Research Article

# PREPARING A STRATEGY FOR ELECTRICITY DISTRIBUTION COMPANY OF KHUZESTAN

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## **ABSTRACT**

Preparing a strategy is one of the most important steps in strategic management organizationally it includes changing factors of business, company's social objectives, existential philosophy and objectives of operational policies necessary to achieve the objectives of the organization. The main objective of this research is to develop a strategy for the Electricity Company of Khuzestan. For this purpose, the SWOT analysis is used to develop strategies. The study population included all of the employees and experts in the electricity company; 20 experts were designated. In order to identify strengths, weaknesses, threats and opportunities, fuzzy Delphi method is used. In this method at first aspects of consideration in these sectors are identified. After identifying the dimensions it is tried to determine the advantages of each of these criteria by a researcher-made questionnaire and then based on the SWOT, the appropriate strategy for the electricity company has been selected. It was found that offensive and defensive strategies must be developed and implemented with the competitive strategies.

**Keywords:** Competitive Strategies, Policies, Code of Ethics and SWOT Analysis

## **INTRODUCTION**

Preparing a strategy is one of the most important steps in strategic management organizationally it includes changing factors of business, company's social objectives, existential philosophy and objectives of operational policies necessary to achieve the objectives of the organization. Strategic planning is a systematic approach that supports the strategic management process and ensures all measures which leads to the definition of objectives and determining appropriate strategies to achieve the goals of the organization.

By beginning the post-industrial era, the organizational environment was dynamic and complexity as the dominant issue was raised in the organization. Changes came so drastically that predictive factors validity was lost and new and unexpected challenges were formed. Markets were highly competitive, and learning faster than competitors was considered as a competitive advantage, and thus the organization focused on awareness, knowledge and information (Herovitz, 2003). Today the most important concern for organizations is to develop strategies that will ensure the organization in today's competitive environment (Mintzberg and Lemble, 2001). Strategy is an approach to create a competitive advantage and its patterns for competitive environment are effective. Competitive environment governs not only in business but also in the military, political, sports and any space where the competition rules govern (Ghafarian, 2005). Various methods have been proposed to develop strategies but according to David (1382) challenging problem during developing this strategy is that a high percentage of projects failed in organizations. It provides managers with greater sensitivity. Since according to formulate the strategies with direct supervision of managers, any failure to implement developed strategies can be a great loss for them and the organization. One of the strategy developing methods is using SWOT analysis. The analysis attempts to develop strategy by identifying the opportunities and threats as well as the strengths and weaknesses of the strategy according to the organization's requirements (Carolina, 2006). The study also sought to answer this question, given the threats and opportunities and the strengths and weaknesses what is the best strategy for electricity Distribution Company of Khoozastan?

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#### Research Literature

Strategy Definitions and Concepts

A strategy is a comprehensive program which shows how the company achieves its mission and objectives (Hangr, 2005).

Strategy is an overall and general program of activities by them institute plans to achieve its long term goals in a dynamic environment (Pearce, 1994).

Strategy is a tool that the company can achieve its long-term goals by using it (David, 2002). The strategy is a program to create an interaction with environmental factors that are often contradictory, to meet the goals of the organization (Daft, 2001). Strategies maximize competitive advantage and minimize the lack of competition (Hangr, 2005).

The Importance of Strategy Formulation

One of the most important steps in strategic management is strategy developing and organizationally changing model of the business includes social objectives of the company, existential philosophy and objectives of the necessary implementing policies to achieve the objectives of the organization. Strategic planning is a systematic approach that supports strategic management process and ensures all measures which leads to defining objectives and determining appropriate strategies to achieve the goals of the organization (Shams, 2003). Scientists described several reasons for the necessity of developing the strategic management in the organizations as follows:

- 1- Changes in the world today;
- 2- Increasing risk of errors;
- 3- High cost of mistakes;
- 4- Economic problems;
- 5- Lack of resources
- 6- The government needs to increase revenue sources
- 7- Reducing reliance on exports' revenues of raw materials such as oil (Hamidizade, 2003).

Levels and Hierarchy of Strategy

An organization usually examines three types of strategies:

- 1- The overall strategy of the organization: describes the orientation of the major companies in the general attitude of the company to develop and manage a variety of businesses and product lines. Grand strategy of the organization is formed of leading, analysis strategy and portfolio strategy and supervision strategy. Leading strategy makes sense in forms of words such as stability, development and supervision. Analysis and portfolio strategy is related to decisions on a range of businesses that company should invest its money and management efforts in them (Gould and Campbell, 1994). Supervision strategy considers the company in terms of usable resources and capabilities in the creation of added value and synergies of the administrators (Hangr, 2005).
- 2- The strategy of business or sector: they usually are run on the main product or in business units or main sectors of organization and they focus on improving the competitive position of goods and services or in a particular industry or a particular market segment. Business strategies are consisted of competitive and partnerships strategies. Competitive strategies indicate competition of the company in the industry (Pirso, 2002). In Porter's point of view there are three categories of competitive strategy: distinguishing, cost leadership and focus (Porter, 2005).
- 3- Collaborative strategies are those strategies used for a competitive advantage in an industry through collaboration with other companies not fighting them. The main type of partnerships strategy is alliance strategy (Hangr and Vilen, 2005).
- 4- Functional strategy: functional strategy refers to cases related to the functional activities and operations of the Company. Programs at this level of strategy are often described within organizations sophisticatedly, but it should be noted that such programs should be directed and controlled using some basic strategic considerations. For example, the changes in the type of products should be done according to the company's basic strategy framework. Always at this level of strategy, fundamental flaws and bugs in the program can bring disastrous results for the company (Esmaielpour, 2007).

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#### SWOT Matrix

Formulating an organization's strategies include analysis of the external and internal organization environment, analysis of company's choices (strategies) is done by analyzing both internal and external factors and identifying the best strategies through the evaluation of options based on the proportional action (Robinson, 1994). The most common strategy developing tool is the SWOT matrix, which is due to the extraordinary ease of implementation and transparency has become the most common way of strategy developing.

SWOT is one word stands for strengths, weaknesses, opportunities and threats. SWOT matrix is a strategic planning tool used to evaluate the strengths and weaknesses of an organization, opportunities and environmental threats facing it. The source and origin of the SWOT analysis is based on 1960 and it is attributed Albert Humpry who conducted a research project at Stanford University in the 1960s and 1970s using data from Fortune 500 organizations. SWOT analysis is designed in the preliminary stages of deciding on the one hand, and as a prelude to planning strategic management on the other hand and is run by individual and group users and if it is used correctly, it can provide a basis for setting strategy (Kajanus *et al.*, 2004). SWOT analysis is an important tool for decision support and commonly is used as a tool to systematically analyze the internal and external environment of the organization (Kurtila *et al.*, 2002). SWOT analysis is one of the most powerful strategic tools seeking to maximize strengths and opportunities, and on the other hand, minimize the threats and changing weaknesses into strength (Arsalan *et al.*, 2008). The matrix is composed of a two-dimensional grid coordinates that each of the 4 regions represents a set of strategy. These strategies are:

Invasive strategies (SO): strategies to take advantage of environmental opportunities using the strengths of the organization

Conservative strategies (WO): strategies to use potential advantages that lie in environmental opportunities, to compensate for weaknesses in the organization.

Competitive strategies (ST): strategies of using the organization's strengths to avoid threats

Defensive strategies (WT): strategies to minimize losses caused by the threats and weaknesses (Amini and Khabbaz Bavil, 2008). SWOT model is presented in the table below.

Table 1: Pesonen SWOT matrix (2001).

SWOT		External factors	
		Opportunities	Threats
Internal factors	Strengths	Aggressive strategy (SO)	Competitive Strategy(ST)
	Weaknesses	Conservative strategy (WO)	Defensive strategy (WT)

## Research Questions

- 1. According to the purposes and mission of the Electricity Distribution Company, which are the strategies for achieving them?
- 2. What are factors and the strengths and weaknesses of the internal environment of Electricity Distribution Company?
- 3. What are threats and opportunities arising from the external environment of Electricity Distribution Company?
- 4. According to the assessment of internal and external factors in Electricity Distribution Company what is its strategic position and what is the proper functional strategy?

## MATERIALS AND METHODS

The present study can be considered an applied research based on the purpose of research. The research method is descriptive one that is a subset of survey research.

According to experts and specialists in electricity distribution company the statistical population is to run the Delphi method and determining the components effective on the strategy development and 20 experts

are identified and selected. As a result in this research, sampling is theoretical or judgmental and purposeful sampling will be used for sampling.

At the beginning an open questionnaire was used to identify factors affecting implementation. In the second stage after identifying 34 questions, final questionnaire of Delphi Fuzzy and AHP based on these questions was presented in the form of the 5-choice Likert spectrum.

In this study after collecting data through questionnaires and doing experts paired comparisons, criteria and sub-criteria weights were calculated using AHP method and the final results of rankings were determined by TOPSIS. EXPERT CHOICE software is used to run AHP method and EXCELL software is used to run TOPSIS method.

To verify the AHP questionnaire reliability rate adaptation of AHP questionnaires is used. The Cronbach's alpha coefficient in this study is provided in table 1:

Table 2: Evaluation of reliability of research tool

Confirm / rejection of reliability	alpha coefficient	Number of Questions
Confirm	0.745	34

## Data Analysis

First Step

The Initial Questionnaire Distribution (Defining Linguistic Variables)

Questionnaire of the present study has been designed aimed at obtaining expert opinion on the compliance with the criteria and standards of the model, so the experts have expressed their approval rate by the verbal variables like strongly disagree, disagree, no idea, agree, strongly agree. Since the different characteristics of people affect their subjective interpretations of the qualitative variables therefore, the experts answered the questions with the same mentality by defining the variables. These variables are defined according to Table (3) in the form of triangular fuzzy numbers.

Table 3: Triangular fuzzy numbers of linguistic variables

Final fuzzy number	Triangular fuzzy number	Verbal variables
(0.9375)	(0,0.25,1)	Strongly agree
(0.75)	(0.15, 0.15, 0.75)	agree
(0.5)	(0.25, 0.25, 0.5)	No idea
(0.25)	(0.15, 0.15, 0.25)	disagree
(0.0625)	(0.25,0,0)	Strongly disagree

Final fuzzy numbers in the above table are calculated using Minkowski formula as follows: Formula (1)

$$\chi = m + \frac{\beta - \alpha}{\Delta}$$

With regard to the proposed options and verbal variables defined in the questionnaire, the results of the surveying responses are provided in Table 1. According to this table, the fuzzy mean of each component is calculated according to the following equations:

Formula (2)

$$A_i = (a_1^{(i)}, a_2^{(i)}, a_3^{(i)}), i = 1, 2, 3, ..., n$$

Formula (3)

$$A_{ave} = (m_1, m_2, m_3) = (\frac{1}{n} \sum_{i=1}^{n} a_1^{(i)}, \frac{1}{n} \sum_{i=1}^{n} a_2^{(i)}, \frac{1}{n} \sum_{i=1}^{n} a_3^{(i)})$$

In this equation  $A_i$  reflect the views and opinions of expert ith and  $A_{ave}$  represents experts view average. The results of these calculations are shown in Table (4).

Table 4: Calculating experts view average resulted from the first survey						
De fuzze d	β	α	m	Agent		
ave rage						
opportuniti						
0.85	0.07	0.21	0.89	Weak competitors		
0.80	0.10	0.20	0.83	The emergence of new markets for products		
0.77	0.11	0.23	0.80	Disinflation		
0.74	0.13	0.23	0.76	Increasing government focus on increasing the population		
0.82	0.09	0.21	0.85	Increasing electricity demand in the future		
0.84	0.07	0.22	0.88	Rate increase in energy prices in the future		
0.81	0.10	0.20	0.84	Industrialization and industry increasing need for electric power		
0.90	0.03	0.23	0.95	Privatization of the energy industry in the future		
0.90	0.03	0.23	0.95	governments' special attention to the energy-producing sectors		
Threats						
0.61	0.20	0.23	0.61	increasing government regulations		
0.90	0.03	0.24	0.95	skilled workforce shortage in the workplace		
0.91	0.02	0.24	0.96	Growing costs		
0.83	0.07	0.23	0.88	Supply of raw materials		
0.84	0.07	0.21	0.88	Raw material price increase		
0.88	0.04	0.23	0.93	Environmental problems and risks as a result of population pressure		
				on resources		
0.91	0.02	0.24	0.96	Extended periods of drought		
0.89	0.04	0.23	0.94	Increasing pressure on natural resources as a result of the spread of		
				consumerism in society.		
Strength						
0.80	0.10	0.21	0.83	efficient research and development		
0.82	0.08	0.22	0.85	Financial strengths		
0.87	0.05	0.22	0.91	High quality of products		
0.84	0.07	0.22	0.88	Skilled manpower		
0.81	0.08	0.23	0.85	Relationship with academic centers		
0.86	0.06	0.23	0.90	Participation in the electricity industry		
0.88	0.03	0.25	0.94	Communication with various organizations considering nature of		
				work		
0.83	0.08	0.23	0.86	Communication with various organizations considering nature of		
				work		
Weakness						
0.88	0.04	0.24	0.93	Poor industrial relations		
0.71	0.14	0.24	0.74	Management succession problems		
0.90	0.03	0.24	0.95	Poor credit for customer service		
0.75	0.12	0.23	0.78	The lack of up to date staff at the global level		
0.73	0.14	0.21	0.75	Lack of alignment with the overall goals of development programs		
0.77	0.11	0.23	0.80	The pressure drop in high consumption seasons		
0.90	0.03	0.23	0.95	The lack of efficient use of natural resources		
0.83	0.07	0.23	0.88	Lack of self-sufficiency in the production of parts and raw materials		
		z. <b>=</b> 2	2.00	and dependence on foreigners		
0.69	0.14	0.23	0.71	Lack of effective use of the organization's ability		
0.09	0.14	0.23	0.71	Lack of effective use of the organization's autility		

In Table 2 triangular fuzzy mean is calculated using the formula 2 and then using Minkowski formula (Formula 1) it has been defuzzed. The obtained final mean indicates the intensity of experts' agreement, with each of the components of the study model.

Table 5: Calculating the mean response of experts

Defuzzed average	β	α	m	Factors
0.91	0.02	0.24	0.96	1) weak competitors
0.89	0.04	0.24	0.94	2) the development of new markets for products
0.88	0.04	0.24	0.93	3) reducing inflation
0.89	0.04	0.24	0.94	4) increasing the government concentration on population
				increase
0.9	0.03	0.24	0.95	5) increasing electricity demand in the future
0.88	0.04	0.23	0.93	6) rate increase in energy prices in the future
	0.02	0.25	0.96	7) industrialization and the increasing industry need for
				electric power
0.92	0.02	0.24	0.98	8) privatization of the energy industry in the future
0.92	0.02	0.24	0.98	9) Pay special attention to the energy-producing sectors
0.89	0.04	0.24	0.94	10) increasing government regulations
0.93	0.01	0.25	0.99	11) Lack of skilled workforce in the workplace
0.93	0.01	0.25	0.99	12) increasing costs
0.9	0.03	0.24	0.95	13) Supply of raw materials
0.91	0.02	0.24	0.96	14) increasing the cost of raw materials
0.9	0.03	0.23	0.95	15) environmental problems and risks as a result of
				population pressure on resources
0.93	0.01	0.25	0.99	16) extended periods of drought
0.91	0.02	0.24	0.96	17) Increasing pressure on natural resources as a result of
				promoting a culture of consumerism in society.
0.9	0.03	0.24	0.95	efficient research and development
0.91	0.02	0.24	0.96	Financial strengths
0.92	0.02	0.24	0.98	High quality of products
0.91	0.02	0.24	0.96	skilled manpower
0.89	0.04	0.24	0.94	Association with academic centers
0.91	0.02	0.24	0.96	Public participation in the electricity industry
0.93	0.01	0.25	0.99	Communication with various organizations considering
				nature of work
0.9	0.03	0.24	0.95	Communication with various organizations considering
				nature of work
0.92	0.02	0.24	0.98	Poor industrial relations
0.88	0.03	0.25	0.94	Management succession problems
0.93	0.01	0.25	0.99	Management succession problems
0.87	0.05	0.24	0.91	1) The lack of up to date staff at the global level
0.88	0.04	0.23	0.93	Lack of alignment with the overall goals of development
				programs
0.86	0.05	0.25	0.91	The pressure drop in high consumption seasons
0.93	0.01	0.25	0.99	The lack of efficient use of natural resources
0.91	0.02	0.25	0.96	Lack of self-sufficiency in the production of parts and raw
				materials and dependence on foreigners
0.84	0.06	0.25	0.89	Lack of effective use of the organization's ability

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The Second Stage

The Second Version of the Questionnaire Distribution

At this stage after showing the first questionnaire results for each patient it was trying to inform preliminary results of each question and people general answer to elites and then the second questionnaire was given to the people. Responses results are provided in table (5) and the fuzzied results of the studied options are presented in table (5):

According to the views presented in the first stage and comparing them with the results of this stage, if the difference between the two is less than too low, in this case the rating process will be stop.

$$s(A_{m2}, A_{m1}) = \left| \frac{1}{3} \left[ (a_{m21} + a_{m22} + a_{m23}) - (a_{m11} + a_{m12} + a_{m13}) \right] \right|$$

According to the above formula the difference between experts' mean views at first and second groups can be calculated. The difference between the first and second stage is provided in the table (6):

Table 6: Defuzzed mean difference:

Factors	Average defuzziation	Average defuzziation	The mean difference between
	of second stage	of first stage	communities
1) weak competitors	0.91	0.85	0.06
the development of new markets for products	0.89	0.8	0.09
1) reducing inflation	0.88	0.77	0.11
increasing the government concentration on population increase	0.89	0.74	0.15
2) increasing electricity demand in the future	0.9	0.82	0.08
3) rate increase in energy prices in the future	0.88	0.84	0.04
4) industrialization and the increasing industry need for electric power	0.91	0.81	0.10
5) privatization of the energy industry in the future	0.92	0.9	0.02
6) Pay special attention to the energy-producing sectors	0.92	0.9	0.02
7) increasing government regulations	0.89	0.61	0.28
8) Lack of skilled workforce in the workplace	0.93	0.9	0.03
9) increasing costs	0.93	0.91	0.02
10) Supply of raw materials	0.9	0.83	0.07
11) increasing the cost of raw materials	0.91	0.84	0.07

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12) environmental problems and risks as a result of population pressure on resources	0.9	0.88	0.02
13) extended periods of drought	0.93	0.91	0.02
14) Increasing pressure on natural resources as a result of promoting a culture of consumeris m in society	0.91	0.89	0.02
efficient research and development	0.9	0.8	0.1
15) Financial strengths	0.91	0.82	0.09
High quality of products	0.92	0.87	0.05
skilled manpower	0.91	0.84	0.07
16) Association with academic centers	0.89	0.81	0.08
17) Public participation in the electricity industry	0.91	0.86	0.05
18) Communication with various organizations considering nature of work	0.93	0.88	0.05
19) strong infrastructure in various sectors of energy production	0.9	0.83	0.07
20) Poor industrial relations	0.92	0.88	0.04
21) Management succession problems	0.88	0.71	0.17
22) Poor credit for customer service	0.93	0.9	0.03
23) The lack of up to date staff at the global level	0.87	0.75	0.12
24) Lack of alignment with the overall goals of development programs	0.88	0.73	0.15
25) The pressure drop in high consumption seasons	0.86	0.77	0.09
26) The lack of efficient use of natural resources	0.93	0.9	0.03
27) Lack of self- sufficiency in the production of parts and raw materials and dependence on foreigners	0.91	0.83	0.08
28) Lack of effective use of the organization's ability	0.84	0.69	0.15

As the above table shows the expert group members have reached consensus on most components and disagreement in the first and second stages are much less than the threshold (0.1) so the rating of these components will be stopped.

Third Stage

The Third Version of the Questionnaire Distribution

At this stage after showing the results of the second questionnaire for each person it was tried to inform preliminary results of each question and general answers of people to elites, then the third questionnaire was given to the people. The fuzzed results of the study options are expressed on the table (7):

Table 7: Calculating the experts' response mean

Defuzzed average	β	α	m	Factors
0.87	0.11	0.23	0.80	reducing inflation
0.85	0.13	0.23	0.76	increasing the government concentration on population increase
0.84	0.10	0.20	0.84	industrialization and the increasing industry need for electric power
0.84	0.20	0.23	0.61	increasing government regulations
0.87	0.14	0.24	0.74	Management succession problems
0.87	0.12	0.23	0.78	The lack of up to date staff at the global level
0.82	0.13	0.22	0.70	Lack of alignment with the overall goals of development
				programs
0.82	0.09	0.22	0.78	Lack of effective use of the organization's ability

According to the presented views at the second stage and comparing it with results of this stage, if the difference between the two is less than the threshold is too low, in this case the rating process stops.

$$s(A_{m2}, A_{m1}) = \left| \frac{1}{3} \left[ (a_{m21} + a_{m22} + a_{m23}) - (a_{m11} + a_{m12} + a_{m13}) \right] \right|$$

According to the above formula the difference between experts' views in first and second groups can be calculated. The difference between the first and second stage has presented in the table (8) is:

Table 8: Defuzzed mean difference:

Factors	Average defuzziation	of	Average defuzziation of first stage	The mean difference between communities
	second stage			
reducing inflation	0.88		0.87	0.01
increasing the government concentration on population	0.89		0.85	0.04
increase				
industrialization and the	0.91		0.84	0.07
increasing industry need for				
electric power				
increasing government	0.89		0.84	0.05
regulations				
Management succession problems	0.93		0.87	0.06
The lack of up to date staff at the	0.88		0.87	0.01
global level				
Lack of alignment with the	0.87		0.82	0.05
overall goals of development				
programs				
Lack of effective use of the	0.84		0.82	0.02
organization's ability				

As the above table shows the expert group members have reached consensus at all the components and the difference in the first and second stages less than the threshold has been very low (0.1), so rating of these components will be stopped.

External factor evaluation matrix (EFE)

External factor evaluation matrix (EFE) is the result of an external factors strategic review. This matrix formulates and evaluates the opportunities and threats of the external environment. For the preparation of this matrix, the following steps should be taken:

- 1- After studying the external factors, known factors are listed, firstly factors that lead to future opportunities and then factors that threaten the region, will be written.
- 2- The factors listed are given weight or coefficient. These coefficients range from 0 (no important) to 1 (very important. The coefficient indicates the relative importance of the factors in terms of success of the area in the concerned situation. The sum of these coefficients must be equal to one.
- 3- When ranking the external factors that are facing opportunities and threats, the opportunities are given rank 3 and 4 and threats are given rank 1, 2. Level 3 means relative chance and level 4 means fundamental opportunity. Rank 2 is the relative threat and rank 1 means a significant threat.
- 4- Each factor coefficient is multiplied by the corresponding rank to obtain a final score.
- 5- External factors score will be determined by the end score of each of the factors.

**Table 9: External Factors Evaluation Matrix** 

Final	Importance	Ranking	Opportunities	Row
score	coefficient	o .		
0.085	0.034	2.5	Weak competitors	O1
0.159	0.075	2.8	The emergence of new markets for products	O2
0.273	0.079	3	reducing inflation	O3
0.085	0.023	2.5	increasing the government concentration on population increase	O4
0.130	0.045	2.9	increasing electricity demand in the future	O5
0.092	0.034	2.7	rate increase in energy prices in the future	O6
0.204	0.068	3	industrialization and the increasing industry need for electric power	O7
0.204	0.068	3	privatization of the energy industry in the future	O8
0.237	0.074	2.3	Pay special attention to the energy-producing sectors Threats	O9
0.095	0.079	2.1	increasing government regulations	T1
0.096	0.074	1.3	Lack of skilled workforce in the workplace	T2
0.179	0.085	1.2	increasing costs	T3
0.039	0.017	2.3	Supply of raw materials	T4
0.059	0.028	1.2	increasing the cost of raw materials	T5
0.117	0.090	1.3	environmental problems and risks as a result of population pressure on resources	Т6
0.117	0.09	1.3	extended periods of drought	T7
0.077	0.051	1.5	Increasing pressure on natural resources as a result of promoting a culture of consumerism in society	T8
2.18	1			total

If the final score of the external factors is 1 to 5.2, it represents a threat and if it is 2/5 to 4 it means opportunity. Therefore, the number 2/18 in Table (9) indicates the relative threat in the region.

## Internal Factors Evaluation Matrix (IFE)

Internal factors evaluation matrix is the result of a strategic review of internal factors. This matrix formulates and evaluates the original strengths and weaknesses.

- 1- After reviewing internal factors, known factors are listed; firstly the strengths and then weaknesses are identified and written.
- 2- The factors listed are given weight or coefficient. These coefficients range from 0 (no important) to 1 (very important). The coefficient indicates the relative importance of the factors in terms of success of the area in the concerned situation. The sum of these coefficients must be equal to one.
- 3- When ranking the internal factors, the strengths are given rank 3 and 4 and weaknesses are given rank 1, 2. Level 3 means relative strength and level 4 means fundamental s. Rank 2 is the relative weakness and rank 1 means a significant weakness.
- 4- Each factor coefficient is multiplied by the corresponding rank to obtain a final score.
- 5- Internal factors score will be determined by the end score of each of the factors.

**Table 10: Internal Factor Evaluation Matrix** 

Final	Importance	Ranking	Strengths	Row
score	coefficient			
0.230	0.072	3.2	efficient research and development	S1
0.192	0.062	1.3	Financial strengths	S2
0.153	0.052	9.2	High quality of products	<b>S</b> 3
0.246	0.077	2.3	skilled manpower	S4
0.308	0.077	4	Association with academic centers	S5
0.125	0.043	9.2	Public participation in the electricity industry	<b>S</b> 6
0.308	0.081	8.3	Communication with various organizations considering nature of work	S7
0.288	0.072	4	strong infrastructure in various sectors of energy production weaknesses	S8
0.074	0.067	1.1	Limited natural resources (water)	W1
0.066	0.033	2	Creative and skilled manpower shortage	W2
0.170	0.081	1.2	The lack of efficient use of natural resources	W3
0.074	0.053	4.1	The population relying on agriculture and livestock for income and employment	W4
0.079	0.053	5.1	Governing state management on the resource (water)	W5
0.073	0.043	7.1	Environmental risks	W6
0.050	0.024	1.2	Governing fatalism and lack of change in cultural values	W7
0.059	0.033	8.1	Beneficiaries difference between the top and bottom of the dam	W8
0.161	0.077	1.2	The lack of efficient use of water resources	W9
2.65	1			total

If the final score of the internal factors is 1 to 2.5, it represents weakness and if it is 2.5 to 4 it means strength. Therefore, the number 2.65 in Table (10) indicates the relative strength in the region.

# **Developed Strategies**

At first internal and external factors were identified by forming several analytic meetings with the heads, and some questionnaires were prepared about the opportunities, threats, strengths and weaknesses. Then, according to extracted data from the questionnaires, internal and external factors evaluation matrix was regulated using the SWOT analysis matrix of strategies. At the end using the grid matrix of internal and external factors (IE), the optimal strategies were selected and recommended among presenter strategies.

Table 11: Strategies raised by Experts

(Strengths) S	(opportunities) O	Strategy	Row
S1,2	01,2,3	Attracting external and internal investment	SO1
S5,8,7	O4,5,6,8	Developing new services	SO2
S(Strengths)	T(Threats)	strategy	
S6,7,8	T1,6	Focus on cost reduction	ST1
S1,4,7	T2,3,4	Increasing uptake of new resources	ST2
S1,4	T1,3,4	Expansion capabilities of staff	ST3
S5,6,7	T6,7	Focus on production infrastructure	ST4
S4,5,6,7	T2,3,4	Customer focus through improving staff communication	ST5
W(Weakness)	T(Threats)	strategy	
W1,3,5,9	T1,5,6,7	Developing relationships with other organizations	WT1
W1,2,3,6,9	T1,7,8	Self-sufficiency and a focus on local produce	WT2
W1,3,6	T1,2,6	Using seasonal storage	WT3

Table 12: Internal and external matrix checkered (IE)

Final score matrix evaluation of internal factors

1	2.5	2.65	4	matrix
Conservative Home (2)		Offensive Home (1)		P Pactor evaluation ma
Defensive Home (4)		Competitive Home (3)		2.5 81.2 Final score external fac

As Table 12 shows, focus on cost reduction is at square (3) or competitive part. This point indicates that focus on cost reduction has an appropriate condition in terms of internal factors but in terms of external factors it is not in good condition.

# Inferential Analysis Results

In studying «SWOT» matrix dimensions by Delphi method, some indicators have been identified that have been presented in the table (13):

Table 13: SWOT matrix dimensions of Electric Company

# Weak competitors

the development of new markets for products

reducing inflation

increasing the government concentration on population increase

increasing electricity demand in the future

rate increase in energy prices in the future

industrialization and the increasing industry need for electric power

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privatization of the energy industry in the future

Pay special attention to the energy-producing sectors

increasing government regulations

Lack of skilled workforce in the workplace

increasing costs

Supply of raw materials

increasing the cost of raw materials

environmental problems and risks as a result of population pressure on resources

extended periods of drought

Increasing pressure on natural resources as a result of promoting a culture of consumerism in society efficient research and development

Financial strengths

High quality of products

skilled manpower

Association with academic centers

Public participation in the electricity industry

Communication with various organizations considering nature of work

strong infrastructure in various sectors of energy production

Poor industrial relations

Management succession problems

Poor credit for customer service

The lack of up to date staff at the global level

Lack of alignment with the overall goals of development programs

The pressure drop in high consumption seasons

The lack of efficient use of natural resources

Lack of self-sufficiency in the production of parts and raw materials and dependence on foreigners

Lack of effective use of the organization's ability

## Matrix Analysis Results «SWOT»

In considering strategies necessary for the electricity company it was determined that strategy of focus on the cost as the most important strategy required for the implementation of activities has been approved. The results of this analysis showed that it is necessary to implement defensive and aggressive strategies with the competitive strategies.

## Research Suggestions

Organization focus should be on identified strengths on strengthening these factors, also the continuous assessment of the organization situation in these sectors can be effective in the continuous improvement of the organization.

Weaknesses identified in this sector have been mainly structural and managerial weaknesses that need to be studied and to be considered by organizations' experts.

Organizational threats are mostly environmental threats and it is required to provide different scenarios to deal with uncertainty of these threats while continuously evaluate them.

It is necessary for organization to identify and observe its environmental opportunities. Also it is required to check the performance of competitors in fields related to clients to identify problems and opportunities will be well used. The strategy study showed that using the strategy focus on the cost is the best strategy for the current situation of Electricity Company. The following suggestions are offered to improve the organization in this field:

Factors such as removing cultural and legal barriers have been emphasized to reduce the cost of services and attention to issues such as the need for managers' serious thought to reduce the cost, it should be mentioned to change organization mechanism, continuing educating reform of work structures, serious attention to cost management, liquidity gap, balancing cost and value of creating social capital, etc.

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To decrease cost and for savings we should consider strategic cost reduction in addition to disrupt the laws for existing structures. Furthermore, cost reduction is not a threat but it is an opportunity to activate unknown potential opportunities to eliminate waste and create improvements and finally opens the doors on the market.

Reducing the cost is considered from two dimensions:

A-When we want to reduce costs by saving our resources.

(B) When we are looking to cut costs through reduction the cost of the resources, it means we use the same resources at a lower price; and above all the government benefits much of the mess. If they provide services or products without spillage off and this surplus will be prevented, in addition to remove false employment and false profit, we will have a major social problem. Because our economy productivity is low, this has a social outcome definitely appears somewhere and surplus manpower is one of the consequences.

Government on one hand is a major customer and on the other hand a big waster.

In cost reduction process savings resulting from the information must be considered. To-date information is one of the origin of money and a source of economy. Another savings is savings resulting from strategic alliances which we are deprived of it. In fact, on a small scale with limited volume and ignorance and without great cooperation, we want to reduce the cost and it is obvious that these issues encounter us with some limitations. In response to the question of what kind of costs should be addressed in the process of implementing the strategy to reduce costs? We would say that the most important headlines that can be considered in this connection by organizations can be summarized as follows:

A - Efficient use of all production and service capacities and imposing proper management of maintenance and repairing all equipment in clinics, hospitals or organization.

B-Training and developing a culture of growth and productivity and targeting forces to improvement indicators through the recovery groups and etc.

C. Management of the capital stagnation costs

D-management on energy costs and waste of other resources

E-Reducing waste management of organizational resources, raw materials and components

F-promoting quality

G-The process improvement and upgrading of services in order to increase the speed, accuracy and responsiveness to the needs of clients and customers;

H-Process view of organizational structure (organization reengineering)

J-attention to information systems and information recycling in organization to give speed and accuracy for decision making in the organization

K. Identification and elimination of non-value added activities, parallel activities -redoing.

L- Decreasing share of human resources in ministerial departments to the executive and production departments;

K-activate recommendation system, promote teamwork and create a motivational and assessment system of the organization;

N-service delivery innovation;

An organization with static structure, behavior, and the management never can have a dynamic and efficient management. Chronic diseases cannot be treated by normal treatments. Even if the main cause is lost, the diseases becomes the cause and diseases in managements conditions and procedures creates management diseases that one of them is high cost of services or goods that should be treated in a timely manner and with resistance to change, and lack of decision-making in accepting cost reduction systems is not possible. Manufacturing and services, and medical institutions should be changed to dynamic and rapid organizations by reducing the cost and reducing imprisonment load of funds and coordinating with the rules of customer-orienting.

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