Abstract

Nowadays, the internal and external business environment of organizations is dynamic and turbulent. In this situation, in order to maintain the competitive advantages, the organizations have to formulate the appropriate key strategies. On the other hand, food industry is the business that entangle with this environment. In this article the integrated deployment of freeman model, using the SWOT matrix, and AHP is illustrated. The purpose of the paper is to formulate the strategies of a firm in food industry. Here, the primary and secondary factors of the mentioned industry in freeman model using AHP is privileged and chosen as opportunity, threat, weakness and benefit of company. After the SWOT analysis and the determination of strategies, the impact of each strategy is determined in different groups of freeman in the firm. Finally, the important steps to implement the strategies are mentioned.

Key words: strategy, food industry, freeman model, AHP, SWOT

INTRODUCTION

According to the environmental changes that have increased, the need to implement a comprehensive plan for dealing with these changes feels. The food industry is an industry that the environment with fast-paced changes surround it. Several models have been designed for strategic planning. This article is related to use of freeman model using SWOT matrix and the priority of strategies in a company of food industry with the metaphoric name of ABC Company. So at first, the view and mission of company and its long- and short-term goal are expressed. Then in addition to analysis of external environment of company, this environment is divided into ten parts. Then the major and minor factors of considered industry using AHP in freeman model are privileged. After the SWOT analysis and the determination of strategies, according to freeman model, the impact of each strategy on different groups of freeman in company is determined and has priority based on the resulting scores.

LITERATURE REVIEW

The word strategy is taken of the Greek root of strategema meaning the army leader that composed of stratos meaning army and ago meaning leader. This word initially used in military matters and has entered in business and management issues in the second half of the twentieth century. According to Mintzberg definition, strategy consists of the understanding of different dimensions of industry structure and the foundations of competition (Mintzberg, 1992). Several models have been designed for strategic planning such as Philips, SWOT, freeman, Space, Porter, and Bryson. In this study the freeman models is used with SWOT matrix (Mintzberg 1992; Hussey 1998; Buller 1988; Dyson 2004).

FREEMAN MODEL

The freeman model is based on the effect of the strategy choose on the company beneficiary. In this model, the expectations and demands of individuals and the groups inside and outside the organization is considered. The approach that has been selected in the freeman model is coordinated the effectiveness of organization with satisfaction of beneficiary. In this model, first all of beneficiary is identified and the appropriate strategies is selected in order to ensure they are satisfied. According to freeman, the stability and the success of an organization is depended on the satisfaction of people and the key groups associated with the organization (Buller 1988). Generally the theorists have identified eight groups of beneficiary in organization that include:
1. The stockholder and the main owners that consider the benefit and credit of organization.
2. The managers and the staff of organization that seek the salaries, benefits, job promotion and job satisfaction.
3. The customers who seek better quality, suitable, prices of goods and services.
4. The society that considered the role of social responsibilities and the environmental protections.
5. The government that considered the observance of regulation and funding.
6. The suppliers of raw materials that the suitability of the transaction and price is important to them.
7. The rivals that is sensitive to quality of goods and services, price, delivery, time, market share, technologies and the flexibility of competing organization.
8. The creditors that the credit amount of organization is important to them. (Buller 1988; Glaister and Falshaw 1999).

Of course, in new perspectives the role of international organizations is also important. Although attention to different needs of people related to organization and awareness of the beneficiary satisfaction was benefit of this model, but the lack of proper criterion that can be used for evaluation of antonym needs is considered as defect of beneficiary model. In fact the coordination of goals and needs of all beneficiary that sometimes are in conflict is very hard that may not be meet in practice.

THE PROCESS OF HIERARCHICAL ANALYSIS

As mentioned the AHP is used in this study for rating and ranking factors. The aim of AHP application in beneficiary model is to promote and improve the quantitative information as a basis for strategic planning. AHP or the process of hierarchical analysis is a multi-criteria decision making techniques that can be used in priority setting. This process is designed in such a way that conforms to mind and nature of mankind (Saaty 1980). AHP is collection of verdict in a logical way. This process use different choices in priority setting and provides the possibility of qualitative and quantitative criteria in problem this process also has strong foundation and is base on the obvious principle (Benítez 2011). This process can be performed with Expert Choice and Criterium software.

The calculation of weight in the process of hierarchical analysis is discussed in two separate cases: The relative weight, and the final weight. The relative weight is the result of paired comparison matrix while the final weight is used for decision making. The final rank is each choice that is calculated with the synthesis of relative weight (Ho 2008). In AHP method, The decision makers use the verbal and nonverbal judgments, in such a way that if we compare the element $i$ with element $j$, the decision maker express the importance of $i$ on $j$ as follow. these judgments have been converted to quantitative amount between 1 till 9 by Thomas. in this study, the software Expert Choice is used to perform calculation. one feature of above software is its ability to get quantitative and qualitative data (Saaty 1980; Benítez 2011).

In order to use the (EC9.5) software in this study, four criteria (main factors in beneficiary model), after entering the name of model and its definition for system, was recorded. then for each criterion, the desired options (equivalent to sub-factors) were entered comparison. first the relative weight with paired comparison of options toward each criterion and criterion toward the aim is calculated. then with synthesis of relative weight, the final weight for each option is determined.

ABC AGRO-FOOD INDUSTRY

Outlook: the global acceptability of canned produce, jams and salinity.

Function: the production of canned, salinity and jams in different packing with quality of international standards. this production is used desirable material and modern machinery in internal and external markets for satisfaction of customer.

Long-term goals (10 years): 1. improving quality in order to achieve customer satisfaction; 2. the conformity of product features with standard; 3. the 15 percent increase in annual exports; 4. the 20 percent increase of internal sale annually; 5. the satisfaction of employees through inventive systems; 6. the observance of health factors in society (lack of common cancer-causing preservatives); 7. To achieve a production nominal capacity.

Short-term goals (one year): 1. the 8 percent reduction in amount of waste annually; 2. the productivity increase of machinery with annual rate of at least 70%; 3. The increase of production capacity to at least 70% of nominal capacity;

Analysis of external environment

The external environment of each company include the domains of it. Although this entire environment isn't considered But territory is considered. By definition, the external environment affecting
the company is called domains. Thedomains of agro-industrial (ABC company is the canned market of middle east-also; the environment that organization is working there and surround it is called territory of company. Territory is part of range that is unique to the company. The realm of cultivation and industry of ABC is canning industry.

The division of external environment

The external environment of ABC agro-food industry complex can be divided into 10 sections:
1. Industry: competitors include internal competitors and foreign competitors (China, United Arab Emirates, etc)
2. Market:
   A. Customers: Internal customers (domestic consumption) restaurant's, etc., and external customers (demand for a variety of packages).
   B. The culture of consumption. Gradually, the domestic consumer become interested in internal consumption of these products in smaller packages.
3. Raw materials:
   A. The main manufacturers: since the company in an agro-industry, so, it produces most of its raw material and purchase the other materials form farmers and middlemen in the region.
   B. The competitors in consumption of raw material
4. Technology: the use of (Multiple Effects Evaporators), and the active part R&D.
5. Economic: high inflation low growth rate of investment in production, the market stagnation because of Chinese imports into the country.
6. Political: The economical and political sanction make problem in field of the machinery in production line and packing is done from other provinces, so the sanction issue wouldn't problematic.
7. Social
8. The state: The employment laws related to increase of workers wage has caused problems. also, the various government organizations such as institute of standards and industrial research, ministry of food administration, the departmental of labor, insurance, taxes, etc. have their own rules and monitoring methods.
9. International: The customs law, the health and safety requirements in having international certificate such as HACCP, the vast import of china with low price and medium quality and soon.
10. Financial resources: The credit facilities of export development bank and agricultural bank. The continuous analysis of section 10 allows the determination of company position and its effect by management at any time.

To justify the weight of any criteria we should consider the position of the criteria comparing to 3 other items. After paired comparison with EC9.5 Program and justifying the weight of items, paired comparison of sub-factors and criteria should be done at the end the final weight of items is multiplying the weight of any item in approximate weight of desired sub-factors.

To determine the type of sub-factors from SWOT aspect according to the company's experts, all criteria with the weight more than 0.1 are considered as an opportunity and those between 0.1 and 0.05 are strength also the items between 0.05 and 0.005 are weaknesses and if were less than 0.005 are assumed threats. Negative strategies are eliminated, the S7 is put aside.

All the strategies we put in the stakeholder table. S5 due to the negative is removed. Then strategies are based on priority points. S2 and S3 and S8 strategies cover the first goal; S1, S6, S4, S3 and S8 strategies cover the second goal.

STEPS TO IMPLEMENT STRATEGIES

New product (S1)
A. Attention and involvement of employees: The employees of the company turn the strategies into action plans and help the organization to realize their goals.
B. Development and innovation: In product development process some errors may occur. So providing a suitable environment for staff to participate can reduce the possible risks.
C. Translating strategy into action plans and the budget: the practical application of new production strategy include: active dialogue with different groups of customers. 1. new products for marketing. 2. Active R&D group to
product new design - production design. 3.purchase of equipment if necessary. 4. prepare quality ingredients. 5. Operational plans 1 to 5 for all budgets should be prepared (the budget for programs 3 and 4 and 5 was more). When planning for new products, the accessibility to raw materials should be considered, less budget might been used for transporting and buying these materials therefore.

Exports (S2)

A. Attention and employee involvement: the attention of staff in implementing the export strategy is as follows:
1. Having regard to the above point, staff must consider that the company's products with reasonable quality are a principle to keep existing customers and develop the market. In case of the independent republics of the former Soviet Union, suitable price is a point.
2. Training the staff: Because of the variety in packaging system of exporting products, the staff must be trained for this. For special orders using booklets, movies and etc. is beneficial.
3. Encouraging: Participating staff in benefits of exporting and giving promotions to capable individuals.
4. Culture: the exports itself is one of categories that requires a culture in personnel.

B. Development and innovation: the field of creativity in all aspects of the business goals and strategies are developed to eliminate defects

C. Translating strategy into action plans and the budget: The practical applications of export strategy are:
1. Marketing in the various countries
2. Taking orders
3. Production planning, purchasing raw materials
4. Personnel training (if necessary depending on the product order)
5. Right from the door of the factory to the ports for loading

Repair and Maintenance System recovery (S3)

A. Attention and participation of employees: inspiring and encouraging the staff to implant the strategy and knowing that Repair and Maintenance system would simplify their work and the overall system performance will increase.
B. Establishment of transformation and innovation
C. Translating strategy into action plans and the budget preparing the required forms. Information and computer soft ware; Checking the machinery in first 30 minutes of work; Training the technicians; Preparing detailed operating budget for implementing each program separately.

Purchasing the bankrupt supplier (S4)

A. Attention and participation of employees.
B. Establishment of transformation and innovation.
C. Translating strategy into action plans and the budget.

In implementing the above strategy, the third step is more important of the first two steps.
1. Applying a strategy follow-up team and an in charge individual.
2. Making a list of the bankrupt suppliers.
3. Consulting with food industry experts to discuss the negative and positive points of this strategy.
4. Prepare final list of selected supplier for the purchase.
5. Enter into dialogue with the selected supplier.
6. Purchase and finance.

Loans for equipment and devices (S6)

The third step is the most important
Translating strategy into action plans and the budget justified the borrowing plan for facilities development
the follow-up group and the person directly responsible for obtaining follow up facilities

Increase sales offices in the cooperative state (S8)

A. Attention and participation of employees; Effective communication among vendors of corporate officials with relevant government agencies. The share of the profits from the sales staff (if the rate of sales exceeds a certain limit) in order to motivate them enough.
B. The creation and evolution of innovation: innovation in the field of development and sales of consumer cooperatives in order to attract more customers.
C. Translating strategy into action plans and the budget. The follow-up group and the person directly
responsible for obtaining follow up facilities to connect with organizations. To produce quality products with minimum standards of quality and safety, while medium and lower prices for government employees. Prepare the detailed operating budget for implementing each program separately.

CONCLUSION

In this study with implanting the stakeholder model and hierarchical analysis, main and sub-criteria in a food industry are scored and are recognized as SWOT. In this applied hierarchal process, main criteria are considered as criteria and subs as hierarchal factors. At the end of the six strategies, the export strategy is the first priority, some steps of implanting the strategies is discussed.

REFERENCES

Table 1: Freeman's four factors and determining the type of sub-factors using AHP.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Standard Weight</th>
<th>Sub-factors</th>
<th>Weight</th>
<th>Type</th>
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<td>Experience</td>
<td>0.051</td>
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<td></td>
<td></td>
<td>Predicting power</td>
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<td>O</td>
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<td>Flexible properties</td>
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<td></td>
<td>High Technology</td>
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<td>W</td>
</tr>
<tr>
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<td></td>
<td>Repair and Maintenance System</td>
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<tr>
<td></td>
<td></td>
<td>Human resource skills</td>
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<td>Access to capital when needed</td>
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<td></td>
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<td>Low cost material</td>
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