

ORIGINAL ARTICLES

The Application of Strategic Position & Action Evaluation (SPACE) Matrix in the Organizational Goals and Strategies Development (Yazd Regional Electricity Company as Case Study)

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ABSTRACT

It is impossible to consider a strategy development model as a perfect and whole model, but it is possible to implement different models based on the organization's situation, facilities, and wants. The matrix method is one of the more applicable instruments in the strategies determination that some of the strategy development models have been formed based on it. The Strategic Position & Action Evaluation (SPACE) is one these matrixes. In order to review the research literature and primary studies, library method has been used and then field study was used to perfect the library findings. The questionnaire of the model that has been developed in four scales was modified based on the conditions of studied organization. Also the agreement method was used to perfect the questionnaire. In order to develop the strategies, the strategic position was studied and analyzed by senior managers and directors and then the strategies were developed in different sessions. Also the organizational goals were defined in different sessions and then were recognized by the organizational experts in line with this strategic project's goals promotion.

Key words: Strategic Management, Strategic Position & Action Evaluation (SPACE).

Introduction

The strategic position & action evaluation (SPACE) will be examined and analyzed in this article. There are several methods for defining and developing organizational strategies that some of them were formed based on the matrixes such as the strength, weakness, opportunity, and threats (SWOT) matrix or Boston Consulting Group (BCG) method. The Strategic Position & Action Evaluation (SPACE) matrix is one of these methods that can be considered as a supportive factor in strategies development trend because of its speed in finding the organization's strategic position. In this study, the SPACE matrix will be described after literature review and necessity of the study. In the next section, this model implementation in a public project-based service organization will be described. Also this model's strengths and weaknesses will be identified in action and some empirical suggestions will be indicated for improving its application. The organizational goals and strategies have been recognized after determining the organization's strategic position and then the strategic projects have been defined for acquiring these goals. It is necessary to remembered that there are few studies that have studied such issues.

Literature review:

As indicated in the previous section, there are several methods for defining and developing organizational strategies that some of them were formed based on the matrixes such as the strength, weakness, opportunity, and threats (SWOT) matrix or Boston Consulting Group (BCG) method or growth/market share method, Quantitative Strategic Planning Matrix, Strategic Position & Action Evaluation (SPACE), and General Electric Model (Ahmadi, Alireza, 2012). Many studies have been done about these models and their implementation in different organizations and also such instruments have been used in Iran such as the study of Pegah Milk Company that has been done based on the SWOT Matrix and using SPACE for defining its strategies (Siavashan, Farangis, 2012). Also SPACE matrix has been used for determining the companies' strategic position (Hajkarimi, Abassali, 2009). The SPACE matrix has been used in another study in a champ management (Ommani, Ahmad Reza, 2001). In another study, strategic position of Mahd Beton Company has

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been determined through this matrix (Shojaei, Mohammad Reza, 2012). Therefore, it is resulted that the SPACE matrix has been used in the previous studies, but different implementation mechanisms and methods have been used in the present study. The results of this study can be helpful in suggesting the mechanisms that can improve accuracy of other studies that use SPACE matrix for their purposes.

Necessity of the study:

As indicated in the previous sections, it is impossible to consider a strategy development model as a perfect and whole model, but it is possible to implement different models based on the organization's situation, facilities, and wants. Although several studies have been done in terms of the SPACE matrix, but there are different defections in this model when using it as helpful model beside other models or disregarding the respondents' different perceptions of the SPACE questionnaire. These defections necessitate more comprehensive studies with new and modified methods.

On the other hand, it is should be remembered that while some organizations have strategic plans, but it is possible to develop more accurate strategic solutions to these organizations' planners through defining the organization's strategic position and adapting the present strategies with defined position.

Strategic Position & Action Evaluation (SPACE) matrix is a method for developing strategic projects and goals after defining the organizational strategies that is regarded by authors and researchers rarely. So, the present study concentrates on this issue especially.

Research methodology:

In order to review the research literature and primary studies, library method has been used and then field study was used to perfect the findings of library method. The questionnaire of the model that has been developed in four scales was modified based on the studied organization's conditions. Also the agreement method was used to perfect the questionnaire. In order to develop the strategies, the strategic position were studied and analyzed by senior managers and directors and then the strategies were developed in different sessions. Also the organizational goals were defined in different sessions and then were recognized by organizational experts in line with this strategic project's goals promotion.

SPACE model:

The SPACE model is a developed version of the BCG matrix. This model includes four internal and external dimensions. Financial strength and competitive advantage are the main internal dimensions and environmental stability and industry strength are the main external dimensions in this model.

- *Financial strength:*

This criterion measures the organization's financial potency and includes several sub-criteria capital volume, pay-back period, investment, financial ratios, asset potency, and the trade risk-taking level.

- *Competitive advantage:*

This criterion refers to the organizational competitive advantage and includes several sub-criteria such as market share, product and production quality, product life cycle, customer loyalty, technical knowledge, competitive capacity, and control on the product resources and distributors.

- *Environmental stability:*

This criterion refers to stability of the environment that the organization operates in and includes several sub-criteria such as technological changes, market changes trend, inflation rate, competitors' products price, market entrance obstacles, competitive pressures, and price elasticity.

- *Industry strength:*

This refers to the industry that the organization operates in and its characteristics and includes several sub-criteria such as growth and profitability potency, financial stability, technological awareness, the used capital and resources, market entrance ease, and the used capacities.

In order to use the SPACE matrix for determining the organization's strategic position, the following six steps should be passed.

- The sub-criteria of every main criterion (including financial strength, competitive advantage, environmental stability, and industry strength) are listed.
- The sub-criteria of financial strength and competitive advantage are scaled from +1 (worst) to +6 (best) and the sub-criteria of the environmental stability and industry strength are scaled from -1 (best) to -6 (worst).
- These sub-criteria values are summed and then are divided to the sub-criteria frequency so that the main criteria mean is resulted.
- Every main criterion's mean is specified on the diagram axis.
- Mean of the financial strength, competitive advantage, environmental stability, and industry strength are summed together.
- Zero point and the resulted point are connected to each other. The resulted line indicates type of the organization's strategy that can be assertive, competitive, defensive, and conservative strategies (Fred, David, 1985).

There are four strategic positions (including financial strength, competitive advantage, environmental stability, and industry strength) that can be suggested for the organization based on its position (Rowe, A.J., 1982).

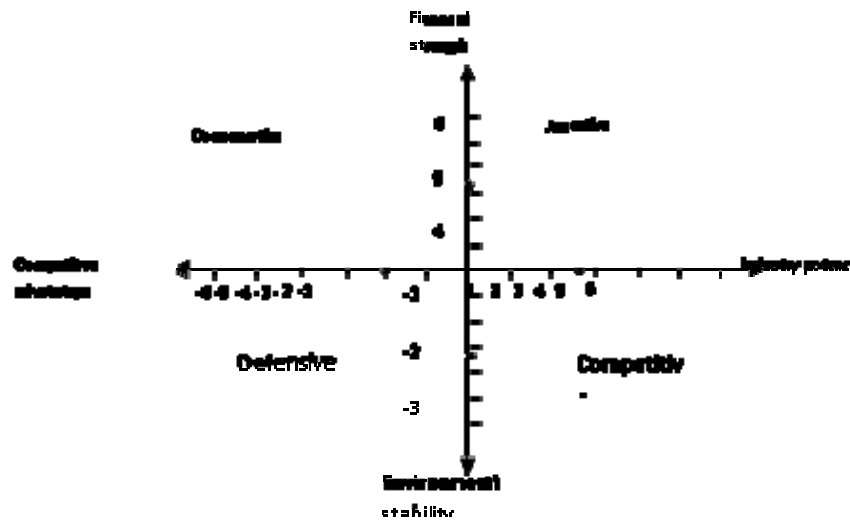


Fig. 1: The four axis and positions of SPACE matrix.

Describing the model's strategic positions:

Assertive position:

If the organization's position is assertive, this indicates that the organization is in the best conditions and can use the present opportunities, eliminate its weaknesses, and also prevent from external threats through its strengths. When all of these dimensions are positive, it is possible to be in this position of SPACE matrix. One of the dangers of this strategic position is the managers and policy-makers' indolence in such positions. The organization in this position can adapt several strategies based on its conditions. Some of these strategies include market penetration, product development, up-to-down vertical integration, down-to-up vertical integration, horizontal integration, diversity, horizontal integration, vertical integration, or combinative strategies.

- *Conservative position:*

Being in the conservative position indicates that the organization has good financial strength, but it cannot achieve considerable profit from its business. If the organization that is in this position, this indicates that the organization must maintain its strengths and key capabilities and avoid from big risks. Almost, the conservative strategies include the necessary schemes for promoting its productivity, penetrating in market, and increasing its production capacity.

There are three positions for organizations in the conservative position. The first position is that the organization may have not favorable competitive advantage and industry potency. The second position is that competitive advantage is favorable and industry potency is not favorable in the conservative position. Finally, the third position is that the organization has favorable competitive advantage, but its industry has not favorable potency and strength.

If the industry stability is unfavorable and the organization has considerable competitive advantage, then the organization's profitability is risky conditions and the organization may be deleterious. These conditions can decrease the organization's financial potency for diversity in other products.

This organization must control its costs and maintain its products market and customers so that acquire more time for finding diversified and attractive opportunities. Also it is necessary to the organization that rationalizes its production capacity so that adapt it with regard to the future market expectations.

In such cases, the organization may be able to improve its position through a specified strategy for reinforcing its competitive advantage. It is possible to achieve comprehensive outcomes and opportunities through new trade and customer-based strategies. Also the organization may recognize the cases that have advantage or can develop the new advantages for it (Fred, David, 1985; Simister, Paul, 2011).

- *Competitive position:*

Being in such position indicate that the organization has powerful advantages, but its financial potency is not sufficient to compensate its environmental instability. The rapid strategy in this position is improving financial potency and maintaining competitive position (such as increasing capital, improving profitability, using investments of the external investors). In the competitive position, the organization must implement the competitive strategies such as down-to-up vertical integration, up-to-down vertical integration, horizontal integration, market penetration, market development, product development, and coalition.

The competitive position strategy is a situation that the industry stability and competitive advantage have favorable conditions, but financial strength and environmental stability are favorable. Achieving financial strength for compensating environmental instability is a key strategy in such conditions. Therefore, the organization can follow the assertive strategies. The goal of the competitive strategies is to increase profitability and parity power levels so that adapt an assertive strategy (Fred, David, 1985; Simister, Paul, 2011; Radder, Laetitia, 1998).

- *Defensive position:*

This strategy indicates that not only the industry potency and competitive advantage, but also financial strength and environmental stability are not favorable.

In the defensive position, the organization must eliminate its weaknesses and also prevent from environmental threats. The defensive strategies include several items such as decreasing or eliminating some activities, selling the deleterious departments of the organization, diversification, and elimination. This region of the SPACE matrix indicates that all of the internal dimensions are weak. The organization in such condition is broking, unless its external environment becomes more favorable. The organization need to retreat, but this is the final strategy and it is possible to concentrate on the limited resources in the primary steps.

If the competitors assail the market, the organization must follow to assail and resist for maintaining its rights. Also the organization must know the potential threats and their location and follow its activities through analyzing its competitors and perceiving its goals, strengths, and weakness.

If there is potential weakness in the organization's product or service, it is necessary to eliminate its weakness. Also the organization needs equal or more power than its competitors in terms of competition conditions.

Concentration on the defensive strategies in trade not only is to maintain market share, but also is to maintain whole business. The main strategies in such conditions are decrease in cost, improvement in the product, decrease in the capacity, and achieve more assets through selling unnecessary facilities and equipment.

Defensive strategy may leads to sell or eliminate many departments of the organization.

Case study:

Introducing the studied organization and its experiences in terms of strategic plan implementation:

Regional Yazd Electricity Company is established to produce, transit, distribute, and sell the secure electricity for all of the electricity users. This company also includes different assistances such as planning, development, exploitation, financial, human resources, and logistic assistances.

The first study on the strategic planning is started in 1993. In the 1995, the first version of strategic plan software that has been developed in the PIP method was used in this company. This plan is developed for 5 years, but some problems and difficulties prevent from its growth.

The companies managers decided to develop the strategic plan in another manner that has possibility of rapid changes. The strategic plan development was done in the BSM method in seven steps after several advices and counsels.

In 2012, the organization decides to apply and implement the SPACE model for defining its strategic position.

Implementation steps:

In order to implement the model, different methods and steps have been used to eliminate some weaknesses of the model. Additionally, this model has been used to determine the organizational goals and define the strategic projects.

- *Establishing a group for developing the organization's strategic plan and learning the model for them:*

A group that has been considered for recognizing the strategic position through the mentioned method includes direct members and senior managers of the organization that have concentration on the internal and external environment issues. With regard to the SPACE dimensions, concentration on the internal and external environment issues is considered as one of the main principles of the questionnaire indication.

- *Examining the criteria from conceptual perspective, screening them, and determining the related criteria:*

Because some of the mentioned sub-criteria in the SPACE matrix are not usable in the electricity company, so it is necessary to modify some of them. Some of these sub-criteria have been modified by workgroup members in the different sessions. Finally, seven sub-criteria in terms of the industry strength, 10 sub-criteria in terms of the environmental stability, seven sub-criteria in terms of the competitive advantage, and eight sub-criteria in terms of the financial strength have been finalized.

The sub-criteria that have been used in the questionnaire were indicated in the following section.

Industry strength:

This criterion includes the growth strength (financial strength for attracting the scientific and expert manpower and technology change), resources application (better use of the present resources, maximum capacity, and minimum wastage for doing the better activities and achieving the better results), profitability strength, market entrance ease, extension strength (physical extension of the market), and better use of capacity. Financial stability (is a condition that the financial system is able to check the shocks without destroying the saving allocation process for investment and also payment system function).

Environmental stability:

This criterion includes inflation rate (change in the prices criteria, increase in the general prices level in comparison to the fixed price), technological changes (rapid change in the sciences and techniques that change the surrounding environment or the organization), the present risk in the industry, changes in demand, competitive pressure (new competitors and change in the competitors' product), obstacles of the market entrance, and the ecological problems.

Competitive advantage:

Market share (importing the actual share of the internal and external market), product life cycle (how to perfect the products' demand during four steps including introduction, growth, maturation, and decline), product quality, customer loyalty, technical knowledge, better use of the capacity, control on the suppliers and distributors.

Financial strength: asset potency (asset resources, current properties, and ability of the organization in converting the current properties to assets), capital in operation (the differences between current assets and liabilities), asset currency (asset in the trade and business), property operation (frequency of the product sell in the present year), pay-back period, ratio of sell price to the product price, ratio of the liability to the pure property).

- *Developing the questionnaire:*

The modified version of the questionnaire was developed after applying the changes for Regional Yazd Electricity Company. In order to this, it is necessary not only to consider the model's framework, but also any defects did not remain in the questionnaire.

- *Describing concept of the every criterions for strategic plan development group:*

The developed questionnaire was offered to the development group for perfecting it, but the results indicate significant differences that it was specified after modification that every group members perceive the criterions differently. This necessitates more sessions for modifying the criterions and sub-criterions.

- *Convening on the agreement and scoring:*

Because of different perceptions of the respondents from the questionnaire of the criterions, it was necessary to result a common perception. Therefore, the criterions definitions and their perception were discussed in several sessions that consist of all members. The questions were offered in this session and then an agreement has been resulted on a scoring alterative through discussion. Also it is should be remembered that the mean method has been used in the disagreement conditions.

- *Analyzing the scores and determining the organization's strategic position:*

Every criterions score was resulted as following section after collecting the scores:

Financial stability: 3.125

Industry strength: 2.85

Competitive advantage: 2

Environmental stability: 3.2

These results indicate that the organization's strategic position is competitive position that is indicated in the fig 2.

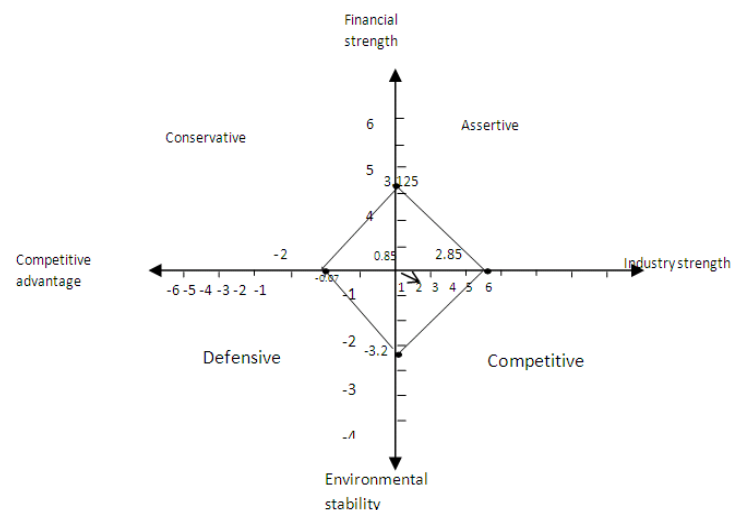


Fig. 2: Strategic position of the studied organization.

- *Defining the organizational strategic strategies, goals, and projects in the determined position:*

The time competitive condition is applicable in this organization that industry stability and competitive advantage are favorable in the SPACE matrix, but financial strength and environmental stability are unfavorable in this organization. Therefore, Regional Yazd Electricity Company must increase its environmental stability and also improve its financial conditions. There are several methods that can be used for this purpose such as horizontal integration, vertical integration, market penetration, product development, and market development (David, R. Fred, 2010; Dyson, R.G., 1990).

With regard to the strategic position of Regional Yazd Electricity Company, it is necessary that this company do corrective activities in terms of financial strength and environmental stability. Based on the scores in terms of financial strength, the results indicate that there are several sub-criterions that achieve low scores such as asset potency, capital in operation, profit per share, and ratio of the sell price to the overall price. In order to reinforce these sub-criterions, some strategies have been developed that include increase in the resources and income, budget attraction management, project management, increase in the activities of electricity market, outsourcing management.

In order to measure the realized improvements in the developed strategies, it is necessary to define measurable goals. Therefore, the measures were defined and their present values were measured.

In order to increase the resources and income, resources and sell measures were used. In order to improve the budget attraction management, the measures of the improved budget attraction percentage and transition plan budget attraction percentage have been used to increase the activities in the electricity market. Then the total penalty measure has been defined for this purpose. In order to promote the project management, the project performance-time has been used. Finally, the outsourced activities measure has been used to improve the outsourcing management.

On the other hand, several strategic plans have been defined to promote the strategic goals in terms of overcoming the financial strength and environmental stability. In order to this, several strategies have been developed that include developing the projects, designing the financial facilities attraction process, determining the product ordering system, identifying and selling the surplus items of the store, determining the income-generating solutions, and decreasing the organization's crimes in the activities implementation in the electricity market.

Although the organization has favorable conditions in terms of industry strengths and competitive advantages, but its conditions can be closed to the other situations through few changes. Therefore, it is necessary that the organization achieve stable condition and also improve stability.

On the other hand, although this company is a public organization and also is considered as an exclusive organization in terms of its product and services, but it is necessary to consider the competitive advantage and industry strength, because the strategic plan is a future-based plan. In order to this, the following strategies have been suggested that include improvement in the facilities exploitation, increase in the customers' satisfaction, supply the electricity power timely, increase in the employees' productivity, and improve in the processes performance.

Also the following measures have been developed for every strategic goal: improvement in the facilities exploitation through post exploitation, increase in the customers' satisfaction through Customer Satisfaction Index (CSI), supply the electricity power timely through unsatisfied demands, increase in the employees' productivity through some measures such as victim, silence rate, network readiness, and improve in the processes performance through productivity measure.

In order to achieve the strategic goals, several projects have been defined in this area that include determining the manpower productivity measure and solutions of the productivity promotion, managing individual and organizational performance evaluation and improvement, doing studies on improvement in the bar supply and prediction method, and reviewing the contact with the master applicants.

All of the organizations' efforts except the organizations that are located in the assertive positions are to achieve the assertive position. Also the organizations that are located in the assertive position seek to survive in this position. Therefore, it is expected that this organization can achieve the assertive position through the mentioned strategies implementation and improving the SPACE dimensions.

Conclusion:

With regard to the empirical experiences of the SPACE model in determining the organization's strategic position and developing the organizational strategies, there are several problems in the implementation step that different methods have been used to overcome them. Some of the resulted experiences from model implementation are indicated in the following section.

- One of the important defections of this model is different perceptions that there are in the measures so that these different perceptions influence the scores and finally the organization's strategic position is not defined favorably. This defection has been resolved through describing every measures concept for strategic plan development group and discussion on this defection concept.
- Distance of the determined strategic position point from axis can be indicator of the position pragmatism, but its closeness to the axis increase the axis sensitivity and necessitate its continuous screening. This meant that if the point is close to the zero or one of the axis, a few change in the sub-criteria concept and conditions can change its score and then change its strategic position.
- High speed of this model in determining the organization's position and also developing strategies makes it more applicable. Also it is should be remembered that high speed in determining the strategic position can prevent from senior managers' exhaustion and boredom in developing strategic plan.
- The relationship between strategic position, strategies development, strategies goal-setting, and defining the strategies for promoting every axis measures and the related strategies for improving the organization's performance from strategic perspective is an issue that has been considered rarely. The rational trend from development step to strategies implementation has been suggested in this study.

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