#### STRATEGIC PLANNING FOR A LUBRICANT MANUFACTURING COMPANY

Using SWOT Analysis, QSPM model (one of the *Top companies of Iranian Oil, Gas and Petrochemical Products Exporters' Association*)

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#### **ABSTRACT**

Increase in competition in local and global markets, market globalization, customers' limitations considering the producers, lack of exclusive conditions and improvement in complete competition condition governance, rapid changes in technology, swift innovations in products have led to a complication in organizations so that preserving and improving organization situation would be impossible without a daily consideration and reacting to the environmental variable. Strategic management process provides a close estimation of environmental changes and more preparation to react toward changes and organization internal/external pressures. Applying a specific strategy based on long-term goals could result in an optimal usage of organization internal resources for taking the environmental opportunities and overcoming the threats. Using the SWOT analysis and QSPM models, the present paper tries to methodize an appropriate strategy for a lubricant manufacturing company.. After completing the checklists provided to assess the strength points, weak points, opportunities, and threats, the weight and importance of each factor was defined by the company managers and they were interviewed for final conclusions. Based on the acquired data, EFE and IFE matrixes were calculated and the results were analyzed on diagrams. The results showed that the company was placed in the region of diversity strategies. These results were also confirmed by QSPM matrix. The strategy of participate in fairs to present staff and product for costumers gained the highest score and therefore, became the top priority.

**Keywords**: Strategic Planning, SWOT Analysis, IFE Matrix, EFE Matrix, OSPM Model.

## 1. INTRODUCTION

There are a few numerous definitions for the term *strategy*, and in order to cast some light upon its meaning we will first mention a few other terms. Strategy of an organization is devising plans to direct operational activities including products and services that will be presented to customers. The strategy also consists of defining goals and missions that must be fulfilled, as well as the logistics and distinguishing sources to reach the original goals(Rahmanseresht & Mohebali, 2003).

Strategies are tools that companies can use to reach their long-term goals. In other words, a strategy is a comprehensive plan which is defined within the boundaries of company's goals, benefits, and environmental factors which helps the company to reach its goals when constructed and executed in a proper manner (David, 2000). Since there are numerous strategies, only those useful and practical ones must be taken into account. In general, not all selected strategic plans will be part of the organizational strategies; hence strategy analysis is used to select only the desired strategies. Selecting a strategy includes three main steps. (Rahmanseresht, 2005):

#### 1.1Creating the strategy

The purpose here is to define different strategic variables to model the desired subject using a matrix or a decision-making model that finally results in making a decision which should be based upon main strategy of the organization. By choosing the most suitable strategy, we can obtain how to reach goals and make a balance between the organization and its environment (Ahamdi & alirezaei& tajedini,2003). Strategies can be

determined by using different tools that include SPACE, BCG, IE, GE, and Main Strategy Matrix. However, since the SWOT method is commonly used and is the simplest and most lucid one, we will refer to this tool throughout this article (Rahmanseresht, 2005)

#### 1.2Evaluation of Strategy

During designing and forming the strategy stage it is not possible to determine all plans. Hence, planning a strategy is usually done based on some general information about the selection criteria. During the investigation if more specific selections are discovered, more accurate information will be provided that may casts doubts on the first selection of the strategy. Therefore, with using suitable methods, the best selections will be identified and selected (Ahamdi & alirezaei& tajedini,2003).

In order to evaluate strategies first it is essential to identify suitable indices for evaluation of strategies. Strategy evaluation will be based on main external (economical, political, legal, social, Ecological, and cultural), internal (management, marketing, finance, accounting, production, operations, research and development, and IT), environmental, and innovative factors.

Since opportunities and threats are caused by external factors, and weak and strength points from internal factors, in this model evaluation of strategies is considered by taking into account the opportunities, threats, weak and strong points. This will be a good foundation for formulating the strategy. Yet, observations have revealed that SWOT analysis shows weakness in evaluation and measurement and this weakness could be covered by using QSPM model assuring in a more suitable strategy design (Kazemi, 2001).

## 1.3Strategy selection

In the process of strategic planning, one of the most important tasks is to create strategies that help companies reach their defined goals in which important internal factors, major environmental factors and missions are considered. This step benefits from all previous studies and goal-setting activities and after creating strategies, each must be given a priority based on its importance after which they must be selected considering the stakeholders and relevant benefits (abtahi, 1989).

In this article our goal is to create a suitable strategy for Kaveh Ghatran Motor Oil Company which produces different Oils (engine oil, gearbox, Grease, and etc) and we will use SWOT analysis and SQPM method.

## 2. INVESTIGATION METHOD

A checklist to determine the company's weak and strong points, production industry potential, actual opportunities and threats, and denials were distributed among the executives and production manager. After receiving the checklist the first interview was conducted with them' to agree and finalize weak and strong points, and opportunities and threats as well.

Then the above mentioned authorities were requested to provide an evaluation mark from Zero to 100 after which, by using NORM METHOD, they were normalized and their weight was obtained and finally an importance factor (from 1 to 4) for each element was planned considering the following definitions:

- "4" for excellent opportunity or great strength
- "3" for normal opportunity or normal strength
- "2" for normal thread or normal weakness
- "1" for critical thread or critical weakness

After that, by using SWOT and QSPM tools, the strategies were prioritized. The information related to weights measurements were taken from IFE and EF tables and were transferred into the right column of QSPM matrix. All of the strategies in SWOT matrix were written in the above row and attraction mark (AS from 1 to 4) was considered. The importance factor (TAS) is equal to weight multiplied by AS. Finally for each strategy, the importance factors (TAS) were added up and the best programs were determined in order of their priorities (Meredith E. David, 2009).

## 3. RESEARCH FINDINGS

## 3.1SWOT Model

Firstly, we will search internal and external environments of Ghatran kaveh Co regarding technological innovations. Secondly, we will do feasibility study regarding application of current and potential production of co by customers and finally we will investigate company's ability regarding production (Thomas & David, 2010).

Table 1 - External Factors Evaluation Matrix EFE (Ali Ahmadi, Alireza, 2008)

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	External Strategic Factors	Weigh	Scor	Weighte								
	Opportunity	t	e	d Score								
O1	Possibility of purchasing new machines to eliminate the last production step	3	0.09									
O2	Possibility of expanding the market in international markets	0.05	3	0.15								
O3	Gasoline price increase due to removal of subsidies	0.04	3	0.12								
O4	Product export	0.07	4	0.28								
O5	Existence of International partners and investors	0.11	4	0.44								
O6	Possibility of internal markets expansion	0.07	3	0.21								
Ο7	Lack of government participation in this industry	0.02	3	0.06								
O8	Existence of management consulting teams	0.03	3	0.09								
O9	Having factories abroad	0.05	4	0.2								
O10	Membership in executives teams of different unions products exporters in Oil, Gas, and petrochemical	0.02	3	0.06								
Threa	it											
T1	Lack of commitment from used oil providers to supply raw materials (supply chain problems)	0.11	1	0.11								
T2	Lack of specific laws for buying/selling used oil (problems in supply chain)	0.07	1	0.07								
Т3	Lack of satisfying market demands based on effective product varieties	0.07	1	0.07								
T4	Lack of a good reputation of products brand in market	0.06	1	0.06								
T5	Lack of existence of well-known union in this industry (problems in supply chain)	0.04	2	0.08								
Т6	Lack of attending fairs	0.02	2	0.04								
T7	Improper view of customers for refined used oil	0.06	2	0.12								
Т8	International sanctions	0.02	2	0.04								
Т9	Lack of government support for refined second-hand oil producers	0.03	2	0.06								
T10	Reduction in raw materials due to removal of subsidies	0.03	1	0.03								
				2.38								

Table 2 - Internal Factors Evaluation Matrix IFE (Ali Ahmadi, Alireza, 2008)

	Internal Strategic Factors	117 - 2 - 1- 4	G	Weighted
	Strenghts	Weight	Score	Score
S1	High quality	0.12	4	0.48
S2	Good Customer trust	0.07	4	0.28
S3	Having engine oil standards	0.07	4	0.28
S4	Using one-solution software to handle stock, accounting and sale	0.03	3	0.09
S5	Availability of ADDETIVE from outside of the country	0.05	3	0.15
S6	Two- step production	0.04	3	0.12
S7	Exempt from tax due to exports	0.04	3	0.12
S8	Experienced staff in production	0.07	3	0.21

S9	Having equipped labs	0.06	4	0.24
S10	Guaranteed demand market for products under productions (half-built)	0.05	3	0.15
Weakn	ness			
W1	Lack of marketing and advertisement	0.08	1	0.08
W2	Dominating Low-profit Wholesales instead of high-profit retail sales	0.06	1	0.06
W3	Not being able to reach to full production capacity due to lack of used oil supply (problems in supply chain)	0.04	2	0.08
W4	Lack of a specific system for providing used oil (problems in supply chain)	0.05	1	0.05
W5	Lack of obtaining and receiving regular reports	0.02	1	0.02
W6	Disagreement among shareholders	0.03	2	0.06
W7	Staff s' weak knowledge and experience	0.03	2	0.06
W8	Executives' traditional view	0.02	2	0.04
W9	Weak motivation systems	0.02	2	0.04
W10	Lack of pricing units and systems	0.05	2	0.1
				2.71

In table 1 and table 2, the weight measurements for IFE and EFE matrixes are calculated and their values are 2.71 and 2.38 respectively. In the next step, after evaluating Strength, Weakness, Opportunity and Threats (S, W, O, T), different strategies were transferred into strategic planning table.

## 3.1.1Different strategies

**SO Strategies:** Production of high quality products in consideration of foreign markets demand and new products with special ADDETIVES.

**WO Strategies:** Creation of a separate unit to supply used oil (separating it from sales unit), and determining strategies for marketing with a goal of increasing domestic and foreign markets share.

**ST Strategies:** Market and research expansion with use of information innovation (for advertisement & getting orders), participation in fairs for better introducing to customers, and co-operation with Department of Environment.

**WT Strategies:** expansion of skilled human resources, management and expansion of the brand (eliminating some products from production due to products varieties), increasing motivation of suppliers for better efficiency by using different methods such as providing a portion of the company's shares to suppliers

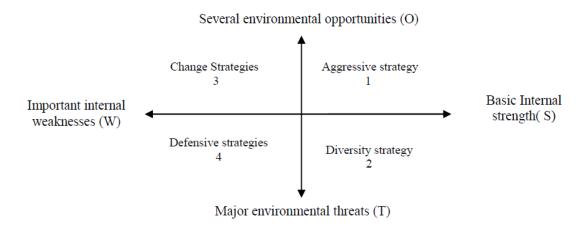


Chart 1 - Analysis of Strategies Matrix SWOT (Ali Ahmadi, 2008)

Noting this chart and the obtained results in IFE and EFE matrixes, the considered area is located in variety of strategies as shown in chart 2.

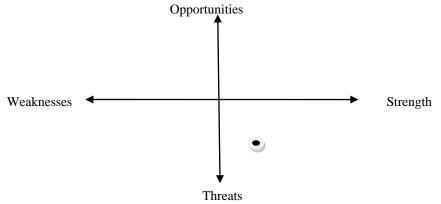


Chart 2 - Analysis of SWOT (Ali Ahmadi, 2008)

Considering that we are in variety of strategies zone, ST strategies are recommended for implementation. 1) Market and research expansion by using information innovation for advertisement & getting orders. 2) Participation in fairs for introducing to customers 3) co-operation with Department of Environment.

## 3.2Quantitative strategy planning matrix (QSPM)

After providing each factor with an Attraction Score (AS), TAS was calculated for each strategy. The QSPM matrix for Kaveh Ghatran motor oil is mentioned in table 4 (the numbers for Strength, Weakness, Opportunity and Threats are considered based on tables 1 and 2).

The result originated from SWOT matrix is confirmed in QSPM matrix, and as it can be seen ST-2, ST-1, and ST-3 strategies with score of 238, 220, 229 respectively are the ones that have the highest scores in QSPM matrix and they are considered the company's first priority strategies that are analyzed in table 3. Among these, attending fairs strategy to be introduced to customer has the highest score and it is therefore the company's first priority.

Table 3 - Quantitative strategic planning matrix- External factors (Ali Ahmadi, 2008) , (Meredith E 2009) IRSE

W	T-3	W	T-2	WI	Γ-1	ST-3		ST-3		ST-3		S	T-1	W	O-2	WO-1		S	O-2	S	0-1		Ir ts
T A S	A S	TA S	A S	TA S	AS	T A S	A S	T A S	AS	T A S	A S	T A S	A S	TA S	A S	TA S	A S	TA S	A S	point	Importan t strategic factor		
Op	portu	nity																					
9	3	3	1	3	1	6	2	3	1	6	2	6	2	9	3	9	3	9	3	3	1		
9	3	9	3	6	2	1 2	4	9	3	9	3	6	2	9	3	9	3	9	3	3	2		
9	3	6	2	3	1	3	1	9	3	6	2	6	2	3	1	6	2	6	2	3	3		
8	2	12	3	12	3	8	2	12	3	8	2	1 2	3	12	3	12	3	8	2	4	4		
4	1	12	3	8	2	1 6	4	12	3	8	2	1 2	3	8	2	8	2	12	3	4	5		
9	3	12	4	9	3	1 2	4	9	3	9	3	1 2	4	9	3	12	4	3	1	3	6		
6	2	6	2	9	3	3	1	6	2	9	3	6	2	9	3	12	4	3	1	3	7		
9	3	12	4	9	3	6	2	6	2	9	3	1 2	4	9	3	9	3	9	3	3	8		
8	2	4	1	4	1	8	2	8	2	8	2	8	2	12	3	8	2	12	3	4	9		
6	2	6	2	6	2	6	2	6	2	9	3	6	2	6	2	6	2	9	3	3	10		

Thi	eats																					
3	3	1	1	2	2	2	2	1	1	2	2	2	2	3	3	1	1	2	2	1	1	
2	2	1	1	1	1	2	2	1	1	2	2	2	2	4	4	1	1	1	1	1	2	
3	3	3	3	2	2	4	4	3	3	3	3	2	2	2	2	3	3	2	2	1	3	
2	2	4	4	3	3	3	3	4	4	3	3	2	2	2	2	3	3	3	3	1	4	
2	1	4	2	2	1	8	4	8	4	4	2	4	2	2	1	2	1	6	3	2	5	
4	2	4	2	6	3	6	3	8	4	6	3	4	2	4	2	2	1	2	1	2	6	
4	2	2	1	4	2	8	4	8	4	4	2	4	2	2	1	2	1	2	1	2	7	
4	2	2	1	6	3	2	1	2	1	2	1	2	1	2	1	2	1	4	2	2	8	
6	3	2	1	4	2	8	4	6	3	4	2	2	1	2	1	2	1	4	2	2	9	
2	2	2	2	1	1	2	2	3	3	3	3	1	1	2	2	1	1	1	1	1	10	
	Strength																					
8	2	12	3		4	4	1	9	3	8	2	8	2	8	2	8	2	12	3	4	1	
8	2	4	1	9	3	8	2	8	2	4	1	4	1	4	1	4	1	4	1	4	2	
8	2	12	3	4	1	1 6	4	12	3	8	2	8	2	8	2	8	2	12	3	4	3	
6	2	6	2	6	2	3	1	9	4	9	3	6	2	6	2	6	2	6	2	3	4	
6	2	3	1	6	2	3	1	3	1	6	2	3	1	6	2	12	4	9	3	3	5	
9	3	6	2	6	2	9	3	6	2	9	3	6	2	6	2	6	2	6	2	3	6	
3	1	3	1	6	2	3	1	3	1	6	2	6	2	3	1	3	1	3	1	3	7	
3	1	9	3	6	2	3	1	6	2	9	3	3	1	9	3	9	3	9	3	3	8	
9	3	12	3	4	1	9	3	8	2	9	3	8	2	12	3	12	3	12	3	4	9	
6	2	6	2	6	2	3	1	6	2	9	3	3	1	9	3	9	3	3	1	3	10	
We	aknes				1		1					1			1				1			
3	3	3	3	4	4	3	3	4	4	4	4	4	4	1	1	2	2	3	3	1	1	
2	2	2	2	3	3	1	1	2	2	4	4	4	4	2	2	2	2	2	2	1	2	
6	3	2	1	4	2	2	1	6	3	4	2	6	3	8	4	4	2	6	3	2	3	
3	3	2	2	2	2	2	2	2	2	2	2	2	2	4	4	1	1	1	1	1	4	
1	1	3	3	4	4	1	1	2	2	3	3	2	2	1	1	1	1	2	2	1	5	
2	1	6	3	6	3	4	2	4	2	2	1	2	1	2	1	2	1	2	1	2	6	
4	2	2	1	8	4	2	1	4	2	2	1	4	2	2	1	2	1	4	2	2	7	
6	3	6	3	4	2	6	3	4	2	4	2	4	2	4	2	4	2	4	2	2	8	
4	2	4	2	6	3	6	3	4	2	4	2	2	1	4	2	4	2	4	2	2	9	
4	2	6	3	4	2	4	2	6	3	6	3	4	2	6	3	4	2	4	2	2	10	
	213		216	2	01	2	220		238		229		200		216		213		215		Set of TAS	

#### 4. RESULTS

The results revealed that participation in exhibitions is the first priority of company. This results obtained from this study were conformed to both SWOT and QSPM methods. As we already knew, in the past most of company 'efforts were toward export and they ignored domestic markets, this neglect was approved by research findings, our findings show that three strategies can solve this problem: market development, participation in exhibitions and collaboration with department of environment can change customers' view regarding recycle oil engine as well as introducing its production at domestic markets to develop it. The QSPM model is totally based on personal opinions of experts, and it is a tool that is used to help management make a better decision, and at the end it is the management that makes the final decision based upon the situation in changing and demanding environment.

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