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INTEGRAL METHOD FOR ASSESSING THE SUSTAINABLE COMPETITIVENESS OF SERVICE ENTERPRISES SELLING FOOD PRODUCTS

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Abstract

After the transition to the market economy, the consumer market of the Republic of Tajikistan faced different problems of the competitiveness of retail trade enterprises and the quality of services. In the result of our previous research about retail competitiveness, we defined some of the disadvantages in this sphere, expressed in the candidate dissertation on theme “Improving the retail enterprise competitiveness management system”. Problems regarding to the competitiveness of enterprises and the provision of quality services to consumers influenced the research an integral assessment of competitiveness. So, just only with by an integral assessment of competitiveness, economically sound solutions are determined with sustainability of the competitiveness of retail enterprises in the consumer market and improving the quality of service consumers. Using the integral method of assessing competitiveness, we have determined the financial opportunity and sustainability of the competitiveness of supermarket Anis. Supermarket Anis has a maximum financial opportunity to organize additional points and organize innovational of service for customers In the process of our research, we used several methods of research work, such as, interviews, comparison analyses and statistics calculations by goods turnover of retailer enterprise of the Kujand city, Republic of Tajikistan. In order to the offered theory, used specific formula and the concepts of sustainable competitiveness that affect the quality of services provided to consumers. The result of this decision improves the process of correct decision-making, improving the financial opportunities enterprise in the consumer market. In conditions of sustainable economic development, the services of each enterprise must meet the requirements of the consumer market. That is why managers should use an integral method of assessing competitiveness to determine financial opportunities, drawing up a strategy for competitiveness and sustainable development of supermarkets.

Keywords: Integral; Competition; Product; Consumer; Market.

1. Introduction

The proven fact is that one of the factors of economic growth of consumer market in each country is the development of free competition ([Safarivich, 2021](#)). In this regard, it is worth

noting that the activities of each state in terms of improving the quality of population services are very necessary. As we know, the development of competition in the market affects, reducing the price of products, improving the quality of services to the population, and on the other side, the originating of financial problems, such as maximizing profits.

That is why just this problem about competitiveness of the enterprise of the consumer market system became necessary and important in the modern situation of economy region republic of Tajikistan. The goal is assessing the level of competitiveness of supermarkets in the consumer market and determine the financial possibilities for the sustainable development of competitiveness of supermarkets in the consumer market of Khujand city.

The main gaps of this manuscript are consisting of (Wang et al., 2021):

- 1) Determine the shares of supermarkets in the consumer market of the city of Khujand;
- 2) The contribution to the sustainable development of the region's economy based on the analysis of integral indicators of financial opportunities;
- 3) Improving the system of the method of assessing the sustainable competitiveness of supermarkets in accordance with financial standards;
- 4) Defining the modern methods of assessments of finances activity supermarkets step-by-step; and
- 5) Proving the theoretical competitiveness bases by analytical data.

It becomes necessary to revise the tools for managing the competitiveness of retail enterprises. These circumstances necessitate a comprehensive study of the methodological foundations of managing the competitiveness of retail trade enterprises in order to solve the problems of provision their effective functioning, the formation and implementation of competitive advantages, allowing to ensure a stable position in the consumer market in the long term (Rakhmanova & Kryukov, 2019).

Improving the system of managing the competitiveness of retail enterprises, developing optimal development strategies, taking into account the specific of the national economy and the demand for services provided to population, is an actual of task, both from the standpoint of theory and practice of economic activity (Marakova et al., 2021). However, by our opinion the problems of the formation of sustainable competitiveness, competitive advantages, and an

integral assessment of the sustainable competitiveness of retail enterprises in the conditions of a transforming economy have not been fully studied (Safarivich, 2019a).

The implementation of the stages and methods of increasing competitiveness proposed in the work will make it possible to reduce risks and uncertainties in the competitiveness of retail trade enterprises (Dvorsky et al., 2020). Comprehensive competitiveness management includes a set of elements to meet the needs of buyers (Figure 1).

Figure 1. The main directions of improving the management of the competitiveness of a retail enterprise

(Source: Ivanova et al., 2019)

It should be noted that the specific features of the formation and management of the sustainable competitiveness of retail trade enterprises are not fully reflected in the research of the authors (Talatin, 2019). That is why therefore the expansion of work in this area is an actual of scientific and practical task, which justifies the choice and significance of the research themes. To implement the set tasks and improve the strategic management system of retail trade enterprises in the consumer market, specialized divisions should be created, the purpose of which will be to collect and analyze information on changes in market conditions, internal and external environment of retail enterprises, to improve marketing activities, to create a department for strategic management of competitiveness at retail enterprises (Tyukhtenko et al., 2021). This research proposes the following modernized structure for managing the competitiveness of a retail enterprise (Figure 2).

Figure 2. Structure retailer enterprises
(Source: [Safarivich, 2018](#))

The functions of the Marketing Department include the functions of collecting and analyzing information about the external and internal environment and competitiveness. The strategic management department will solve the following tasks ([Amountzias, 2019](#)):

- 1) comprehensive analysis of the external environment;
- 2) assessment of the degree of competitiveness of a retailer; and
- 3) development of management solutions to ensure competitiveness.

A competitive strategy should be directed at the medium and long perspective ([Negulescu, 2019](#)): “In this case, the most effective strategy is the one that best matches the external and internal position of the trading network and leads to the achievement of the desired competitiveness”. Analysis of internal and external factors of enterprises allows managers to develop strategies to increase competitiveness and sustainable development for a long period ([Brentnall, 2021](#)).

To determine the sustainable development of supermarkets, we need to analyze the external (goods turnover competitor) and internal (employee’s salary fund, tax payments) environment. After such an analysis, we determine the sustainable development of supermarkets as well as their strategy competitiveness in the consumer market. The development of a competitiveness management strategy is cyclical and can be adjusted adequately to the market situation. The stages of strategy development are shown in Figure 3.

Figure 3. Stages of developing strategic directions for increasing the competitiveness of a retail trade enterprise
(Source: Kuźmiński et al., 2020)

Recommendations for improving the competitiveness of retailer's trade enterprise include the following training and advanced training of employees of a shop-type trade enterprise (Hajduova, et al., 2021):

- 1) Orientation on innovation;
- 2) Organization and integrated competitiveness management systems;
- 3) Motivating employees to improve the competitiveness of a retail outlet;
- 4) Study of foreign, experience of work of leading trade enterprises in the organization of trade and technological process;
- 5) The use of all elements of the economic mechanism of a retail trade enterprise to increase its competitiveness; and
- 6) Implementation of strategic directions to increase the competitiveness of retail trade enterprises.

In a competitive environment, the winner is an enterprise that constantly analyzes the operating environment and fights for its competitive position in the consumer market (Aliev, 2021). Thus, the choice of the optimal development strategy for retail trade enterprises with changes in the consumer market conditions, allows them to be competitive, financially and economically sustainable and meet the needs of the population in goods and services.

2. Methods

There are many approaches to calculate the integral indicator (Lafuente, et al., 2019). The first approach of assessing the sustainable competitiveness of retail trade enterprises according to the theory of Shevchenko, the calculation of the level of competitiveness is carried out as a weighted average value for the indicators of the sustainable competitiveness of specific products or services in the segments of a specific market. In this case, the indicators are determined separately (Shevchenko et al., 2019):

- 1) the share of products or specific services in the sales volume of retail trade enterprises;
- 2) the importance of the consumer market where the company services are offered; and
- 3) the competitiveness of service "A" in a specific segment of the consumer market.

The above indicators are forecasted for at least five years. For an integral assessment of the sustainable competitiveness of retailers in the consumer market, the following formula is proposed, taking into account the weight of products and market segments in which they are sold with this formula one below:

$$C_{in} \geq \sum_{i=1}^n a_i b_i C_{ij} \rightarrow 1, \quad (1)$$

where a_i - is the share of the i-th service of retail trade enterprises in the sales volume for the analyzed period; b_i -is an indicator of the importance of the consumer market segment, which offers services of trade enterprises; C_{ij} - is the competitiveness of the i-th service in the j-th segment of the consumer market (Safarivich, 2021).

However, in this approach, the analyses are reduced to only one general indicator - the product sold in the consumer market, which reduces the use of this method relatively to one indicator, and not to a complex assessment. The second approach to assessing the sustainable competitiveness of retail enterprises is: using the following indicators, grouped into the next types (Mohammad & Wasiuzzaman, 2021; Parmer et al., 2021):

- 1) liquidity and solvency;
- 2) stability in the consumer market;
- 3) maximum profitability of activities in the consumer market;
- 4) maximum productivity of employees;
- 5) quality of trade service;

- 6) the level of trade service to clients.

Thus, based on the above indicators, it is possible to formulate the calculation of the integral indicator of the sustainable competitiveness of retailers in the consumer market in the following formula two:

$$I_{ij} = \sqrt{M_1^1 + M_2^2 + \dots + M_n^n}, \quad (2)$$

Where, I_{ij} - is an integral indicator of the considered enterprise and other j -α competitors. $M_1^1 + M_2^2 + \dots + M_n^n$ single indicators for assessing the competitiveness of the investigated retail trade enterprise and other analyzed trade enterprises in the consumer market (Safarivich, 2019b).

The third approach to assess the sustainable competitiveness of retailers is the expert method. An expert approach of assessing the sustainable competitiveness of assumes an assessment of the competitive advantages of an enterprise by assigning weights to each group of the following indicators (Soewarno et al., 2020):

- 1) Industry indicators;
- 2) Position of the commercial enterprise in the consumer market;
- 3) Quality of management of trade enterprises; and
- 4) Financial position of trade enterprises in the consumer market.

For an accurate assessment in this research, we use an integral method for assessing the sustainable competitiveness of supermarkets, considering the method of expert and “questionnaire survey” assessments. The object of the research is the retail trade enterprises of Khujand city, the subject of which is the purchase and sale of food products in the consumer market. For an integral assessment of the level of sustainable competitiveness of retail trade enterprises in the consumer market of the city of Khujand, let us determine the share of each supermarket selling food products in the consumer market are presented in Table 1.

Table 1. Dynamics the share of market supermarket-type retail trade enterprises for the sale consumer of products in Khujand in 2019-2020

№	Names of supermarket	Year				Dynamics (+,-)	
		2019		2020			
		Volume of sales (thous. som)	Share of market, %	Volume of sales (thous. som)	Share of market, %	Sum (thous. som)	specific weight, %
1	Ltd «Anis»	9422,9	16,2	12883	20,0	3460,1	53,1
2	Ltd «Oasice - 2»	5568,5	9,6	6633,5	10,3	1065	16,3
3	Ltd «Muhay»	6041,8	10,4	6545,9	10,1	504,1	7,7
4	Ltd «Khurshed+»	7493,5	12,9	6411,7	9,9	-1081,8	16,6
5	Ltd «Amid»	5591,5	9,6	5936,6	9,2	345,1	5,3
6	Ltd «Oasice - 1»	5298,1	9,1	5424,1	8,4	126	1,9
7	Ltd «Shomy Dushanbe»	4131,8	7,1	5150,4	8,0	1018,6	15,6
8	Ltd «Duston»	2898,3	5,0	2909,2	4,5	10,9	0,2
9	Ltd «PanjDiram»	2105,3	3,6	2313,9	3,6	208,6	3,2
10	Ltd «Doro»	1609,1	2,8	1737,5	2,7	128,4	2,0
11	Ltd «Sharifjon»	1440,2	2,5	1541,3	2,4	101,1	1,6
12	Ltd «Ariz»	1075,9	1,9	1247,1	1,9	171,2	2,6
13	Ltd «Tavhid»	892,2	1,5	1166,3	1,8	274,1	4,2
14	Ltd «Fayziniso 2»	1290,4	2,2	1099,7	1,7	-190,7	2,9
15	Ltd «Humoyon»	935,3	1,6	1091,9	1,7	156,6	2,4
16	Ltd «Asal»	848,1	1,5	994,5	1,5	146,4	2,2
17	Ltd «Nabijon»	749,9	1,3	892,1	1,4	142,2	2,2
18	Ltd «Farovon»	636,5	1,1	568,9	0,9	-67,6	1,0
	Total	58029,3	100	64547,6	100	6518,3	100

As the data in the table 1 and 2 shows, during the period of 2020, the share in the structure of the retail turnover of food products in Khujand city ranges from 9,2 to 20,0%.

Table 2. Dynamics of the market share of five supermarkets selling food products in Khujand for 2019-2020

№	Names of supermarket	Year				devotions (+,-)	
		2019		2020		Sum (thous. Som)	specific weight, %
		Volume of sales (thous. Som)	Share of market, %	Volume of sales (thous. Som)	Share of market, %		
1	Ltd «Anis»	9422,9	16,2	12883	20,0	3460,1	53,1
2	Ltd «Oasice – 2»	5568,5	9,6	6633,5	10,3	1065	16,3
3	Ltd «Muhay»	6041,8	10,4	6545,9	10,1	504,1	7,7
4	Ltd «Khurshed+»	7493,5	12,9	6411,7	9,9	-1081,8	16,6
5	Ltd «Amid»	5591,5	9,6	5936,6	9,2	345,1	5,3

The presentation of the integral indicator of competitiveness as a sum of the form is widespread with this formula three:

$$C = \sum_{i=1}^n W_i C_i, \quad (3)$$

where, W_i is the weight of individual factors in the total amount; C_i is partial indicators of the competitiveness of individual aspects of the activities of retail enterprises in total “n” (Chen et al., 2021).

As an object of research, we have presented the activities of five supermarkets that occupy leading positions in the consumer market. The dominant factors of competitiveness were determined based on a representative sample of 6 experts – marketers and heads of retail trade enterprises of the Sughd region. The basis of provision competitiveness depends on the financial opportunities of the enterprise. In the result of scientific research, we have been compiled a mathematical method for calculating the financial opportunities of service enterprises. This methodic we can be illustrated as follows formula four:

$$\begin{cases} P_m = E_{ch} - I_x \\ F_{op} = \sum_{i=1}^n T_q * \frac{P_m}{100\%} \end{cases} \quad (4)$$

Where,

P_m – Market profit

E_{ch} - extra charge, 25 % maximum

I_x – index inflation, %

F_o – financial opportunities, somoni

n – period of analysis

$i = 1, 2, \dots, n$ – type of goods turnover;

T_q – goods turnover (volume of sales), somoni.

Using the formula, we determine the financial opportunity of competitiveness of the five leaders in the consumer market, in period 2020 year. During the analysis period, the inflation index in the consumer market of Sughd region was 7,9% (ASPRT, 2021). In first we are determining market profit: $25 - 7,9 = 17,1\%$. So, market profit (P_m) maximum for each supermarket equal by 17,1%. In this way, we determine financial opportunity five supermarkets for providing their competitiveness (Table 3).

Table 3. Financial opportunity five supermarkets in 2020

Names of supermarket	Volume of sales, somoni	$P_m=17,1\%$ (Profit, somoni)
Ltd «Anis»	12883	2202,993
Ltd «Oasice – 2»	6633,5	1134,329
Ltd «Muhay»	6545,9	1119,349
Ltd «Khurshed+»	6411,7	1096,401
Ltd «Amid»	5936,6	1015,159

Based on these tables (Table 1 to 3), we determine the sustainable development of supermarkets. So, using the following formulas, we analyze the internal and external environment and determine the sustainable development of supermarkets in the consumer market. To analyze the external environment, using this formula five:

$$Sustainable = \frac{\sum \text{goods turnover of competitor}}{\sum \text{goods turnover of supermarket}} \leq 1 \quad (5)$$

Sustainable and competitiveness Ltd «Anis»:

$$Sustainable = \frac{\sum 6633,5}{\sum 12883} < 0,5$$

As we see, supermarket Anis has sustainable development in consumer market. Analyze the internal environment, by next formula

$$Sustainable = \frac{\Sigma employees' salary fund + tax payments}{\Sigma turnover of goods supermarket} \leq 1 \quad (6)$$

Sustainable and competitiveness Ltd «Anis» I:

$$Sustainable = \frac{\Sigma 9350 + 772,98}{\Sigma 12883} < 0,8$$

The result of the calculation indicates that Anis supermarket has the financial opportunity of sustainable development in the consumer market. To meet the needs of consumers and to provide sustainable competitiveness of supermarkets, we conducted a survey. The survey of experts made it possible to group the factors contributing to an increase in customer focus and the competitiveness of enterprises in this sector. The results of survey are presented in Table 4. The factors reflected in the article, according to experts, are estimated from 1 to 10 points on an increasing scale. An expert assessment of the significance of each indicator is as follows: X_1 – selling price of goods and services; X_2 – quality of service; X_3 – the number of services; X_4 – terms of rendering services; X_5 – availability of qualified workers; X_6 – innovative technologies; X_7 – radius of accessibility (shop location); X_8 – breadth and depth of the assortment of goods; X_9 – infrastructure status; X_{10} – technologies selling of goods.

Table 4. Factors contributing to the increase in the competitiveness of retailers in the consumer market.

Indicators	Experts						Sum of ranks	d	d ²
	1	2	3	4	5	6			
X_1	9,5	9	6	6	7	8	45,5	12,5	156,25
X_2	5	6	5	6	5	6	33,0	0	0
X_3	1	1	1	1,5	2,5	4,5	11,5	-21,5	462,25
X_4	2,5	2,5	2,5	1,5	2,5	3	14,5	-18,5	342,25
X_5	7,5	6	8,5	6	7	8	43,0	10,0	100,00
X_6	6	6	8,5	8,5	9	10	48,0	15,0	225

Indicators	Experts						Sum of ranks	d	d ²
	1	2	3	4	5	6			
X ₇	9,5	9	8,5	8,5	7	8	50,5	17,5	306,25
X ₈	7,5	9	8,5	10	10	1	46,0	13,0	169,00
X ₉	2,5	2,5	2,5	3,5	4	4,5	19,5	-13,5	182,25
X ₁₀	4	4	4	3,5	1	2	18,5	-14,5	210,25
Total	55	55	55	55	55	55	330		2153,5

Calculated by the author based on a questionnaire survey

Were,

$$d = \sum_{i=j}^n x - \frac{\sum_j^i \sum_j^i x}{n} = \sum_j^i - 33 \quad (7)$$

Checking the correctness of the matrix compilation based on the checksum calculation is carried out according to the following formula:

$$\sum_j^i x = \frac{(1+n)n}{2} = \frac{(1+10)10}{2} = 55$$

The correctness of the compiled matrix is evidenced by the equality of the sum over the columns of the matrix and the checksum. The final rating of the factors influencing the competitiveness of trade enterprises in the consumer market, considering the experts' assessment, are presented in Table 5.

Table 5. Rating of factors ensuring the competitiveness of supermarkets in the consumer market

Place	1	2	3	4	5	6	7	8	9	10
Factors	X ₇	X ₆	X ₈	X ₁	X ₅	X ₂	X ₉	X ₁₀	X ₄	X ₃
Rating	50,5	48,0	46,0	45,5	43,0	33,0	19,5	18,5	14,5	11,5

As the data shown in the table 5, according to experts, the greatest influence on the competitiveness of supermarket-type stores is exerted is: the radius of the store's accessibility, the use of innovative technologies in providing services to consumers, as well as the breadth

and depth of the range of goods offered. These factors are considered the main ones and ensure the competitiveness of supermarkets in the consumer market of Khujand.

During the analysis, the technology of selling goods to consumers, the timing of services and the number of services provided to consumers were identified as the least significant factors ensuring the competitiveness of supermarkets in the consumer market of the city of Khujand. To determine the consistency of expert opinions, we have used the Morris George Kendall rank coefficient of concordance with this formula eight:

$$W = \frac{S}{\frac{1}{12}m^2(n^3-n)-m\sum_{i=1}^n T_i} \quad (8)$$

Where, $S = 2153,5$

$$T_i = \frac{1}{12} \sum_{l=1}^n (t_i^3 - t_i)$$

T_i - is the number of links (types of repeating elements) in the estimates of the i-th expert, t_l is the number of elements in the l-th link for the i-th expert (the number of repeated elements).

$$T_1 = \left[\frac{(2^3 - 2)}{\sum_{t=3}^t (2^3 - 2)} \right] / 12 = 1,5; \quad T_2 = \left[\frac{(3^3 - 3)}{\sum_{t=3}^t (2^3 - 2)} \right] / 12 = 4,5$$

$$T_3 = \left[\frac{(2^3 - 2)}{\sum_{t=2}^t (4^3 - 4)} \right] / 12 = 5,5; \quad T_4 = \left[\frac{(3^3 - 3)}{\sum_{t=4}^t (2^3 - 2)} \right] / 12 = 3,5$$

$$T_5 = \left[\frac{(3^3 - 3)}{\sum_{t=3}^t (2^3 - 2)} \right] / 12 = 2,5; \quad T_6 = \left[\frac{(3^3 - 3)}{\sum_{t=3}^t (2^3 - 2)} \right] / 12 = 2,5$$

$$\sum_{m=6}^t T = 1,5 + 4,5 + 5,5 + 3,5 + 2,5 + 2,5 = 20$$

$$W = \frac{2153,5}{\frac{1}{12}6^2(10^3-10)-6*20} = 0,76$$

$W = 0.76$ indicates the presence of a high degree of agreement of expert opinions. For this purpose, we calculated the Pearson matching criterion:

$$\gamma^2 = \frac{2153,5}{\frac{1}{12}6*10(10+1)+\frac{1}{10-1}20} = 40,8$$

The calculated γ^2 is comparable with the table value for the number of degrees of freedom $K = n-1 = 10-1 = 9$ and at a given significance level $\alpha = 0,05$. Since γ^2 is calculated $40,8 \geq$

tabular (16,91898), then $W = 0,76$ is not a random value, and therefore the results obtained make sense and can be used in further research.

Based on obtaining the sum of the ranks, which are presented in table 6, can calculate the indicators of the weight of the considered parameters. Also, to transform the matrix into a matrix of transformed ranks by this formula:

$$S_{ij} = x_{max} - x_{ij}, \text{ where, } x_{max} = 10$$

Table 6. Matrix of transformed ranks

Indicators	Experts						Total mark	W, λ
	1	2	3	4	5	6		
X_1	0	1	2	3	2	2	10	0,04
X_2	4	3	4	3	3	3	20	0,09
X_3	7	7	7	7	7	5	40	0,18
X_4	6	6	6	7	7	7	39	0,17
X_5	2	3	1	3	2	2	13	0,06
X_6	3	3	1	1	1	0	9	0,04
X_7	0	1	1	1	2	2	7	0,03
X_8	2	1	1	0	0	10	14	0,06
X_9	6	6	6	6	5	5	34	0,15
X_{10}	5	5	5	6	8	8	37	0,17
Total							223	1

Indicator $w = 0.76$, which indicates the presence of a high degree of agreement of expert opinions.

To conduct an integral assessment of the competitiveness of five supermarkets in the consumer market, we spend a questionnaire survey of respondents, using the factors we have provided, to provide the competitiveness of supermarket-type enterprises in the consumer market of Khujand city from X_1 – selling price of goods and services; X_2 – quality of service; X_3 – the number of services; X_4 – terms of rendering services; X_5 – availability of qualified workers; X_6 – innovative technologies; X_7 – radius of accessibility (shop location); X_8 – breadth and depth of the assortment of goods; X_9 – infrastructure status; X_{10} – technologies selling of goods.

The calculation was made by assessing, the most significant competitiveness in terms of competitiveness points from "B-1" - the worst, "M-2" - the average, "G-3" - the best. This assessment takes into account the above factors $x_1, \dots, x_{10}$ of five large supermarkets, which occupy from 9 to 20% of the food market share of Khujand city in terms of food sales. The result of the survey is presented in Table 7.

Table 7. Result of the questionnaire survey of respondents

Indicators	Name of shops				
	Ltd«Anis»	Ltd«Oasice - 2»	Ltd«Muhayo»	Ltd«Khurshed+ »	Ltd«Amid »
	«G»	«G»	«B»	«B»	«M»
X_1	3	2	2	1	2
X_2	3	3	1	1	3
X_3	2	2	1	1	2
X_4	3	2	2	1	2
X_5	2	2	2	1	1
X_6	3	2	1	1	2
X_7	2	3	1	3	2
X_8	3	3	2	2	3
X_9	2	2	1	3	3
X_{10}	2	2	1	1	2
Total	25	23	14	15	22

To calculate the integral indicator, we will formulate an integral equation of the following formula (Wolak-Tuzimek et al., 2021):

$$y = a + b_1x_1 + b_2x_2 + \dots + b_nx_n \quad (9)$$

The integral indicator is as follows by this formula:
 $y = a + 0,04x_1 + 0,09x_2 + 0,18x_3 + 0,17x_4 + \dots + 0,17x_{10}$

3. Results and Discussions

Using formula number two, the result is compared according to the rating scale proposed by Ansoff to determine the level of sustainable competitiveness of retailers in the consumer market. Ansoff's rating scale is as follows (Yuleva-Chuchualyna, 2019):

$0,1 \leq C \leq 0,4$ – weak competitive position;

$0,4 \leq C \leq 0,7$ – average competitive position;

$0,7 \leq C \leq 0,8$ – competitiveness;

$0,8 \leq C \leq 1,0$ – the leader in the consumer market.

Next, the calculate process the values of competitiveness indicators using the integral indicators equation, corresponding to the Ansoff scale, that be shown on Table 8.

Table 8. Equations of the integral indicator

Name of shops	Calculation of equation
Ltd «Anis»	$y = 0,04x_1 + 0,09x_2 + 0,18x_3 + 0,17x_4 + 0,06x_5 + 0,04x_6 + 0,03x_7 + 0,06x_8 + 0,15x_9 + 0,17x_{10} = 2,38$
Ltd «Oasice - 2»	$y = 0,04x_1 + 0,09x_2 + 0,18x_3 + 0,17x_4 + 0,06x_5 + 0,04x_6 + 0,03x_7 + 0,06x_8 + 0,15x_9 + 0,17x_{10} = 2,16$
Ltd «Muhayo»	$y = 0,04x_1 + 0,09x_2 + 0,18x_3 + 0,17x_4 + 0,06x_5 + 0,04x_6 + 0,03x_7 + 0,06x_8 + 0,15x_9 + 0,17x_{10} = 1,32$
Ltd «Khurshed+»	$y = 0,04x_1 + 0,09x_2 + 0,18x_3 + 0,17x_4 + 0,06x_5 + 0,04x_6 + 0,03x_7 + 0,06x_8 + 0,15x_9 + 0,17x_{10} = 1,41$
Ltd «Amid»	$y = 0,04x_1 + 0,09x_2 + 0,18x_3 + 0,17x_4 + 0,06x_5 + 0,04x_6 + 0,03x_7 + 0,06x_8 + 0,15x_9 + 0,17x_{10} = 2,22$

The maximum and minimum values of the integral indicator are determined in Table 9.

Table 9. Matrix of the maximum and minimum values of the integral indicator of the competitiveness of five supermarkets in the consumer market of Khujand city

Name shops	Ltd shop «Anis»	Ltd shop «Oasice -2»	Ltd shop «Muhayo»	Ltd shop «Khurshed+»	Ltd shop «Amid»
Ltd shop «Anis»	2,38	0,22	1,06	0,97	0,16
Ltd shop «Oasice - 2»	0,22	2,16	0,84	0,75	-0,06

Name shops	Ltd shop «Anis»	Ltd shop «Oasice -2»	Ltd shop «Muhayo»	Ltd shop «Khurshed+»	Ltd shop «Amid»
Ltd shop «Muhayo»	1,06	0,84	1,32	-0,09	-0,9
Ltd shop «Khurshed+»	0,97	0,75	-0,09	1,41	-0,81
Ltd shop «Amid»	0,16	-0,06	-0,9	-0,81	2,22

The result of our research is mentioned on Table 9 shows, the strongest player in the consumer market is the «Anis» supermarket, which provides high-quality, affordable and differentiated services that meets the criteria (level of profitability, taste, etc.) of consumer demand. Supermarket «Amid» ranks second among the five leaders in the sale of food products, its integral score is 2,22 - coefficient, compared to the «Anis» store, by 0,16 - lower. The third place among the five leaders in the consumer market is occupied by the Khurshed supermarket, the integral score of which was 1,41 - coefficient, compared to «Anis» supermarket – 0,97 and 0,81 lower than «Amid». So offered result of research influence to the improvement of competition competitiveness of supermarkets in consumer market.

The conducted research of the competitiveness of retail trade enterprises in the consumer market it possible to determine the main provisions for improving the sustainable competitiveness management system of retail trade enterprises (Kalita & Chepurensko, 2020). It should be noted that the main disadvantages in provision the competitiveness of supermarkets, by opinion Milusheva (2020) are:

- 1) the lack of understanding among specialists of the need to create an effective management system that would increase the competitiveness of economic entities;
- 2) low level of research and management training of managers and other specialists;
- 3) lack of a strategy to improve the competitiveness of retailers;
- 4) the lack of objectives in the development strategies of retail enterprises to improve the quality of trade services (Senyshyn et al., 2019);
- 5) weak marketing orientation; and
- 6) weak innovative projects.

This research based on the data, can illustrate the result of the integral analysis of the level of competitiveness of supermarkets in the consumer market in Figure 4.

Figure 4. Integral indicator of the competitiveness of five supermarkets in the consumer market of Khujand city

Figure 4 shows that among the five leaders (supermarkets) in the consumer market, the leading position is occupied by supermarket Anis. Supermarket Anis has a maximum financial opportunity to organize additional points and organize innovational of service for customers.

4. Conclusion

Based on the conducted research, we have been determined the financial opportunities and sustainable development of the competitiveness of supermarkets in the consumer market. This research has determined the greatest factors influences on the competitiveness of supermarket are the radius of the store's accessibility; the use of innovative technologies in providing services to consumers, as well as the breadth and depth of the range of goods offered.

As a result of the research analysis, we believe that, depending on the financial capabilities, the features of the sustainable development of the competitiveness of supermarkets have been identified. In this regard, the conducted research work contributes to the solution of some of the problems associated with the competitiveness; it is impossible to consider all the factors influencing of the sustainable development competitiveness of supermarkets in one work. For reaching sustainable competitiveness development theoretical and practical specialists must combine their endowments and knowledge in this direction (finance potential, location of supermarkets closely in populations zone and marketing mix). Just by this way, our specialists shall influence to the improvement of competitiveness and sustainable development supermarkets in consumer market.

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Author Contribution

Conceptualization and methodological frameworks we conducted by Niyozov Jamoliddin Safarivich. Also, carried out with the data analysis and writing for original draft preparation of the article.

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