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COMPETITIVENESS RATING METHODOLOGY IN LIGHT INDUSTRY

МЕТОДОЛОГИЯ ОЦЕНКИ КОНКУРЕНТОСПОСОБНОСТИ В ЛЕГКОЙ ПРОМЫШЛЕННОСТИ

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The authors propose a rating methodology for the competitiveness of light industry enterprises. This methodology is based on a comprehensive analysis of all the major components of the enterprise competitiveness as well as meets the essential principles of its evaluation. The article describes an application of the methodology in several competing light-industry enterprises in Kazakhstan.

Авторы предлагают методологию оценки для конкурентоспособности предприятий легкой промышленности. Эта методология основана на всестороннем анализе всех главных компонентов конкурентоспособности предприятия и включает существенные принципы своей оценки. Статья описывает применение методологии на нескольких конкурирующих предприятиях легкой промышленности в Казахстане.

Keywords: enterprise competitiveness, rating methodology, light industry, rating, strengthening of market positions.

Ключевые слова: конкурентоспособность предприятия, методология оценки, легкая промышленность, оценка, укрепление положений на рынке.

An enterprise competitiveness reflects its functioning efficiency. Effective measures aimed at increasing competitiveness of a company should have some objective tools. We do not have a commonly accepted approach to evaluate competitiveness. We have analyzed a few methods applicable in the light industry [1], [2]. We believe that the most applicable would be a rated evaluation method based on a multilayered comparison analysis [3].

The aim of the paper is to develop the rated evaluation competitiveness method (RECM) in the light industry whereby the specific measures can be tested and measures defined to increase competitiveness.

In addition to internal competitiveness indices, RECM allows to identify their closeness

to a benchmarked index. We use the following formula to identify RECM R_i [3]:

$$R_i = \sqrt{K_1 X_{ij}^2 + K_2 X_{ij}^2 + ... + K_n X_{nj}^2}, \quad (1)$$

whereby K_1, K_2, ..., K_n – competitiveness indices of a company, $\sum K = 1$; X_{ij} – standardized indices.

The higher R_i, the more competitive is the company.

RECM advantages:

– Based on complex and multilayered analysis;

– Allows to come up with exact evaluation indices excluding different misinterpretation;

– The method is based on the real company figures and it allows comparing them to the benchmarked parameters.

The method proposed by Dr. Sabden may be used in identifying RECM. However, we should revise the index system, which would fully reflex the company's current position. We think that it is advisable to use the following ratings: production, labor, competition, finance, marketing including the market share.

We have analyzed different methods, which allow us to form the basic principles to identify RECM:

– Compact – implying evaluation of all important indices;

– Certainty – eliminating different misinterpretation of the gained results;

– Systemization – analyzing competitiveness indices as a single unit;

– Objectivity – the gained results should reflex the real situation;

– Simplicity – minimizing any possible mistakes;

– Compatibility – comparing the gained results with competition.

The proposed method meets all these requirements. The rating system can be used to identify positions within competing companies. Therefore, we have chosen four firms competing in fashion industry "Arlan 777" LLP, "Veles-V" LLP, "Avangard-spetsodezhda" LLP and "Fashion Group" LLP, making the same garments located in one region.

We use the following formula characterizing different aspects of the companies [4]:

$$K_i = \sum_{j=1}^{m} (b_j P_j), \quad (2)$$

whereby b_j – weight factors; P_j – indices of particular features of enterprise competitiveness.

Each weight factor shows a contribution of the given feature into the corresponding grouped index and in total they are equal to one (Table 1). The weight factors have derived through the expert evaluation method.

Table 1

Index description	Index	Weight
Production	K_1	0.15
Production capacity coefficient	E_1	0.6
Equipment renewal coefficient	E_2	0.4
Product competitiveness	K_2	0.25
Relative pricing	P_1	0.55
Relative quality	P_2	0.45
Labour and personnel	K_3	0.1
Staff profitability	T_1	0.65
Qualification	T_2	0.35
Financial position	K_4	0.15
Current liquidity	F_1	0.55
Automation	F_2	0.45
Marketing	K_5	0.15
Sales dynamics	M_1	0.65
Brand awareness	M_2	0.35
Market share	K_6	0.2

Relative pricing and quality have been chosen because they both represent competitiveness of the product in light industry. Quality is evaluated from 1 to 10 points. We use staff qualification to evaluate efficiency in using the personnel. We believe that it is advisable to look at the company's liquidity and automation in order to assess its financial position. We also suggest using sales dynamics and brand awareness as the basis to evaluate the company's marketing activity. Brand awareness is assessed from 1 to 10 points. Market share is used to see the company's real competitiveness ability.

Relative index should be applied to achieve the best precision. The following formula is used to come up with the relative index [5]:

$$A_{ri} = \frac{A_i}{A_{max}}, \qquad (3)$$

whereby A_{ri} – relative index; A_i – actual index; A_{max} – basic (the best) index which could exist in the company.

In order to define the relative index it is necessary to establish the company's best index economy-wise: higher (e.g., quality and brand awareness) or lower (e.g., pricing). This means that we should transfer "pricing" and "brand awareness" of the company to the relative index. We have used the industry-average indices as the basis. Figures are shown in Table 2.

T a b l e 2

Indices	"Arlan 777" LLP	"Veles-V" LLP	"Avangard-spetsodezhda" LLP	"Fashion Group" LLP
Coefficient E_1	0.65	0.54	0.63	0.38
Coefficient E_2	0.89	0.31	0.59	0.72
Coefficient K_1	0.75	0.45	0.62	0.52
Coefficient P_1	0.42	0.43	0.36	0.40
Coefficient P_2	0.90	0.60	0.70	0.80
Coefficient K_2	0.63	0.51	0.51	0.58
Coefficient T_1	0.26	0.07	0.18	0.11
Coefficient T_2	0.40	0.20	0.70	0.47
Coefficient K_3	0.31	0.11	0.36	0.24
Coefficient F_1	1.95	1.60	1.76	2.05
Coefficient F_2	0.57	0.42	0.49	0.61
Coefficient K_4	2.10	1.75	1.91	2.19
Coefficient M_1	1.08	0.78	1.10	0.87
Coefficient M_2	0.80	0.60	0.90	0.70
Coefficient K_5	0.98	0.72	1.03	0.81
Market capacity, mln. KZT	14,518.6	14,518.6	14,518.6	14,518.6
Coefficient K_6	0.006	0.002	0.004	0.003

Thus, $(K_1, K_2, …, K_6)$ indices have been estimated for assessing the company's rating. The next step is to form a standardized coefficient matrix. We take the highest index as a benchmark. The rest of the indices of this column are divided to the benchmarked index (Table 3).

T a b l e 3

Company	Coefficient X_{ij}					
	K_1	K_2	K_3	K_4	K_5	K_6
"Arlan 777" LLP	1	1	0.86	0.96	0.95	1
"Veles-V" LLP	0.60	0.80	0.31	0.80	0.69	0.39
"Avangard-spetsodezhda" LLP	0.83	0.81	1	0.87	1	0.43
"Fashion Group" LLP	0.69	0.91	0.67	1	0.78	0.45

Formula 1 is used to assess the company's competitiveness rating (1). R_i is distributed by range whereby each company's rating is defined (Table 4).

Company	R_i	Rating
"Arlan 777" LLP	0.97	1
"Veles-V" LLP	0.64	4
"Avangard-spetsodezhda" LLP	0.82	2
"Fashion Group" LLP	0.77	3

Thus, as the rating reveals, "Arlan 777" LLP has the highest competitiveness rating among others: three indices out of six have appeared to be the highest. The company has taken lead in production, competition and the market share. Labor, finance and marketing are on the second place. "Avangard-spetsodezhda" LLP along with "Fashion Group" LLP have high competition rates. Based on overall evaluation figures, "Veles-V" LLP has the lowest competition rate.

The evaluation system allows us to identify measures necessary to increase competitiveness of the company. As such, we could advise "Arlan 777" LLP to use production capacity more effectively and hire competent personnel. Regardless of the best rating, the company should take measures in maintaining its market position and utilizing potential. Otherwise, the competing companies may "win back" the market.

"Veles-V" LLP should modernize production, introduce new technologies, increase quality, hire qualified staff and improve marketing activity. The company should pay close attention to financial issues.

"Avangard-spetsodezhda" LLP is a leader in labor and marketing. It shows that the company is working hard on its image and personnel. However, the company should boost productivity, which will allow them to gain more market share. It is also advisable for the company to work on production aspect to decrease overheads.

"Fashion Group" LLP should utilize production capacity and work on personnel qualification. We believe that the company could expand in production due to better financial and production activity.

C O N C L U S I O N

Advantage of the said analysis is that it could help the companies see their level of closeness to a benchmark. Besides, they could also identify their strong and weak points and define measures for improvement. Thus, "Arlan 777" LLP should work on personnel; "Veles-V" LLP – marketing, modernization and quality; "Avangard-spetsodezhda" LLP – overheads; "Fashion Group" LLP – personnel. In general, all of them have a potential to increase production capacity.

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