

Using PEST- and SWOT Analysis for the Strategic Development of an Enterprise for the Production of Confectionery Products

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Abstract— formation of strategic policy of the organization, according to a principle of a quality management has direct an effect and indirect influence on success of activity of the enterprise. In article force of influence is analyses and the analysis of factors of the macro environment of the enterprise by means of the PEST-analysis and the analysis of factors of a microhabitat with use SWOT-of the analysis is lead, communication between strengths and possibilities, strengths and dangers, weaknesses and threats, weaknesses and possibilities is established. Result of research of factors micro-and macro environments of Open Society Blagoveshchensk confectionery factory "Zeya" became formation of the politician in the field of quality and a security of confectionery products of Open Society the Blagoveshchensk confectionery factory "Zeya" including development and introduction of system of a quality management and a security of confectionery products, optimization of industrial expenses at all stages of technological process.

Keywords— systems; management; security of confectionery products, introduction

1. INTRODUCTION

The confectionery industry is independent industrial branch [1]. Among production of food processing confectionery products are one of popular and demanded as they possess special flavoring properties, high power value and attractive physical appearance [2]. Open Society Blagoveshchensk confectionery factory "Zeya" the largest manufacturer of confectionery products in the Far East Russia which production is in demand far outside area. In conditions of modern economy when the competition has increased in all areas, apparently, up to a limit, and timeframes of a life of the separate goods are estimated in months and even weeks, application of technologies of management by projects is necessary not only for prosperity, but also for a survival almost each commercial enterprise. In confectionery factory it is developed more than 100 names of sweets: dairy and cream, on a wafer basis, assortments chocolates for all tastes and other. The card of factory cookies "Blagoveshchensk", "Zeya"; wafers "Fairy tale"; sweets: "School Amur", "Amur taste pineapple", "the Bird's milk Amur".

In it is given to article an assessment the strategic position of Open Society Blagoveshchensk confectionery factory

"Zeya" by means of methods PEST and the SWOT- analysis is developed [3].

2. VALUE OF USE PEST-AND SWOT THE ANALYSIS FOR STRATEGIC PROGRESS

Value of strategic behavior recently has risen sharply. The enterprises in conditions of a rigid competition should focus attention to development of the strategic policy which have been directed on a lot of specific features [4]. The market of confectionery products is characterized by high capacity and stable demand that does branch by attractive object for investments [5]. The heads interested in stable progress of the company, constantly estimate the changes of the environment influencing realization of accepted strategy, and aspire to correct it [6]. Under the control and management should there is all factors of an external and internal environment the enterprises having the attitudes to its functioning [7]. The analysis of the external and internal environment of existence of the enterprise expediently to spend, studying a macro environment, a direct environment and internal components of business [8]. It provides the way to receive all information necessary for strategic planning [9~10].

For carrying out of the analysis of the factors influencing progress of the enterprise the commission of experts which primary goal was revealing and an assessment of the external and internal factors which are influencing success of the enterprise in the market, as well as definition of a vector of its progress in strategic prospect has been generated [11~13]. At detailed studying factors of the macro environment of the enterprise it is necessary to analyses set of aspects, as well as to lead their assessment as not all factors of an environment render equal influence on conditions and productivity of functioning of the enterprise [14].

Macro environment is presented by the factors influencing success of cooperation of the enterprise with consumers: political, social, economic, technological which should be predicted at the moment time, but also for some years forward [15~17]. All these factors are not subject to direct updating from the company [18].

3. THE ANALYSIS OF FACTORS OF MACRO ENVIRONMENT

The general analysis of factors of an environment assumes revealing factors of macro environment and their qualitative an assessment with application of a method of the PEST-analysis, allowing estimating the importance of the analyses factors. The analysis is spent under the diagram "factor-enterprise"[19~20].

TABLE I. MAJOR FACTORS OF AN ENVIRONMENT THE BLAGOVESHCHENSK CONFECTIONERY FACTORY "ZEYA", REVEALED BY MEANS OF THE PEST-ANALYSIS

Political factor	Social factor
<ul style="list-style-type: none"> - The requirements of adopted Technical regulations of the Customs Union TR CU 021/2011, 022/2011 TR TS, TR CU 005/2011 - Confirmation of conformity of products in the form of Declaration in accordance with TR CU 021/2011 - Development of Technical regulations for bread and bakery products - Changes in labor and accounting legislation of the Russian Federation, procurement procedure, administrative Code - Changes in tax policy (tariffs, benefits) - The state policy of the Russian Federation in the field of healthy food of the population - Federal programs for the modernization of school meals - Tighter control over the activities of food enterprises and penal sections 	<ul style="list-style-type: none"> - Demographic situation (including in the past - the problem of recruitment) - Changing structure of income and expenses of the population (increasing gap in income levels of different groups of the population) - Production of the enterprise possesses cultural value - The government's commitment to support families - Long-standing presence in the market - The increasing literacy of the consumer - Updating the range in accordance with the seasons and fashion - Increased attention to environmentally friendly product - A positive image formed in the regional media - Sustainable public relations
Economic factor	Technological factor
<ul style="list-style-type: none"> - Economic stability in the region - Fluctuations in currency exchange rates (with purchase of equipment) - Change of the refinancing rate (loans) - High inflation - Taxation of food enterprises - Products refers to goods constant demand - The complexity of trading networks in the region - High costs for modernization of production - High cost of maintenance of fixed assets - Narrow selection of suppliers of raw materials - The cost of maintaining its own fleet - Loyal attitude of end users - High brand and manufacturer recognition 	<ul style="list-style-type: none"> - Development of technologies (constant exchange of experience, participation in exhibitions) - Own the development of new products - Changing technology of processing of raw materials (the required adaptation of the production technology of production) - Maturity of the main elements of technology used - High level of production capacity - Availability of information about new technologies on the Internet - High level of technology development, new types of equipment (high cost) - Acquisition of more advanced equipment by competitors - Geography of equipment manufacturers (Russia is represented in this market a little) Legislated requirements for the equipment (from the point of view of the security risks of products)

The PEST-analysis assumes an establishment of factors of influence on each of four groups and requiring the most

concentrated attention. The obtained results indicate the greatest influence among the political factors change in the legislation of the Russian Federation regulating the activities of confectionery enterprises, as well as changes in tax policy. It was found that for the enterprises of food branch change legislation are very important because they can lead to the need for urgent organizational and structural changes, and even modification of the main production and warehousing premises (with the introduction of the TR TS 021/2011) [2].

Among the economic factors, there is a change in economic stability in the region, it is this that significantly affects the end users of products, which entails a change in the range, the need to produce cheaper products in crisis for the region, as well as the need to refuse to raise prices for the main range of confectionery products. As relevant factors of negative impact on the company identified difficulty in selling products through the trading network of the region, as well as consistently narrow range of raw material suppliers, who dictate to the manufacturer's requirements, adversely affecting economic efficiency of activity of the enterprise. A social factor affecting the company's activity is the need for a systematic analysis of the range in accordance with the seasons and current trends in the confectionery market. In order for this factor to have a positive impact on the organization, it is necessary to analyze, take into account and seek to anticipate the desires of consumers. Significant technological factors are the development of technology. Knowledge of global trends in these areas will give the company a competitive advantage, including the ability to outperform competitors in terms of effective technical re-equipment of production. In order to turn the changes of these factors to the benefit of the company, it is necessary on the basis of annual planning to lay funds for the modernization of production facilities, as well as for the participation of employees in various seminars, exhibitions, competitions and other events that track the latest technology and technology in the field of confectionery production.

4. THE ANALYSIS OF FACTORS OF MICRO ENVIRONMENT

Available and effective method of analysis of micro-enterprise, used for strategic planning, is SWOT-analysis, which allows you to identify the strengths and weaknesses of the company, opportunities and threats internal (personnel, equipment, technology, management, capital, raw materials) and external (customers, competitors, suppliers, partners, media) environment.

The SWOT analysis identified a number of strengths of the company, achievements and features that provide additional opportunities: enterprise experience in the market (S1); product quality (S2); use of natural raw materials, the quality of which is confirmed by certificates of conformity (S3); upgraded production equipment (S4); own development of formulations and production technology of enriched and functional products (S5); experienced staff (S6); positive reputation in the eyes of consumers (S7).

Weaknesses of the company, established by the Commission in the analysis of the external and internal environment: not enough wide range of products (W1); high

cost of high quality raw materials (W2); dependence on the conditions of sales in retail chains (W3); incomplete utilization of production capacity (W4); lack of advertising activity (W5). Favorable circumstances and market opportunities that can be used to gain competitive advantage: expansion of the range of demanded confectionery (O1); support of Russian manufacturers (O2); improving the efficiency of quality and safety management through the introduction and integration of management systems (O3); expansion of the sales market in the Amur region and beyond (O4); reduction of production costs by reducing non-production costs (O5). Market threats with a chance to have a negative impact on the company: high level of competition in the market of the region (T 1); the emergence of a new type of competitors-manufacturers, located in large retail outlets and selling candy products at the place of production (T2); decrease in income of part of the population (T 3); increase in the cost of basic raw materials (T4).

After formation of the full list of strengths and weaknesses, opportunities and threats in confectionery factory "Zeya" the significance of each strong and weak side, the probability of occurrence and the force of influence for each opportunity/threat were analyzed. The summary estimates are defined as the average value of expert estimates of members of the Commission. The significance of strengths and weaknesses was measured on a scale from 1 to 5, where 1 – the significance of the strong/weak side is very low (the intensity of the impact on the activities of the enterprise is minimal), 5 – the significance of the strong/weak side is very large (the intensity of the impact on the activities of the enterprise is maximum). The probability of occurrence of opportunities and threats is measured on a scale from 1 to 5, where 1 – the probability is insignificant, 5 – the probability is very high. To assess the power of influence of opportunities and threats, a five – point scale was used, according to which 1 – influence is absent, 5 – strong influence. The indicator of the significance of threats and opportunities is determined by the ratio of the probability of occurrence and the force of influence of the threat/opportunity.

According to the scale presented in table 2, determined by the assessed strengths (the ability to leverage opportunities and counter the threats) and weak points (which weakens the potential and amplifying threats).

TABLE II. SCALE OF ASSESSMENT OF THE IMPACT OF STRENGTHS AND WEAKNESSES ON THE IMPLEMENTATION OF OPPORTUNITIES AND THREATS

Score in points	Evaluation of the relationship
70-120	the peculiarity (strong/weak side) allows you to fully implement a favorable situation or eliminate the negative consequences of threats
45-75,9	the peculiarity contributes to realization of favorable situation or elimination of negative consequences of threats
0-45	the peculiarity slightly affects the implementation of a favorable situation or the elimination of the negative consequences of threats

TABLE III. THE SWOT ANALYSIS RESULTS MATRIX (THREATS)

	Significance of strength / weakness	Threats (T)			
		T1	T2	T3	T4
Probability of occurrence		4,5	5,7	3,4	4,8
The power of influence		4,8	3,6	3,8	5,0
Significance of threat / opportunity		17,1	9,4	8,8	16,0
Strengths (S):					
S1	4,2	66,6	33,8	32,8	50,7
S2	5,4	90,0	45,2	44,4	83,0
S3	3,8	51,2	25,4	34,4	44,8
S4	3,2	70,8	36,1	30,9	63,0
S5	4,4	76,4	38,8	38,5	67,9
S6	3,5	55,2	29,0	28,0	46,2
S7	4,0	80,6	42,4	37,8	70,8
Weaknesses (W):					
W1	3,1	37,9	19,4	18,2	32,6
W2	4,1	56,0	28,2	26,9	50,4
W3	2,6	36,1	18,8	17,4	30,8
W4	3,2	48,8	26,6	23,4	40,3
W5	3,8	54,2	28,0	26,0	46,2

The obtained results contribute to the comparison of SWOT analysis indicators in table 3.4. Comparison of SO ("forces-opportunities"), development of strategies to use the advantages of the company for better implementation of the opportunity: consistently high quality of products; long-term experience of the enterprise in the market created prerequisites for successful implementation of innovative management system; the introduction of an integrated system of quality management and safety of confectionery products contributes to the improvement of production capacity, unification of the development of recipes and production technology of products by the company.

TABLE IV. THE SWOT ANALYSIS RESULTS MATRIX (OPPORTUNITIES)

	Significance of strength / weakness	Opportunities (O)			
		O1	O2	O3	O4
Probability of occurrence		5,0	4,1	4,6	2,8
The power of influence		3,1	2,1	4,5	3,9
Significance of threat / opportunity		15,5	8,6	20,7	10,9
Strengths (S):					
S1	4,2	57,8	30,7	77,7	40,0
S2	5,4	77,9	43,4	104,8	53,6
S3	3,8	42,4	26,1	59,0	32,8
S4	3,2	59,5	34,8	84,6	42,4
S5	4,4	64,1	38,6	82,2	45,9
S6	3,5	47,5	27,7	60,1	36,2
S7	4,0	68,8	38,9	92,2	47,4
Weaknesses (W):					
W1	3,1	31,6	17,1	43,5	22,2
W2	4,1	47,7	24,7	64,2	33,4
W3	2,6	34,0	14,2	40,4	21,4
W4	3,2	42,9	22,8	54,9	28,5
W5	3,8	47,5	26,2	62,1	31,8

The mapping ST ("power – threat"), the formation of strategies to use SO the enterprise can confront internal and external threats: high quality products, own product development, a positive reputation in the eyes of consumers lead to tougher competition on the market; aspiration to provide high quality promotes acquisition of expensive high-quality raw materials.

Comparison of WO ("weaknesses-opportunities"), a strategy to minimize weaknesses of the company, in order to successfully implement the existing opportunities: the need to manage relations with suppliers and optimize production processes, including the introduction of innovations.

Comparison of WT ("weaknesses-threats"), the possibility of minimizing the impact of weaknesses of the enterprise and external threats: insufficient level of advertising activity; increase in prices for primary and secondary raw materials.

CONCLUSION

In the course of the research using PEST-and SWOT analysis, gradation of strengths and weaknesses of the enterprise was carried out. Evaluation of strengths and weaknesses is defined. The most significant factors influencing the studied indicators of macro and micro environments are revealed. The result of the study of micro - and macro-factors of Open Society Blagoveshchensk confectionery factory "Zeya" was the formation of the strategic policy of the company, including the development and implementation of an integrated system of quality management and food safety, optimization of production costs [2].

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