

Identifying and Prioritizing Factors Influencing Success of a Strategic Planning Process: A Study on National Iranian Copper Industries Company

Shahrooz Kavousi¹ & Yashar Salamzadeh²

¹ Non-ferrous Industries Process, Engineering and Construction Company (NIPEC), Iran

² Faculty of Management, Farabi Higher Education Institute, Mehrshar, Iran

Correspondence: Shahrooz Kavousi, MBA Graduate, Non-ferrous Industries Process, Engineering and Construction Company (NIPEC), Iran. Tel: 98-91-3192-1418. E-mail: shahroozkavosi@yahoo.com

Received: May 13, 2016 Accepted: June 6, 2016 Online Published: July 7, 2016

doi:10.5539/ass.v12n8p230

URL: <http://dx.doi.org/10.5539/ass.v12n8p230>

Abstract

Nowadays, global economic activities are performed by medium and small-sized enterprises (SMEs). All these organizations seek success, knock the socks off rival companies and satisfy their customers' needs in a turbulent environment and a very competitive market. Strategic planning, in case of proper formulation and implementation, is an effective tool which can identify opportunities, threats, strengths and weaknesses of the organization so that more realistic goals can be set and implemented. National Iranian Copper Industries Company needs to prioritize its strategies due to structural evolutions in order to determine the budget and formulate short-term planning for them. So the present research examines and ranks these factors. Our research method is descriptive-survey and the sampling process is random. Population size is 180 and the sample size of 120 is calculated according to Cochran formula. This research categorized the factors using factor analysis. The results showed that success factors of Strategic Planning for this company were situated in four groups including administrative process, managerial process, inter-organizational culture and extra-organizational factors. Then the indicators were weighted and prioritized by means of Shannon's method and Topsis technique, respectively. Finally conclusions were provided according to the given priorities.

Keywords: planning, strategic management, strategic planning, copper industries, Iran

1. Introduction

The key role of management in the survival of organizations is undeniable. Establishing coordination, balance and interaction among various elements inside and outside the organization, recognizing the current situation of the organization and trying to reach an ideal situation as well as identifying the strengths and weaknesses, threats and opportunities are among the important factors that are realized in the light of strategic management (Smith & Jenkins, 2014). The impact of strategic planning on today's organizations is obvious and the use of it by managers can bring positive, long term outcomes to organizations. The main problem some organizations face is the lack of a strategic plan or failure to develop and implement it (Nemati & Khashei, 2013).

So it is necessary to study and identify the critical success factors and barriers of strategic planning in order to achieve the goals set and implement the planned strategies and programs. If the reasons of why strategies fail in the implementation stage were identified, a greater success in achieving strategic objectives by managers and organizations would be seen. Strategic planning, in case of proper formulation and implementation, is an effective tool in environmental studies which can identify opportunities, threats, strengths and weaknesses of the organization so that more realistic goals can be set and implemented. National Iranian Copper Industries Company (NICICO) needs to prioritize its strategies due to structural evolutions in order to determine the budget and formulate short-term planning for them. So the present research examines and ranks these factors.

Now the question is; why strategic plans aren't implemented successfully or it is difficult to pass the implementation step and what are the reasons? So considering the aforementioned, it is important to discuss the reasons and barriers leading to poor outcomes from strategic planning, of why sometimes strategic plans cannot be implemented successfully and what are critical success factors of strategic planning? Recognizing these factors can be useful in the successful implementation of strategic plans and will contribute to its growth and

development. This research emphasizes on identifying and prioritizing critical success factors of strategic planning with a focus on an industrial group in the country.

2. Theoretical Framework

2.1 Planning

Planning is not only a decision-making process but also a clarification and definition process of facts and differences between them; in other words it is a kind of evaluation process at the end of which the facts evaluated are selected. There are many definitions of strategy; strategy is a program, position, behavior pattern, perspective, policy or decision that shows the organization's direction and visions. Strategy can be defined under organizational levels, tasks and different time limits (Sener, 2012).

2.2 Strategic Planning

Strategy is indeed the general roadmap selected by senior managers for directing the organization toward the main goals. It is clear that this decision plays a definite role in the fate of the organization. Strategy is also the main objectives of the organization and the way to achieve them (Alberchts, 2006). Strategy derives from the company's goal and vision and is at the heart of it. Strategic plans are often associated with parallel implementation plans that summarize responsibilities, timelines, resources requirements and operational and organizational changes required to incorporate into strategic plan initiatives. The term "strategic planning" is often considered as a collective term covering all these aspects which is quite reasonable (Fidler, 2002). Strategic planning is a developed way focusing on the establishment of a common vision among stakeholders to share company information. Strategic planning is a documented structure involving related issues and provides a prediction case of the future of the company. Environmental trends also shape and influence the requirements and expectations of information sharing program. They are intended to look forward with the aim of identifying potential factors that may affect the program's objectives. Identification of environmental trends helps decision makers to understand key external factors (Jacobson, 2014).

Strategic planning is the process of defining an organization's programs to achieve its mission. An organizational strategy is a derivative approach for achieving this mission. The product of a strategic planning effort is typically a document (strategic plan) examining a high-level strategy and explains the elements that influence it- it is a complete description of the organizational environment and goals (Cassidy, 2006). Figure 1 indicates typical strategic planning elements and their relationship

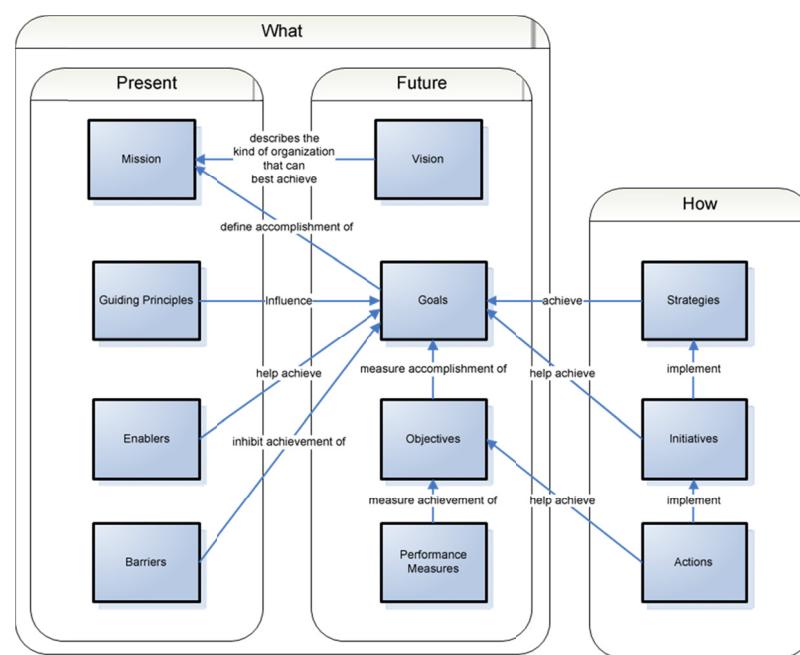


Figure 1. Typical strategic planning elements [USPS, 2000]

2.3 Strategic Planning Model

There are different well known models in the strategic management and planning of organizations including

Tyler comprehensive strategic planning model, Ward policy, negative strategic planning model, Kornj and Lavenj strategic planning system and Daitmn, Mintzberg, Dait, Hill, Piglez, Roger, David, Piers and Robinson, Violin and Hunger, Efa, Bryson and Alston & Blue Ocean models. Due to the large number of models only Bryson and Alston models will be explained.

Bryson and Alston strategic planning model: in 2005 Bryson and Alston suggested their model for strategic planning and management of organizations. The model is actually the extended model of their 1995 model. Bryson and Alston strategic planning model generally addresses three questions: a) who and what are we and what are we doing and why? b) What are we going to do in the future and why? c) How do we want to go from current to desired situation? There are four stages or phases in this model each one has its own steps consisting of activities and information which include: 1. Organizing the planning process and environmental analysis; 2. Identifying and analyzing strategic issues; 3. Developing strategies and operational strategies; 4. Implementing strategies (Bryson & Alston, 2005, p. 85).

2.4 Strategic Planning Approach

To develop a strategic planning, three basic steps can be taken into account based on which the strategic plan is planned and implemented. The three steps include: First step: defining the topic as an organization (where are we now?). Second step: what do we want to be in the future (Where are we going?). Step Three: developing an approach to reach the goal and implementing it.

Table1. Strategic planning key skills, values and consultation principles (C.D.C, 2007)

Skill set	Values	Consultation principles
Containment—demonstrating patience and good listening skills to the needs of the community instead of immediately offering one specific idea or option	Action-oriented—prioritize issues to focus energy and attention to ensure progress	Consultation is based on the application of evidence-based strategies, best practices, and theories, focuses on the future
Supportive attitude—encouraging others to have faith in their own ability to be successful	Human relationships—relationships are an important vehicle for change	Outcomes can be achieved many different ways, each with risks and benefits
Diagnostic—asking a series of questions, laying aside assumptions to fully understand the underlying issues and developing solutions to best suit each situation	Stewardship—manage time, funds, and priorities with a sense of personal responsibility	Present a multiplicity of options for community consideration
Systems thinking—seeing the big picture, interconnectivity, relationships, and boundaries	Strength-based—all communities have strengths and competencies	Communities are at different places and have different needs
Persuasion—articulating the importance of ideas and strategies so others share the motivation to implement them	Peer-to-peer—connect programs to learn from each other	Community programs are the experts on their community
Problem solving—recognizing indications of problems, gathering information, analyzing situations, reaching conclusions, and working with others		Exercise community's critical thinking skills within a community resources and opportunities context
Marketing and product development—understanding audience and tailoring approaches and messages to motivate and enhance knowledge and skills of others to lan and implement evidence-based strategies and best practice		Interactions are culturally competent

Strategic planning development has been always a process and development of planning through individual consultation programs with communities. During this process, planners linked the community programs with other communities who were developing or had previous achievements had similar efforts. Contribution to strategic plan development and implementation, identification of the steps required to achieve the indicator results over time, development of options that fit with the community and will achieve the objectives, specific structure, and measurable annual objectives that evidence progress ensure that the objectives will move the indicator outcomes. The role of employees' participation in the process of strategic planning at different levels of organizational hierarchy has been featured by some studies (lederer & salmela, 1996).

2.5 Strategic Planning Properties

Strategic planning process is essentially a process of coordination between internal resources and external opportunities. The purpose of this process is looking through a strategic lens and set opportunities the organization benefits them or responds to them. Thus, the strategic planning process is a management process including coordination of organizational capabilities with the existing opportunities. Such opportunities are determined over time and are investigated whether to invest the organizational resources in them or not. Strategic planning involves several advantages including:

- Anticipate potential problems before they happen.
- Identify and respond to changes.
- Determine any need required for redefining the organization.
- Provide a good foundation to reach the preset goals.
- Help managers to have a clearer understanding of the organization.
- Make it easier to spot the future market opportunities.
- Provide a purposeful vision of management issues.
- Offer a review framework for implementing the plan and controlling activities.
- Help managers to make major decisions associated with the goals set.
- Allocate the resources and time to the identified opportunities in the most effective way.
- Coordinate the implementation of tactics that complete the plan.
- Minimize the time and resources devoted to incorrect decisions with no long term vision.
- Create standards for internal communications among employees.
- Arrange priorities in terms of chronological order of plans.
- Give the organization competitive advantages.
- Provide a basis for establishing individual responsibility leading to increased motivation.
- Encourage forward thinking.
- Provide incentives for people in the organization to respond the problems and opportunities in a coordinated and integrated way (Sener, 2012).

2.6 Formulating and Designing a Strategy

Formulating a strategy is important for adding value to shareholders and to fulfill the needs of stakeholders. At the same time strategy, processes and capability should be interrelated. Formulated strategies can't be implemented without appropriate process and capabilities such as committed employees and written methods (Sari, 2014). In today's complex business environment and increased competition in the existing markets, routine management decisions can't provide a successful path for companies. Previously, management decisions were taken based on annual goals and the needs and demands of shareholders, while in today's complex world of business such decisions make the company far off the success. What is of utmost importance now for managers of all companies is decision-making process and the information needed to make a proper decision that can bring the company close to its objectives. One of the methods and concepts that can be very useful if used properly is strategic management. Strategic management is the art and science of making decisions that will determine the future direction of the organization. This orientation is the basis for many decisions the manager should deal with in the best way (Paul & Richard 2013).

Generally strategic planning consists of three main steps:

- formulating a strategy
- implementing a strategy
- assessing a strategy

The three together can lead to numerous and comprehensive results and benefits for strategic planning. As it is clear for everyone, none of these three is of a higher priority than the other. Although formulating a strategy is fundamental, even the best strategies fail if they would not be implemented successfully (Grunig & Kuhn, 2011). The steps of the strategy is shown in Table 2. Assessment of a strategy is important too since strategic planning and organizational analysis and contribution to improving it, is a permanent task which is a circle that must be repeated constantly and finally result in profitability and other corporate purposes. So assessing a strategy is crucial for the next stages, because repeating a mistake can't be compensated at all (Malinda, Sara, & Andrew, 2015: S18).

Table 2. Steps of implementing strategies

<i>Special Step</i>	<i>Tasks</i>
-Creating a structure which support implementation of strategies	Creating an organization which can implement the strategies
-Reinforcing skills and capabilities on which strategies are planned	
-Positioning most appropriate people for occupations in organization	
-Being sure that financial resources are allocating to units in appropriate to their contribution of strategic role	Providing financial resources (budgeting) which can support strategies
-Being sure that consuming resources(inputs) will cause desires outputs	
-Developing and managing policies and procedures that facilitate implementation of strategies	Establishing inter support units
-Creating operational & administrational systems which can empower strategies	
-Motivating people and units for implementation of strategies	Innovating motivation and remunerations in close relationship with objectives and strategies
-Designing remunerations can cause optimal level of performance	
-Encouraging tendencies for achievement of aims	
-Creating common values	
-Defining ethical criteria	Forming organization's culture to adjust strategies
-Creating a workplace which support strategies	
-Creating highly achievement motives in culture of organization	
-leading process of value formation, culture development, and empowering implementation and strategy improvement	Performing leadership strategies

Shared understanding of middle management and those at the operational level to the top management is of critical importance to effective implementation (Rapert, Velliquette, & Garretson, 2002). Strategy implementation effort may fail if the strategy does not enjoy support and commitment by the majority of employees and middle management. This may be the case if they were not consulted during the development phase (Heracleous, 2000).

It is clear that a poor or vague strategy formulation process can limit implementation efforts significantly. Good execution cannot overcome the shortcomings of a bad strategy or poor strategic planning effort (Hrebiniak, 2006). Table 3 shows the key variables affecting the implementation of the strategic planning of previous studies.

Table 3. The key implementation variables of strategic planning from previous studies (Al-Kandi, Asutay, & Dixon, 2013)

Author(s)	Variables
Stonich (1928)	Formulation, structure, cultural, planning, resource allocation, people, outcomes.
Hrebiniak & Joyce (1984)	Formulation, structure, people, control and feedback
Galbraith & Kazanjian (1986)	Structure, people, planning, communication, outcomes

Author(s)	Variables
Hamhavek & Cannella (1989)	Structure, people, rewards, resource allocation, internal and external communication
Thomson & Strickland (1995)	Formulation, structure, cultural, planning, resource allocation, people, communication.
Waterman et al. (1980)	Formulation, structure, cultural, resource allocation, people, communication
Pettigrew and Whipp (1991)	Structure, cultural, resource allocation, people, environment, leadership
Skivington and Daft (1991)	Formulation, structure, resource allocation, people, communication.
Schmelzer (1992)	Context variables (environment, formulation, structure, cultural) process variables (operational planning, people, resource allocation).
Bryson & Bromiley (1993)	Environment, cultural, resource allocation, people, communication, outcomes.
Kargar & Blumenthal (1994)	Formulation, structure, cultural, planning, resource allocation, people, communication.
Miller (1997)	Environment, formulation, structure, cultural, operational planning, resource allocation, outcomes.
Ghamdi (1998)	Environment, resource allocation, communication, leadership, people.
Okumus (2001, 2003)	Content, context, process, outcomes
Ali & Hadi (2012)	Personnel, planning, management, organization, external factors

2.7 Factors Affecting Successful Strategy Implementation

According to the research conducted in 2009 according to strategic planning experts' viewpoints, the following factors were identified as the main factors affecting the success of a plan (Stevan, Holmberg, & Cummings, 2009).

2.8 Review of Literature

A research was conducted to identify the critical success factors of business process management. In this study, the most important factor in the business process management is considered fitting with known environmental factors (Peter, 2010). A research was carried out titled as planning features for automotive products development using AHP-FUZZY technique; in this study attributes of customer satisfaction were identified as the most important factor in planning for automotive products development (Bimal & Alper, 2010). In a study conducted, the critical success factors of strategic planning were found as manager partnership, emphasis on creating databases, follow-up after defining strategies, balancing between budgets and planning in the implementation of the strategy (Hensey, 1991). In a study three success factors of strategic planning were pointed out, including identifying realistic goals, identifying needs to achieve goals and providing time and personnel to implement the strategic plan (Johnson, 2007). Kaplan and Norton (2005) pointed out that 95% of employees neither aware nor understand strategies of the organization. Johnson (2004) also believes that 66% of organizations' strategies are not applicable. In many cases, due to weak strategy and the ideas behind them many valuable strategies face the problem and failures in the implementation stage. In fact the main challenges in strategic management is implementing the strategy rather than developing it. Quinn (1981), Peters and Waterman (1982) and Cowherd and Luchs (1988) believe that critical success factors of the strategy include organizational structure, organizational culture, information and communication technology and reporting systems, incentives and rewards, providing adequate resources, decision-making process, effective communication, training, ability and skills. A few other researchers also examined the factors influencing successful implementation of strategies.

In a research conducted by Phillips and Moutinho (2014), a proper strategic planning for developing tourism industry as a foundation needs high investment, long term framework. This requires formulating a strategy for shaping the opportunities for competitive advantage and offering a direction for shareholders. Important decision-makings need to involve multiple-purpose shareholders. Strategic planning can contribute by collaborative method.

3. Method

Since the research data was collected and analyzed in a specified time period and the results changes over time weren't taken into account, time horizon of the study is a single sectional. The strategy of the research is eventually causal. Since in descriptive research the characteristics of the study population can be evaluated

through surveys, the present research is a descriptive, survey research and because the researcher is present in real-life situations of the organization so the research is considered among field studies.

3.1 Research Questions

What are the critical success factors of strategic planning in National Iranian Copper Industries Company?

3.2 Statistical Population

Sarcheshmeh Copper Mines Joint Stock Co of Kerman was formed in 1972 and later in 1976 it was renamed as National Iranian Copper Industries Company to involve all copper mines operations throughout the country. Since 2002 and with the establishment of Iranian Mines and Mining Industries Development & Renovation organization, National Iranian Copper Industries Company was introduced as one of its headquarters and continued its activities within the framework of the Commercial Code by changing the Constitution. Company activities include exploration and exploitation of cooper mines, production of high-grade products of copper ore and copper metal and their distribution and sales, partnership and participation in investment projects related to the copper industry and carrying out all operations and financial transactions and trade and services that directly or indirectly related to any of the issues described above both internal and external. This company has numerous responsibilities to do including extraction and utilization of copper mines, production of copper concentrates and manufacturing copper products such as cathodes, slabs, billets and 8mm wire rods. Sarcheshmeh and Miduk mines in Kerman province and Sunegoon mine in eastern Azarbaiejan province are of the most significant copper mines in the country. The statistical population of the study was senior experts and senior managers of National Iranian Copper Industries Company. Population size is 180 and sample size is equal to 120 using Cochran Formula.

3.3 Measurement Instrument

A questionnaire was used to measure the variables of the research. Therefore, a number of key factors were collected to set the questions of the questionnaire through conducting a series of interviews with experts beside a deep review of Literature.

3.4 Validity and Reliability

Before using the measuring instrument, they should be adjusted under validity and reliability tests. The validity of the study was reviewed initially by collecting the views of experts and counseling professors and several management experts; the questionnaire was finalized by removing some of the questions and the reforms performed. To ensure the reliability of the measuring instrument, Cronbach's alpha coefficient was used with the result of 0.930 which demonstrates good reliability of the measuring instrument because according to Notably, Nunnally and BernStein (1994) alpha coefficient more than 70% indicates good reliability (Chang & Chieng, 2006).

Since the researcher himself requested applicants to fill in the questionnaire, it was expected that about 80% of questionnaires were of correct information and applicable. Of 150 questionnaires 120(80%) were able to be used and 30 were excluded. So response rate was good and covered sample size completely.

3.5 Data Analysis

In order to analyze the statistical data of the present study, first data resulted from the existing documents available in the company were examined. Also, since the researcher have used questionnaires to collect other information so, in order to analyze data, first data was extracted from the questionnaires and set in the general information table or mother table. Then all data and information were analyzed using computers and the statistical software SPSS 19 in descriptive and inferential methods. So first demographic variables and representative indices of the research variables were described then data was analyzed and the hypotheses were tested.

3.5.1 Shannon Entropy Method

In multi-criteria decision-making problems and in particular multi-attribute decision-making problems, having and knowing the relative weights of indices is an effective and required step in the problem-solving process. Among determination methods of index weight, the use of experts responses, LINMAP method, least squares method, eigenvector technique, Shannon's entropy can be mentioned (Ming, 2008). In the present research, Shannon's entropy method as one of the most famous weighing methods was employed for weighing indices.

First, we calculate a value denoted by E:

$$E = - \sum_{i=1}^n [P_i * \ln P_i] \quad (1)$$

where k is a constant and positive number. To ensure that F is between zero and one, E is calculated by probability distribution (P_i) based on statistical mechanics, and its value is maximum in case of equality of P_i .

$$-K \sum_{i=1}^n p_i \cdot \ln p_i = -k \left\{ \left(\ln \frac{1}{n} \right) \left(\frac{n}{n} \right) \right\} = -k \ln \frac{1}{n} \quad (2)$$

A decision-making matrix from a multi criterion decision-making model contains information that entropy can be used as an evaluation benchmark. A decision making matrix can be considered as follow:

	X_1	X_2	.	.	X_n
A_1	r_{11}	r_{12}	.	.	r_{1n}
A_2	r_{21}	r_{22}	.	.	r_{2n}
.
.
.
A_m	r_{m1}	r_{m2}	.	.	r_{mn}

Information content of the matrix is first as follows ($P_{i,j}$):

$$p_{ij} = \frac{r_{ij}}{\sum_{i=1}^m r_{ij}}; \forall i, j \quad (3)$$

And for E_j of $P_{i,j}$ set for each characteristic, we have:

$$E_j = -K \sum_{i=1}^m [p_{ij} \cdot \ln p_{ij}]; \forall j \quad (4)$$

Now, uncertainty or deviation (d_j) from information provided for jth index is:

$$d_j = (1 - E_j); \forall j \quad (5)$$

And finally, for weights of indices we have:

$$w_j = \frac{d_j}{\sum_{i=1}^n d_i}; \forall j \quad (6)$$

Table 4. Shannon entropy

K	0.314658		
Ej	0.952922	0.952922	0.976461
Dj	0.047078	0.047078	0.023539
Wj	0.4	0.4	0.2

3.5.2 TOPSIS Method

This method was developed in 1981 by Hwang and Yoon in which m options are evaluated by n indicators and any problem can be considered as a geometric system containing n points in an n-dimensional space. The technique is relied on the concept that the selected option should have minimum distance to the positive ideal solution (best case scenario A+i) and maximum distance from negative ideal solution (worst case scenario A-i).

Topsis is relied on the notion that the choice should be closest to the positive ideal solution and furthest to the negative ideal solution.

In this method m options are evaluated by n indicators and any problem can be considered as a geometric system containing n points in an n-dimensional space.

The method has six steps:

Step 0: construction of decision matrix; a decision matrix including m options and n indicators is evaluated.

A_i: ith option, X_{ij}: numerical value obtained from ith option and jth indicator

In this matrix, the indicator with positive utility is profitability and the indicator with negative utility is cost.

Step 1: normalization of decision matrix; in this step, we de-scale the scales present in decision matrix. We divide each of the values by vector size of that index.

As a result, each element of r_{ij} is obtained by the following equation:

$$r_{ij} = \frac{x_{ij}}{\sqrt{\sum_{i=1}^m x_{ij}^2}} \quad (7)$$

Step2: assigning weights to normalized matrix

- ❖ Decision matrix is in fact parametric and needs to be quantitative so decision maker determines a weight for any weight index.
- ❖ Sum of weights (w) is multiplied by normalized matrix (R).

$$\sum_{j=1}^n w_j = 1 \quad W = \begin{pmatrix} w_1 & w_2 & \dots & w_j & \dots & w_n \end{pmatrix} \quad (8)$$

Since the matrix Wn*1 can't be multiplied by normalized decision matrix (n*n) so before multiplying weight matrix should be converted into diagonal matrix Wn*n. (weights on the main diagonal).

Step 3: Determination of ideal solution and negative ideal solution.

Two virtual choices A* and A^- are defined as follow:

$$\text{Positive ideal choice: } A^* = \left\{ \left(\max_i v_{ij} \mid j \in J \right), \left(\min_i v_{ij} \mid j \in J' \right) \mid i = 1, 2, \dots, m \right\} = \{v_1^*, v_2^*, \dots, v_j^*, \dots, v_n^*\}$$

$$\text{Negative ideal choice: } A^- = \left\{ \left(\min_i v_{ij} \mid j \in J \right), \left(\max_i v_{ij} \mid j \in J' \right) \mid i = 1, 2, \dots, m \right\} = \{v_1^-, v_2^-, \dots, v_j^-, \dots, v_n^-\}$$

j's related to profitability indicator $\rightarrow j = \{j = 1, 2, 3, \dots, n\}$

j's related to cost indicator $\rightarrow j' = \{j = 1, 2, 3, \dots, n\}$

The two virtual choices are in fact the best and the worst solutions.

Step 4: calculation of distances

The distance between each n-dimensional choice is measured by means of Euclidean method that is the distance of choice is found from positive and negative ideal choices.

$$S_{i-} = \sqrt{\sum_{j=1}^n (v_{ij} - v_j^-)^2} \quad i = 1, 2, 3, \dots, m \quad (9)$$

$$S_{i*} = \sqrt{\sum_{j=1}^n (v_{ij} - v_j^*)^2} \quad i = 1, 2, 3, \dots, m \quad (10)$$

Step 5: calculation of the relative closeness to the ideal solution. This measure is obtained from the following formula:

$$0 < C_{i*} < 1 \quad (11)$$

$$C_{i*} = \frac{S_{i-}}{S_{i*} + S_{i-}}$$

It is seen that if $A_j = A^*$ then $C_{i*} = 1$ and if $A_j = A^-$ then $C_{i*} = 0$.

It is clear that the shorter the distance of A_i choice from ideal solution, the closer the relative closeness to 1.

Step 6: ranking of choices

4. Results

This section presents all statistical results of our research and starts with Table 5 which shows the indicator ranks.

Table 5. Ranking and prioritizing indicators

Rank	Closeness to Positive Ideal	Indicator
1	0.903346285	Too wide viewpoint in strategic planning process
2	0.86049262	Senior managers awareness of strategic planning
3	0.86049262	Change management in strategic planning process
4	0.86049262	Senior managers awareness of knowledge and importance of strategic planning
5	0.86049262	Supporting team participation of employees in strategic planning process
6	0.86049262	Attachment to past strategies in strategic planning process
7	0.86049262	Marketing and product perception development
8	0.86049262	Persuading employees to implement strategic planning
9	0.832573332	Excessive diversification in strategic planning process
10	0.829718421	Obtaining senior managers participations in the strategic planning process
11	0.801523123	Institutionalization of team participation of employees in strategic planning process
12	0.795229817	The possibility of replacing inefficient managers in strategic planning process
13	0.777996229	Proper training of employees in strategic planning process
14	0.770006986	Accurate methodology and framework for strategic planning
15	0.770006986	Sharing the strategy with others
16	0.769839243	Existence of databases and management information systems
17	0.76528719	Organizational obligation to strategic planning process
18	0.752673514	Personal extreme commitment to other activities or participation uncertainty in implementation
19	0.747453384	The presence of similar organizations for benchmarking
20	0.733434712	Patience and good listening skills in implementing strategic planning process
21	0.717109373	Organizational commitment to strategic planning process
22	0.717109373	Coordination between internal resources and external opportunities
23	0.712868987	Employees admission in strategic planning process
24	0.700504653	Appropriate environmental assessment in strategic planning process
25	0.700504653	Bureaucratic decision-making in strategic planning process
26	0.685511481	Supportive attitude and encouragement of staff to implement strategic planning

Rank	Closeness to Positive Ideal	Indicator
27	0.658662769	Involving employees in strategic planning
28	0.642418814	Financing through attracting investors and partnership projects for implementing strategic planning process
29	0.642418814	A system for accurate assessment of performance
30	0.642418814	Senior managers skills in strategic planning
31	0.642418814	Holding different courses for senior managers to increase their knowledge of strategic planning
32	0.634972202	Transferring strategic planning process to other organizations
33	0.634972202	Regulatory devices in strategic planning process
34	0.600690862	Formulating a strategy for the opportunity for competitive advantage
35	0.59170049	Encouraging forward thinking in strategic planning
36	0.568304024	Flexibility in strategic planning
37	0.516084893	Highlighting the needs in order to achieve the goals
38	0.463231778	Consensus between middle and senior managers
39	0.432348653	Creating incentives for implementing strategic planning
40	0.417246813	Senior management support for implementing strategic planning
41	0.363673169	Appropriate resource allocation in strategic planning
42	0.348591423	Balancing the budget and planning for strategic implementation
43	0.337157165	Observing ethical standards in strategic planning
44	0.254429389	Alignment of employees' beliefs and values with strategy implementation

4.1 Factor Analysis Test

The main purpose of using factor analysis is reducing data size and determining the most important variables affecting the formation of phenomena. When researchers face with a large number of variables, they seek to reduce the number of variables and form a new structure for them in order to analyze data more accurately and obtain more scientific and operational results. So, factor analysis method is used. Factor analysis attempts to identify the main variables or factors to explain the pattern of correlations between the observed variables.

4.2 Bartlett Test

Bartlett's test sig value less than 0.05 indicates that factor analysis is a suitable model to identify the structure. KMO value is 0.854 and since it is close to one, is sufficient for factor analysis.

Table 6. Bartlett test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.854
	Approx. Chi-Square	4029.754
Bartlett's Test of Sphericity	Df	990
	Sig.	.000

Total Variance Explained

- ✓ Initial Eigenvalues: related to eigenvalues and determine factors their eigenvalues are greater than one and factors less than one are excluded from the analysis.
- ✓ Extraction Sums of Squared Loadings: related to eigenvalues without rotation.

- ✓ Rotation sums of Squared Loadings: indicate eigenvalues of extracted factors with rotation. In this table four factors are more than one. These four factors account for 95.366% of variability of variables.

Table 7. Total variance explained

Component	Initial Eigen values			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	26.219	56.997	56.997	26.219	56.997	56.997
2	8.122	17.657	74.653	8.122	17.657	74.653
3	7.579	16.477	91.130	7.579	16.477	91.130
4	1.948	4.236	95.366	1.948	4.236	95.366
5	.895	1.947	97.313			

Component Matrix a: indicates component or non-rotated factor matrix, including factor loadings of each variable in the four remaining factors.

Rotated Component Matrix a: indicates component or rotated factor matrix, including factor loadings of each variable in the four remaining factors. The higher the absolute value of these factors, the more significant role the respective factor will play in total change of the desired variable.

Table 8. Classification of factor analysis results

Mainstream	Subgroup	Row
Administrative process	Change management in strategic planning process	
	Appropriate environmental assessment in strategic planning process	
	Existence of databases and management information systems	
	Bureaucratic decision-making in strategic planning process	
	Excessive diversification in strategic planning process	
	Attachment to past strategies in strategic planning process	
	Too wide viewpoint in strategic planning process	
	Transferring strategic planning process to other organizations	
	Working procedure pace and quick response	
	Regulatory devices in strategic planning process	1
	Existence of adequate laws, regulations, rules, guidelines and standards	
	A system for accurate assessment of performance	
	Accurate methodology and framework for strategic planning	
	Personal extreme commitment to other activities or participation uncertainty in implementation	
Managerial	Balancing the budget and planning for strategic implementation	
	Highlighting the needs in order to achieve the goals	
	Involving employees in strategic planning	
	Appropriate resource allocation in strategic planning	
	Obtaining senior managers participation in the strategic planning process	
	The possibility of replacing inefficient managers in strategic planning process	
	Formulating a strategy for the opportunity for competitive advantage	
2	Senior managers skills in strategic planning	
	Holding different courses for senior managers to increase their knowledge of strategic planning	
	Senior management support for implementing strategic planning	
	Consensus between middle and senior managers	

	Senior managers awareness of knowledge and importance of strategic planning	
	Institutionalization of team participation of employees in strategic planning process	
	Organizational commitment to strategic planning process	
	Employees admission in strategic planning process	
	Organizational culture in strategic planning process	
	Organizational structure in strategic planning process	
	Proper training of employees in strategic planning process	
Intra-organizational culture	Supportive attitude and encouragement of staff to implement strategic planning	3
	Persuading employees to implement strategic planning	
	Sharing the strategy with others	
	Creating incentives for implementing strategic planning	
	Encouraging forward thinking in strategic planning	
	Flexibility in strategic planning	
	Observing ethical standards in strategic planning	
	Alignment of employees' beliefs and values with strategy implementation	
	Financing through attracting investors and partnership projects for implementing strategic planning process	
Extra-organizational	Taking advantage of external environment factors (such as related conferences and seminars)	4
	The presence of similar organizations for benchmarking	
	Coordination between internal resources and external opportunities	

5. Discussion

Too wide perspective in the strategic planning process and senior manager's awareness of planning knowledge and change management in the strategic planning process as well as their knowledge of the importance of strategic planning and team participation of employees in strategic planning process are considered among the important and effective success factors of strategic planning. In this study, factors were categorized using factor analysis. In this study, factors were categorized using factor analysis. The results showed success factors in the company are located in four groups: the first group, the administrative process, including, change management and proper evaluation of environmental strategic planning process, the database and is too bureaucratic decision-making and diversification. The second group management, that factors such as the participation of senior managers, to replace inefficient managers and strategy for the company on opportunities for competitive advantage. The third group of senior managers' knowledge of science and the importance of culture within the organization that require planning and organizational commitment to the strategic planning process and includes the reception staff. The fourth group of external factors such as financing through attracting investment and benefiting from external environmental factors and coordination between internal resources and external opportunities were placed in subgroups. Briefing sessions for managers to identify the importance, scope, objectives and approaches of strategic planning can also contribute to the success of this program. Holding such meetings can increase senior managers' awareness of the subject and ensure their commitment to this project leading to allocation of sufficient organizational resources and overcoming the barriers. Establishing committees consisting of key executives would highlight their presence in the successful implementation of strategic planning leading to a uniform strategic planning project team by providing an opportunity for training those involved in strategic planning on inter-organizational operations and processes. Oversight role played by senior managers as key members of strategic planning project will lead to the realization of goals and solve potential conflicts. Official announcement of strategic planning by the highest corporate authority to all heads of divisions might capture their commitment so they allocate sufficient organizational and financial resources facilitating the achievement of the project goals and reveals its importance among employees.

References

- Albrechts, L. (2006). Shifts in strategic spatial planning? Some evidence from European Australia. *Environ. Plan.*, 38, 1149-1170.
- Al-Kandi, I., Asutay, M., & Dixon, R. (2013). Factor influencing the strategy implementation process and its

- outcomes evidence from Saudi Arabian banks. *Journal of Global Strategic Management*, 14, 7.
- Bimal, N., Yadav, O. P., & Alper, M. (2010). A fuzzy-AHP approach to prioritization of CS attributes in target planning for automotive product development. *Expert Systems with Applications*, 37(10), 6775-6786.
- Bryson, J. M., & Alston, F. K. (2005). *Creating and Implementing your strategic plan: A workbook for Public and Nonprofit Organizations* (2nd ed., p. 85).
- Cassidy, A. (2006). *A Practical Guide to Information Systems Strategic Planning* (2nd ed.). Boca Raton, Florida: Auerbach Publications.
- CDC. (2007). *Best practices for comprehensive tobacco control programs*. Atlanta GA: DHHS, CDC, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking or Health.
- Chang, P., & Chieng, M. (2006). Building consumer brand relationship: A cross-cultural experiential view. *Psychology and Marketing*, 23(11), 927-959.
- Cowherd, D. M., & Luchs, R. H. (1988). Linking Organization Structures and Processes to Business Strategy. *Long Range Planning*, 21(5), 47-53.
- Douglas, M. R., Carter, S. R., Wilson, A., & Chan, A. (2015). *A Neo-Strategic Planning Approach to Enhance Local Tobacco Control Programs*, 48(1S1), S13-S20.
- Fidler, B. (2002). *Strategic Management for School Development*. Paul Chapman Publishing, London.
- Grünig, R., & Kühn, R. (2011). Process-based Strategic Planning (6th ed.). Springer-Verlag Berlin eidelberg.
- Hensey, M. (1991). Essential success factors for strategic planning. *Journal of Management in Engineering*, 7(2), 167-177.
- Heracleous, L. (2000). The Role of Strategy Implementation in Organization Development. *Organization Development Journal*, 18, 75-86.
- Hrebiniaik, L. G. (2006). Obstacles to Effective Strategy Implementation. *Organizational Dynamics*, 35, 12-31.
- Jacobson, M. (2014). Enterprise Strategic Planning: A Methodology to Build a Shared Vision for Justice Information Sharing. *The National Consortium for Justice Information and Statistics* (pp. 2-11).
- Johnson, G. (2004). *Exploring Corporate Strategy* (5th ed.). Essex: Prentice Hall.
- Johnson, R. (2007). *Strategic Planning - Key Success Factors and How to Avoid Ten Common September 2007 Mistakes Sunday* (9th ed.).
- Kaplan, R. S., & Norton, D. P. (2005). The office of strategy management. *Harvard Business Review*, 83(10), 72-80.
- Lederer, A. L., & Salmela, H. (1996). Toward a theory of strategic information systems planning. *Journal of Strategic Information Systems*, 237-253.
- Malinda, R. D., Carter, S. R., & Wilson, A. P. (2015). A Neo-Strategic Planning Approach to Enhance Local Tobacco Control Programs. *American Journal of Preventive Medicine*, 48(1), 13-20.
- Ming, L. (2008). Implementation and performance evaluation using the fuzzy network balanced scorecard. *Journal of Computers & Education*, 55, 188-201.
- Nemati, Z., & Khashei, V. (2013). Studying the success factors of strategic planning in the consulting firms studied by consulting engineers of industry research peak. *Tehran, 10th International Conference on Strategic Management* (pp. 5-7). http://www.civilica.com/Paper-ICSM10-ICSM10_172.html
- Paul, M. G., & Richard, K. M. (2013). The application of strategic environmental assessment in a non-mandatory context: Regional transport planning in New Zealand. *Environmental Impact Assessment Review*, 43, 56-64.
- Peter, T. (2010). The critical success factors of business process management. *International Journal of Information Management*, 30(2), 125-134.
- Peters, T., & Waterman, R. (1982). *In Search of Excellence*. New York: Harper and Row.
- Phillips, P., & Moutinho, L. (2014). Critical review of strategic planning research in hospitality and tourism. *Annals of Tourism Research*, 48, 96-120.
- Quinn, J. B. (1981). Formulating Strategy One Step at a Time. *Journal of Business Strategy*, 1(3), 42-63.
- Rapert, M. I., Velliquette, A., & Garretson, J. A. (2002). The Strategic Implementation Process Evoking Strategic

- Consensus through Communication. *Journal of Business Research*, 55, 301-310.
- Sari, R. (2014). *Integration of Key Performance Indicator into The Corporate Strategic Planning: Case study at PT. Inti Luhur Fuja Abadi*, Pasuruan, East Java, Indonesia. The 2014 International Conference on Agro-industry (ICoA): Competitive and sustainable Agroindustry, PP122.
- Sener, I. (2012). Strategic Responses of Top Managers to Environmental Uncertainty. *Rocedia-Social and Behavioral Sciences*, 58, 169-177.
- Smith, H., & Jenkins, P. (2014). *Trans-disciplinary research and strategic urban expansion planning in a context of weak institutional capacity: Case study of Huambo, Angola*, Habitat International.
- Stevan, R., Holmberg, J., & Cummings, L. (2009). Building Successful Strategic Alliances: Strategic Process and Analytical Tool for Selecting Partner Industries and Firms Original. *Long Range Planning*, 42(2), 164-193.
- USPS. (2000). *United States Postal Service*. Five-Year Strategic Plan FY 2001–2005. Retrieved from http://www.usps.com/strategicplanning/_pdf/fiveyear.pdf
- Wolf, C., & Floyd, S. W. (2013). Strategic planning research: Towards a theory-driven agenda. *Journal of Management*.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).