

Identifying and Ranking the Elements of Strategic Thinking in Iran Tax Affairs Organization

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Key words: Strategic thinking, strategies ranking, strategy identification, AHP, BSC

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Page No.: 3156-3160

Volume: 15, Issue 17, 2020

ISSN: 1816-949x

Journal of Engineering and Applied Sciences

Copy Right: Medwell Publications

Abstract: Importance of strategic planning has not merely been in forecasting the future accurately but is in responding to the future and this is possible through continuous strategic thinking. This paper provides a method of indentifying and ranking the elements of strategic thinking in Iran tax affairs organization. In so doing, it firstly determines four measurement criteria and their weights, respectively via. Balanced Score Card (BSC) and Analytic Hierarchy Process (AHP). Then, the preferential matrix of each of performance promotion indicators was developed based on balanced score card and having balanced the scores through VIKOR method, strategies were ranked.

INTRODUCTION

If a manager or a leader wants to be effective, he/she must improve his/her strategic thinking skills. Strategic thinking is a process in which the manager or the leader learns how to define its business vision through team-work and critical thinking. It is a means of helping managers to face with changes and do plan for making developments and visualize new opportunities. It requires having strategic thoughts. A company or an institute can live without formal strategic thinking but it cannot survive without having strategic thoughts. Mintzberg^[1] believes that strategic thinking is a process of analysis and dividing a goal into the predictable phases and implementing strategic thinking is the process of synthesis, intuition and creativity that puts the organization ahead of the competitors by creating an integrated framework from visions perspective^[2].

Strategic thinking aids organizations to develop their strategic planning effectively. Incorporating strategic thinking processes, strategic planning and its implementation in creating sustainable competitive advantages helps organizations. Strategic thinking is an

essential pre-requisite of strategic planning and management and it facilitates identifying and targeting strengths, weaknesses, opportunities, threats and the resulted strategies. Strategic thinking influence strategic measures as well as management efficiency in allocating resources of structural change, cultural change, managing resistance to change and conflicts management. Having perceived its importance, this study aims to provide a method for identifying and ranking strategic thoughts.

Formulating the question: Strategic thinking is deemed as one of the two main capabilities of managers with outstanding performance^[3]. From Mintzberg point of view, improving strategic thinking results in developing better strategies. He believes that managers equipped with strategic thinking capability are able to encourage employees to find out creative solutions for the organization success^[1]. Such managers view the organization as it must be and not as it is Nasehifar, etc. So, strategic thinking can be a preamble to the organization future design^[4]. It requires managers ideas to go beyond routine operations aiming at concentrating on

business long-term strategic goals^[5]. Strategic thinking consists of such activities as data-gathering, data-analysis, debate and consultation about the organization governing circumstances^[6] and in companies with various activities, it embraces responding to major questions about the organization portfolio as well^[7].

Abraham considers strategic thinking as a way for identifying reliable strategies and/or business models which result in creating value for customers. He thinks that seeking proper strategic alternatives, usually as a part of strategic management process is indeed a practical consequence of strategic thinking^[8]. According to Graetz^[9], strategic thinking plays a role in endeavoring for innovations and visualizing a new and different future for the organization which may leads to re-defining main strategies or even the industry in which the company operates^[9]. Thus, we can say strategic thinking is a consistent process which aims to remove ambiguity and to signify a sophisticated environment^[10]. It comprises situation analysis as well as creatively incorporating analysis outcomes into a successful strategic plan^[11].

Strategic thinking enables managers to find out which factors are effective on achieving desired objectives and which are not and why and how effective factors create value for customers? Such an insight brings recognition power regarding effective factors on creating value. Without the recognition power, utilizing the organization (financial and non-financial) resources will not breed success. From Mintzberg^[11] perspective, improving strategic thinking will result in formulating better strategies. He believes that managers equipped with strategic thinking capability are able to encourage employees to find out creative solutions for the organization success. They view the organization as it must be and not as it is. Thus, strategic thinking can be a preamble to the organization future design.

Most of the thinkers that survey in the field of strategic thinking deem such thinking as a distinct method comparing with other methods including systematic, intuitive and analytical thinking. For example, Kenichi Ohmae, a prominent consultant in McKinsey, compares strategic thinking with systematic and intuitive thinking. He states: a strategic thinker, facing with a problem, event or situation which seems to constitute a coordinated “whole”, breaks it down into the components. Having identified the components and their importance and through intellectual ability, he re-combine them in a manner that brings maximum benefits.

According to Kilroy and Mckinley^[12] a strategist must be able to simultaneously utilize different types of linear and non-linear thinking and use linear thinking to converge the divergence stemming from non-linear thinking. Hybrid thinking, in which a thinker integrates linear and non-linear methods is more powerful than a

linear thinking that prevails in most organizations. The thinking method applied by most of the modern managers is mainly based on a linear thinking system and stems from rational reasoning. Such thinking consists of data-gathering, data-processing, arbitration, reasoning, critics and overview. In recent years, access to personal computers and increase of processing power has expanded applying linear thinking method in the business world^[12].

In order to think effectively in the business process, applying rational reasoning must be postponed as long as the problem nature has not been well understood or possible solutions have not been identified. At present juncture, many managers, before thinking sufficiently about a problem for which they are seeking solutions or even before defining it well, refer to their computers and begin to create widespread pages. While here, a hybrid thinking process is required for solving problems (the same, page 52). So, the necessity of identifying and ranking thinking strategies is clarified. This paper aims to provide a method of identifying and ranking strategic thinking in Iran tax affairs organization.

Research background: Khatami, etc., offered in their essay in 2008, a theoretical framework for a manager thinking method via a historical research and surveying scientific documents regarding a strategist thinking. In this new theoretical framework having surveyed a strategist decisions environment, the best thinking method has been suggested. So, the traditional viewpoint that considers strategic thinking as a special thinking method versus the other methods has been left aside in this framework and strategists have been proposed to apply the appropriate thinking method according to different circumstances.

Moshabaki, etc., identified strategic thinking elements and determined their interactions through reviewing the related literatures and the experts opinions. The results were presented in the format of a model through using the methodology of interpretive structural modeling. In this model, the strategic thinking elements were categorized in four levels, on the basis of their dependence degree and driving forces in relation with the other factors. The elements in higher levels are follower and those in lower levels are leader. They believe that the offered model has been a basis for assessing strategic thinking capacity in the Iranian organizations which can pave the way for management decisions with regard to prioritizing improvement measures and organizational training and makes the organizations tangible and intangible investments more efficient.

Ingrid Ben in 2005 stated in an essay titled “improving strategic thinking: a multi-level approach” that the purpose of this study is to develop a framework of

strategic thinking which integrates the micro-domain's focus on individuals and groups with the macro-domain's focus on organizations. She has assessed and introduced various mental patterns for information processing as individual strategic thinking elements through using cognitive concepts (images, frameworks, mental plans, etc.) for conceptualization and perceiving conflicting information. Also in the group level, she has measured various jobs, conflict of tasks, relevant conflicts.

Vila, etc., in an article titled "strategic thinking: strategy as a shared framework in the mind of managers" indicated that even though most academics, business people and consultants recognize that the purpose of strategy formulation can no longer be to generate strategic plans, critics of formal strategic planning offer little guidance on how to overcome its limitations and rarely address CEO's concerns about turning strategic vision into an operational reality. This paper proposes a managerial approach to strategic thinking and strategy formulation and points out that Strategic thinking is a deliberate and creative process as well as the resulting state of mind. The framework outlined here seeks to contribute to top management efforts to build a shared understanding of strategic issues and encourage actions at the front line which are consistent with the strategy pursued by the firm.

Zahra and Nambisan^[13] in an article titled "Entrepreneurship and strategic thinking in the business ecosystems" indicated that Success in business ecosystems that include well-established companies and new ventures requires collaboration and competition, a task that demands strategic thinking to leverage a firm's resources and capabilities. They believe that strategic thinking and the entrepreneurial activities in an ecosystem influence one another in a cycle that perpetuates and even sparks innovation. Finally, they point out that the nature and effect of the dynamic interactions in a business ecosystem can have profound implications for organizational success.

MATERIALS AND METHODS

In order to implement analysis results, first it determines four measurement criteria and their weights respectively via Balanced Score Card (BSC) and Analytic Hierarchy Process (AHP). Then, the preferential matrix of each of performance promotion indicators was developed based on balanced score card and having balanced the scores through VIKOR method, strategies were ranked. Balanced Score Card was introduced by Kaplan and Norton in Harvard Business Review magazine in 1992 for the first time. It was merely a measurement system that

integrated financial and non-financial measures. Four measurement perspectives in this model are: Financial, Customers, Internal Business Processes and Learning and Growth. In 1996 Balanced Score Card converted into a management tool and the measures linked together by cause and effect relationship. So, financial measures, as the system ultimate outputs result in the organization long-term growth. Nowadays Balanced Score Card has been known as a strategic management and learning system which create long-term value based on the company comprehensive objectives. VIKOR is a Multiple Attribute Decision Making (MADM) method that has been developed by Wei^[14] on the basis of LP-metric method. This method provides a maximum group utility for the majority and a minimum of an individual regret for the opponent, the stages of which are as follows:

Calculating normalized values: Suppose that we have m alternatives and n criteria. Various i alternatives have been specified as x_i . For x_j alternative, j-dimensional rank has been specified as x_{ij} and the same for the other alternatives. x_{ij} is the value of jth criterion. For the value normalizing process where, x_{ij} is the main value of ith and then jth alternatives:

$$f_{ij} = \frac{x_{ij}}{\sqrt{\sum_{j=1}^n x_{ij}^2}}, i=1, 2, \dots, m; j=1, 2, \dots, n \quad (1)$$

Determining max and min values: Max and min values for each criterion is identified and called f_j^* and f_j^- , respectively:

$$f_j^* = \text{Max } f_{ij}, i=1, 2, \dots, m \quad (2)$$

$$f_j^- = \text{Min } f_{ij}, j=1, 2, \dots, n \quad (3)$$

Where:

f_j^* = The best positive ideal solution for jth criterion

f_j^- = The worst negative ideal solution for jth criterion

If we join all f_j^* , we will generate an optimal compromise which will have maximum precedence and f_j^- is the same as well.

Calculating criteria weights: Criteria weights must be calculated to state the relative importance for which AHP method is applied in this study.

Calculating alternatives distances to ideal solution: Alternative distance to ideal solution calculated and the sum of the final values are as below:

$$S_i = \sum_{j=1}^n w_j (f_j^+ - f_{ij}) / (f^+ - f_j^-) \tag{4}$$

$$R_i = \text{Max}[w_j (f_j^+ - f_{ij}) / (f^+ - f_j^-)] \tag{5}$$

Where:

S_i = The i th alternative distance to positive ideal solution (best compromise)

R_i = The j th alternative distance to negative ideal solution (worst compromise)

Then the best rank based on S_i value and the worst rank based R_i value will be obtained. In the other words, S_i and R_i are respectively the same as L_{1i} and L_{2i} in LP-metric method.

Calculating VIKOR Q_i : It is defined for each i as below:

$$Q_i = v \left[\frac{S_i - S^*}{S^- - S^*} \right] + (1-v) \left[\frac{R_i - R^*}{R^- - R^*} \right] \tag{6}$$

where, $S^- = \text{Max}_i S_i$, $S^* = \text{Min}_i S_i$, $R^- = \text{Max}_i R_i$ and $R^* = \text{Min}_i R_i$ and v is the strategy weight of maximum group utility or the majority of criterion proponents and $[S_i - S^* / S^- - S^*]$ denotes i th alternative distance to negative ideal solution or in the other words is i th ratio proponents majority. $[R_i - R^* / R^- - R^*]$ denotes i th alternative distance to ideal solution or in the other words, it is i th alternative opponents. So, when v is < 0.5 , the measure of Q_i results in the proponents majority. And when it is > 0.5 , the measure of Q_i indicates the majority negative view. In general, when $v = 0.5$, it denotes measurement experts contractual view.

Ranking alternatives based on Q_i values: In this stage, alternatives are ranked based on Q_i values and decision is made.

RESULTS AND DISCUSSION

First, we must calculate criteria weights, namely four dimensions of balances score card, through paired comparison, then the score of comparing alternatives to wit Entrepreneurship measures, is calculated based on each dimension. For paired comparison, 9-point scale of Saaty is applied. As per usual, comparisons are accomplished via. AHP standard questionnaire and the result is presented through paired comparison matrixes. According to Saaty, a geometric mean approach is employed to combine the comparators opinions. Calculation results, based on experts opinion and AHP method are presented in Table 1.

With respect to experts opinions, scores matrix of entrepreneurial measures on the basis of balanced score card is presented in Table 2. With regard to the above matrix and relevance 2, the normalized matrix is presented in Table 3.

Based on weights calculated by AHP method, the above normalized matrix and VIKOR method as well as 3-7 relevancies, we will have (Table 4).

In Table 4, v coefficient has been assumed 0.5 for all alternatives. With regard to the research results, Iran tax affairs organization must first undertake international investment based on calculated preferences.

Table 1: Calculated weights of measurement criteria

Row No.	Criterion (BSC four dimensions)	Calculated weight via. AHP Method
1	Internal processes	0.152
2	Learning and growth	0.366
3	Customers	0.322
4	Financial	0.16

Table 2: Alternatives final score matrix

Variables	Financial	Customers	Learning and growth	Internal processes
Process innovation	0.116	0.121	0.156	0.228
Product innovation	0.165	0.374	0.069	0.097
Organizational innovation	0.217	0.126	0.273	0.233
Strategic renewal	0.217	0.084	0.317	0.272
National investment	0.150	0.160	0.100	0.084
International investment	0.116	0.121	0.156	0.228

Table 3: Normalized alternatives final score matrix

Variables	Financial	Customers	Learning and growth	Internal processes
Process innovation	0.264	0.238	0.316	0.499
Product innovation	0.391	0.795	0.125	0.196
Organizational innovation	0.523	0.249	0.574	0.510
Strategic renewal	0.523	0.158	0.669	0.602
National investment	0.351	0.324	0.194	0.165
International investment	0.313	0.271	0.159	0.170

Table 4: VIKOR model results in a case study

Criterion	Variables	C1	C2	C3	C4
Alternatives	Criterion weight	0.152	0.366	0.322	0.160
	Process innovation	0.255	0.230	0.314	0.510
	Product innovation	0.391	0.833	0.108	0.183
	Organizational innovation	0.533	0.242	0.593	0.522
	Strategic renewal	0.532	0.143	0.696	0.622
	National investment	0.348	0.322	0.182	0.149
	International investment	0.307	0.265	0.144	0.155
f ⁺		0.533	0.143	0.108	0.149
f ⁻		0.255	0.143	0.108	0.149
Alternatives	Distance to positive ideal solution (S _i)	Distance to negative ideal solution (R _i)	V _i	Q _i	Ranking
Process innovation	2.760	1.000	0.5	0.844	3
Product innovation	2.438	1.000	0.5	0.781	4
Organizational innovation	1.243	0.857	0.5	0.047	6
Strategic renewal	1.002	1.000	0.5	0.500	5
National investment	3.279	1.000	0.5	0.945	2
International investment	3.559	0.988	0.5	0.957	1

CONCLUSION

This study assessed strategic thinking prioritization based on balanced score card through using VIKOR multi-criterion decision making method. The results demonstrate that the most preferential dimension of Iran tax affairs organization strategies is international investment. In this study the criteria weights were calculated via. AHP method and VIKOR method was employed for ranking. For future studies, each of balanced score card aspects can be identified on the basis of which ranking will be accomplished. Also, other performance measurement models can be applied as the measurement criterion. Other methods such as SAW, TOPSIS, ELECTRE or PROMTHE may be applied for weight calculation and ranking. In order to make the research results closer to the reality, fuzzy or gray numbers may be employed.

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