors	Adjusting the financial structure to total cost accounting system

Table 1.12 shows the suggested strategies related to the internal (financial, managerial and human) factors considering the regions 3 (ST) of SWOT matrix.

Table 1.13 the strategies related to the external factors regarding the region 4 (WT) of SWOT matrix

number	Internal factors	Suggested strategies
1	Structural factors	Organizational restructuring and concentrating on the operational budgeting standards
2	Executive factors	Developing total cost accounting system for goods and services

CONCLUSION

Considering the conducted analyses and the company's position in the competitive strategy region of the four-cell matrix (IE), the appropriate strategy for developing an operational budgeting for Yazd Regional Water Company is adjusting the financial structures to total cost accounting system with the highest score 6/12 and was specified as the premier strategy according to quantitative strategic planning matrix (QSPM).

Operational budgeting with a focus on the results of the plans leads to improving the efficiency, effectiveness and accountability. Operational budgeting system relying on comprehensive quality management, decreasing costs and increasing the consumers' satisfaction enhances the organization's performance and results in effective utilization of the organizational resources. Operational budgeting is an invaluable tool for developing a fundamental understanding of combining the used resources and the generated performance. Consequently, the plan authorities will have a chance to examine the internal reciprocal effect between the resources and the expected results. This experience favorably enhances the general management of the plans. Success in operational budgeting depends on the compatibility between the operational objectives and the managerial activities. The strong ties between the organization operational objectives, the allocated funds and the budget enhance the management performance in the organization and increase the budgetary data validity and the financial performance related to the operational plans. To achieve this, the section pertaining to the budget should perform accurately and calculatedly. Therefore, the strategies related to the external factors of operational budgeting as well as the organization's general strategy should be taken into the account.

SUGGESTIONS

- The results and outputs expected by the organization should be explicitly defined.
- The proper performance standards should be accurately defined.
- The current administrative rules and procedures should be amended in line with the needs of the operational budgeting.

- Costing system should produce accurate information concerning decision making process.
- Costing system should allocate the costs clearly to the activities and avoid the risk of transferring the funds.
- The personnel should be satisfactorily trained and informed about total cost accounting system.
- Classifying the operations, choosing the measurement unit, estimating the cost of a work unit, predicting the operation size, calculating operation of the company's budgeting section should be conducted accurately and carefully.

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