

7

**TAXONOMIC ANALYSIS OF STRATEGIC DECISIONS FOR
THE DEVELOPMENT OF THE HOTEL AND RESTAURANT INDUSTRY**

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ABSTRACT

The object of research is the strategy for the development of the hotel and restaurant industry in Ukraine. To achieve this goal, the methods of theoretical generalization, analysis and synthesis, logical generalization, analogies, comparison, grouping, the method of taxonomic analysis, and system analysis were used. The use of the method of taxonomic analysis made it possible to obtain a generalized assessment of the development strategy of the domestic hotel and restaurant industry. The method of retrospective analysis made it possible to analyze the dynamics and identify trends in changes in the integral indicator of the development strategy of the domestic hotel and restaurant industry.

The application of the taxonomy method for diagnosing the development strategy of the hotel and restaurant industry has been substantiated; for this, it is proposed to use a conceptual descriptive model of taxonomic analysis. Indicators of diagnostics of the development strategy of the hotel and restaurant industry have been identified, which are grouped according to the dominant directions: structural, scale of production activities, marketing, personnel, investment attractiveness and financial performance. The interpretation of the values of the integral taxonomic indicator of the development strategy of the hotel and restaurant industry in Ukraine has been substantiated. In accordance with the value of the integral indicator, it is proposed to divide into four states of the industry development, which correspond to certain strategies and managerial decisions for their implementation. The integral indicator of the hotel and restaurant industry development strategy was calculated using the taxonomy method for the period 2013–2019. Based on the results of the calculations, it was concluded that the development of the hotel and restaurant industry in Ukraine is uneven. The largest share is taken by observations with an insufficient state of development of the industry – 57.1 %, a crisis state of development was observed in 28.6 % of periods and a sufficient state of development was recorded in 14.3 % of observations. This indicates the existing problems in the development of the domestic hotel and restaurant industry.

Managerial solutions are proposed for the implementation of the strategy for the development of the hotel and restaurant industry for the coming period, including activities at the national level and at the level of individual business entities.

The applied nature of the proposed methodology is justified by its practical application based on the actual data of the development of the hotel and restaurant industry in Ukraine for 2013–2019.

KEYWORDS

Taxonomic analysis, development strategy, reference vector, hotel and restaurant industry.

7.1 ANALYSIS OF THE PRACTICES OF APPLYING TAXONOMIC ANALYSIS TO SUBSTANTIATE MANAGERIAL DECISIONS ON THE DEVELOPMENT STRATEGY OF THE HOTEL AND RESTAURANT INDUSTRY

At the present stage of economic relations, the development of the domestic hotel and restaurant industry is accompanied by cyclical processes that are intensified by world integration phenomena, increased competition and turbulence in the external environment, and the socio-economic crisis in the country.

The industry is a complex economic system that requires its constant monitoring and the use of a system of dissimilar indicators for this, which must be systematized and constantly analyzed to make rational managerial decisions.

To work with large amounts of information, it is customary to use algorithms and optimal mathematical models in the field of level assessment. The most acceptable in these conditions is the method of taxonomic analysis, which allows the construction of a generalized assessment of a complex object or process. The method has a powerful arsenal of systematization algorithms and can solve the problem of assessing the development strategy of the hotel and restaurant industry.

In the scientific literature, there are no generally accepted methods for assessing the development strategy of the hotel and restaurant industry. In the existing methods, a different composition of indicators is proposed and do not contain the benchmarks of the integral indicator of the level of the development strategy, which complicates analytical and management procedures. However, there is a need to develop a methodology for assessing the development of the hotel and restaurant industry and obtain a generalized indicator of its development.

The object of research is the strategy for the development of the hotel and restaurant industry in Ukraine.

The aim of research is to determine and analyze the integral indicator of the development strategy of the hotel and restaurant industry in Ukraine and substantiate, on this basis, management measures to implement the industry development strategy for the coming period.

To achieve the set research aim, the following tasks have been identified:

- 1) development of a conceptual descriptive model of taxonomic analysis of the hotel and restaurant industry development strategy;
- 2) formation of a sample of data on the development strategy of the hotel and restaurant industry in Ukraine for 2013–2019;
- 3) calculation of the integral indicator of the hotel and restaurant industry development strategy using the taxonomy method;
- 4) interpretation of the results of the analysis of the integral indicator for 2013–2019;
- 5) development of proposals for the implementation of the industry development strategy for the coming period.

The works of many well-known domestic and foreign scientists are devoted to the study of various aspects of the development strategy of the hotel and restaurant industry of the enterprise.

The problems of applying the methods of multidimensional analysis are highlighted in the works of Ayvazyan, S., Bazhaeva, Z., Staroverova, O. [1], Pluta, W. [2] and others.

Olsen, M. D., Roper, A. [3] conducted research on strategy in four main areas – strategic planning, competition and competitive advantage, internationalization and strategy implementation. It has been established that in the field of hospitality it is necessary to take into account the influence of international transactions.

Doctoral research by Schmelzer, C. [4], conducted in three restaurant firms in the United States, is an empirical study of the implementation of strategy in the field of hospitality. This study aims to develop an implementation strategy. Based on the analysis of several framework works on the implementation of the strategy, the author identified 10 variables for the implementation of the strategy, and then divided them into two groups: context and process variables. Data from three restaurant companies were collected and analyzed. Based on the results of her research, Schmelzer has developed a framework for strategy implementation, consisting of a number of variables for strategy implementation, such as structure, culture, learning, etc. [5].

Wong, K. K. F., Kwan, C. [6] analyzed the competitive strategies of hotels and travel agents using the Asia-Pacific context (Hong Kong and Singapore). They identified the cost of competitiveness as mobilizing staff and partners and building a robust service delivery system as a key competitive strategy.

Garrigós-Simón, F. J., Palacios Marqués, D., Narangajavana, Y. [7] studied the competitive strategies and performance of Spanish hospitality firms.

Further research on strategy implementation in the sector was conducted by Jessica Hwang, L., Lockwood, A. [8], who studied hospitality and tourism firms to uncover the challenges of implementing best practices in hospitality and tourism. Seven key capabilities are found to underpin the adoption / implementation of best practices, including customer-centric objectives, planning and control, partnerships and networking, internal and external communication, achieving agreed standards, strategic personal management, cash flow and performance management.

Kandampully, J., Duddy, R. [9] identified the service system as a key factor in maintaining competitive advantage. The authors' research envisioned a model of interlinked empowerment, service warranties, and service recovery to deliver outstanding service to hospitality and tourism establishments as a means of maintaining a competitive advantage.

Gursoy, D., Swanger, N. [10] empirically investigated the managerial perspectives of internal strategic factors that can affect the financial performance of companies in the hospitality and tourism industry. The relationships between internal strategic factors and financial performance were examined, and it was found that four internal strategic success factors (sales, R&D and disruption, IT and human resources) had a significant impact on the financial performance of the company.

The study by Ottenbacher, M. C. [11] analyzed data on 185 innovations in the field of hospitality and identified three dimensions of efficiency: market efficiency, improved financial performance, employees and customers. With 23 potential determinants of success, 12 have been recognized as performance drivers.

In [12], the methodological foundations for determining the competence-based readiness of an enterprise for strategic changes in the context of a high dynamism of the business environment are investigated.

In subsequent works of researchers [13], on the basis of the author's economic and mathematical model, the optimization of the key parameters of the basic strategy of enterprise changes was carried out.

The work of Balatska, N. [14] analyzes the functioning of the restaurant business, emphasizes the importance of Internet technologies and alternative online services for reengineering the main business processes and repurposing the usual operating mode of restaurant business establishments.

Ostapenko, Y., Paranytsa, N., Makarenko, O. [15] analyzed the development of the tourism business in Ukraine. It is determined that due to the growth in the volume of tourism business and the need to accommodate tourists, it is necessary to more direct the state management of tourism on the creation of a competitive hotel industry. The analysis of the structure of the hotel business in Ukraine was carried out and the development of hotel enterprises was assessed, the shortcomings and prospects for the development of the hotel industry were identified.

In the work of Zavidna, L. D. [16], practical recommendations are given on the strategy of ensuring the competitiveness of enterprises in the sphere of hotel services and effective management of the resource potential of an enterprise in the hotel business. The methodological and methodological approaches to the formation and implementation of the development strategy of the hotel business enterprise have been substantiated. The modeling of the process of managing the strategic development of a hotel business enterprise using economic and mathematical methods is proposed.

The article by Dekaliuk, O. V. [17] considered methodological approaches to choosing a strategy for the development of a hotel and restaurant enterprise. The model of integrated strategic management of the hotel and restaurant business has been determined. The analysis of corporate strategies is carried out and conclusions are drawn on the implementation of the latter at the enterprises of the hospitality industry.

In the article by Mylko, I. [18] considered the general aspects of developing a strategy for the development of the hotel and restaurant complex in Ukraine. The mission of the hotel and restaurant complex of the country was formed, the goals, priorities and tasks of the activity were clarified, the SWOT-matrix of the enterprises of the hotel and restaurant complex of the country was built. The structure of the strategy for the development of the hotel and restaurant complex of the country is proposed.

Dyshkantiuk, O., Potemkin, L., Vlasiuk, K. [19] analyzed the world experience and found two approaches to overcoming the crisis: the first approach – affordable credit lines, the second – deferred payment of tax and debt obligations, considered the dynamics of indicators of the development of the domestic hospitality and tourism industry and emphasized the importance of finding new approaches and business models.

Korzh, N., Onyshchuk, N. [20] analyze the activity of hotel establishments in quarantine conditions and determine the main directions of their transformation.

The team of authors Charkina, T., Martseniuk, L., Zadoia, V., Pikulina, O. [21] primed the implementation of strategies and directions for overcoming the crisis in the hotel and restaurant business, in order to ensure the possibility of functioning of hotels and restaurants in the new quarantine conditions.

The work [22] systematizes the main strategies for the development of the hotel and restaurant business during the Covid-19 period, identifies two groups of development strategies: a strategy for maintaining a positive image in the market and a strategy for overcoming the negative consequences of the Covid-19 pandemic.

Methods of multivariate statistical analysis, in particular the taxonomy method, are used in the works of foreign and domestic scientists to study various aspects of strategic management in the hospitality industry. In particular, in the work of Bowen, J. T. [23] used taxonomic analysis to form the marketing strategy of hotel and restaurant establishments. The authors created regression models for each of three different grouping methods (taxonomic, strategic, and sectoral) using ROI as the dependent variable. Taxonomic groups were found to explain most of the changes, followed by strategic groups and industry groups.

The work [24] presents a taxonomic analysis that includes seven practical indicators and a decision tree to measure the use of Revenue Management for various enterprises. The analysis was carried out on the basis of a survey of 232 enterprises. The findings provide insight into how Revenue Management practices differ in different settings.

In the work of the team of authors, chaired by Nikolskaya, E. Yu. [25] used the method of taxonomic analysis to assess the level of innovation potential of hotel enterprises.

In the work of Seliutin, S. V. [26] carried out a taxonomic analysis of the effectiveness of the strategic management of the establishments of the restaurant industry in Kharkov and revealed a tendency for the growth of the values of the integral indicator in more complex and clustered in the form of enterprises. In order to increase the efficiency of strategic management of restaurant enterprises, matrices of possible changes in their values have been developed, which orientate to specific strategic goals of fractal determinants, and priority strategic directions for the development of selected enterprises have been proposed.

Davydova, O. Yu. [27] analyzed the state of efficiency of the components of innovative management of the development of hotel and restaurant enterprises using the taxonomy method. As a result, an assessment of the level of the general integral indicator of the effectiveness of the components of innovative management of the development of hotel and restaurant enterprises was obtained.

In the article by Shykina, O. [28] considered the application of taxonomic analysis as a method for assessing the competitiveness of small hotels in Odesa. A grouping of 75 small hotels was carried out according to the results obtained and the prospects for choosing development strategies for individual groups based on the results of the study were substantiated.

In the work of Chernikova, I. B., Kvasha, O. O., Kirilieva, L. O. [29] the issue of the application of the method of taxonomic analysis in the information system of enterprises of the Kharkiv region and Kharkiv. The taxonomic analysis of the enterprises of the restaurant industry in Kharkiv and the Kharkiv region was carried out and the indicator of the level of economic development of the studied set of enterprises was determined. As a result of the calculations, two groups of enterprises were obtained – with a more and less stable level of development.

Analysis of scientific literature indicates the diversity of approaches to assessing the development of the hotel and restaurant industry. The results of the analysis allow to conclude that it is advisable to use multivariate statistical methods in the study of various types of strategies through the multicriteria of their measurement. As for the methods of taxonomic analysis, it should be noted that they are predominantly used for research at the level of hospitality institutions, and not in the industry as a whole. Moreover, in general, the existing methods do not contain benchmarks, an integral indicator of the level of the development strategy, which complicates analytical and managerial procedures.

Scientific and methodological approaches to assessing the development strategy of the hospitality industry at the sectoral level by methods of taxonomic analysis have not yet been implemented. These shortcomings necessitate the development of scientific and methodological approaches to assessing the development strategy of the hotel and restaurant industry using taxonomic analysis.

7.2 METHODOLOGY FOR TAXONOMIC ANALYSIS OF THE HOTEL AND RESTAURANT INDUSTRY DEVELOPMENT STRATEGY

To solve the tasks, the following methods were used: analysis and synthesis, theoretical and logical generalization, analogies, comparisons, groupings, the method of taxonomic analysis, system analysis, and the like.

To form an integral indicator of the development strategy of the hotel and restaurant industry, it is proposed to use the taxonomy method.

The main purpose of using the taxonomy method is to build a generalized assessment of a complex object or process.

The taxonomic indicator is calculated according to the classical algorithm of taxonomic analysis [1]: formation of the observation matrix, standardization of the values of the elements of the observation matrix, identification of the reference vector, determination of the distance between individual observations and the reference vector, calculation of the taxonomic development coefficient, formulas (5.1)–(5.9) [30].

The construction of a number of indicators that are different in their characteristics to a single generalizing indicator makes it possible to determine the difference between the achieved state and the comparison base as a whole for the group of indicators.

7.3 DIAGNOSTICS OF THE DEVELOPMENT STRATEGY OF THE HOTEL AND RESTAURANT INDUSTRY USING THE TAXONOMY METHOD AND JUSTIFICATION OF MANAGERIAL DECISIONS FOR THE IMPLEMENTATION OF THE STRATEGY FOR THE FURTHER DEVELOPMENT OF THE INDUSTRY

Based on the analysis of literary sources, expert assessment and the available information base according to the State Statistics Service of Ukraine, a list of indicators for diagnosing the strategy of development of the hotel and restaurant industry in the dominant directions was formed (**Table 7.1**).

● **Table 7.1** Indicators of the dominant directions of diagnostics of the development strategy of the hotel and restaurant industry in Ukraine

Nº	Assessment component	Indicators
1	Structural	Number of business entities (X1) Share of the number of entities in this type of economic activity in the total number of entities, % (X2) Share of individual entrepreneurs in the total indicator of economic entities of the corresponding type of activity, % (X3)
2	Scale of production activities	The volume of products (goods, services) produced by business entities for this type of economic activity (X4) Share of products (goods, services) in GDP, % (X5)
3	Marketing	The volume of products (goods, services) sold by business entities in this type of economic activity (X6)
4	Personnel	The number of employees employed by business entities in this type of economic activity (X7) Labor productivity of employed workers (X8) Personnel costs of business entities for this type of economic activity (X9) Average monthly salary of 1 employed employee at business entities for this type of economic activity (X10) Coefficient of the ratio of the average monthly salary of 1 employed employee among business entities for this type of economic activity and the minimum wage (X11) Coefficient of comparison of growth rates of labor productivity and growth rates of average monthly wages (X12)
5	Investment attractiveness	Capital investments in industry enterprises (X13) Value added in terms of production costs for business entities in this type of economic activity (X14) Share of value added in the proceeds from sold products (goods, services), % (X15)
6	Financial performance	Net profit (loss) of enterprises (X16) Level of profitability (loss ratio) of operating activities of enterprises (X17) Level of profitability (loss ratio) of all activities of enterprises (X18) Share of enterprises that have made a profit to the total number of enterprises, % (X19)

Source: developed by the author

The key components that provide an effective strategy for the development of the hotel and restaurant industry are structural, scale of production activities, marketing, personnel, investment attractiveness and financial performance. The proposed list of components is universal and can be used to diagnose the development strategy of any type of economic activity.

Assessment of the development strategy of the hotel and restaurant industry and its backbone components using the method of taxonomic analysis is carried out in order to identify the prerequisites for its formation. Taking into account the indicators of dominant directions influencing the strategic guidelines for the development of the hotel and restaurant industry, we have proposed a conceptual descriptive model for taxonomic analysis of the strategy for the development of the hotel and restaurant industry, which is shown in **Fig. 7.1**.

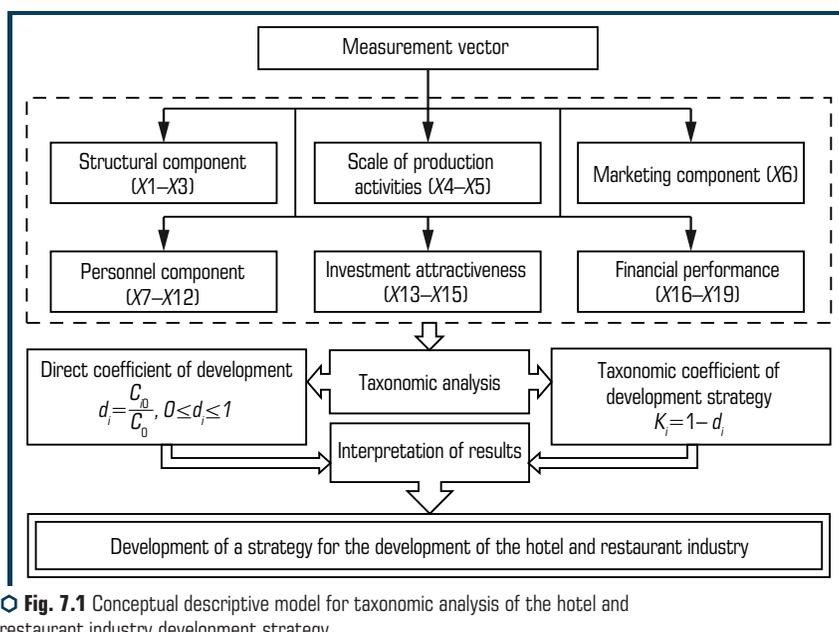


Fig. 7.1 Conceptual descriptive model for taxonomic analysis of the hotel and restaurant industry development strategy
 Source: built by the author

Using our proposed conceptual descriptive model of taxonomic analysis, the identification of taxonomic development factors for key components of the hotel and restaurant industry was carried out.

Sample of data for 2013–2019 is presented in **Table 7.2**. It should be noted that for the purpose of comparability of value indicators in dynamics, they were listed in US dollars at the average annual rate of the NBU.

● **Table 7.2** Initial data for calculating the taxonomic indicator of the development: strategy of the hotel and restaurant industry in Ukraine

Year	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11	X12	X13	X14	X15	X16	X17	X18	X19
	Number of business entities, units																		
	The share of the number of entities in this type of economic activity in the total number of entities, %																		
	The share of individual entrepreneurs in the total indicator of economic entities of the corresponding type of activity, %																		
	Volume of products (goods, services) of business entities, thousand USD																		
	Share of industry production in GDP, %																		
	Volume of products (goods, services) sold by business entities, thousand USD																		
	The number of employees employed by business entities, persons																		
	Labor productivity of 1 employed employee, thousand USD																		
	Personnel costs of business entities, thousand USD																		
	Average monthly salary of 1 employed worker at business entities in this type of economic activity, USD																		
	Ratio of average monthly and minimum wages, coeff.																		
	Coefficient of comparison of growth rates of labor productivity and growth rates of wages (2013 – base)																		
	Added value in terms of production costs of business entities, thousand USD																		
	Share of value added in revenue, %																		
	Capital investments of enterprises, thousand USD																		
	Net profit (loss) of enterprises, thousand USD																		
	The level of profitability (loss ratio) of operating activities of enterprises, %																		
	The level of profitability (loss ratio) of all activities of enterprises, %																		
	Share of enterprises that have made a profit to the total number of enterprises, %																		

Source: compiled by the author according to [31]

Elements of observation matrices have different units of measurement, to align the values of features, a standardization procedure is carried out, the results of data standardization are presented in **Table 7.2**.

Obtained from the **Table 7.2** the data made it possible to determine the reference vector: for factor-stimulants – the maximum value of the standardized indicator; for destimulators – the minimum value. According to the selected indicators-determinants of the development strategy of the hotel and restaurant industry, all factors are stimulants.

According to the **Table 7.3** it can be concluded that most of all the indicators for 2013 and 2019 serve as the benchmark. By 2013, the benchmark indicators are the following: volume of products (goods, services) produced by economic entities for the given type of economic activity (X4); volume of products (goods, services) sold by economic entities for the given type of economic activity (X6); labor productivity of employed workers (X8); personnel costs for business entities for this type of economic activity (X9); average monthly salary of 1 employed employee for business entities for this type of economic activity (X10); capital investments for enterprises of the industry (X13); the share of value added in the proceeds from sold products (goods, services), % (X15).

For 2019, the following indicators are benchmark: the number of business entities (X1); the share of the number of entities in this type of economic activity in the total number of entities, % (X2); the share of individual entrepreneurs to the total indicator of business entities of the corresponding type of activity, % (X3); the share of products (goods, services) in GDP, % (X5); number of employees employed by business entities in this type of economic activity (X7); net profit (loss) of enterprises (X16); level of profitability (loss-making) of operating activities of enterprises (X17); level of profitability (loss-making)) all activities of enterprises (X18).

The obtained data on the reference values of the key indicators of the development strategy of the hotel and restaurant industry for 2013–2019 allowed to determine the distance between individual observations and the reference vector (Ci0) and the deviation of the i -th year from the ideal.

At the next stage, the taxonomic coefficients of the strategy for the development of the hotel and restaurant industry in Ukraine (K_i) were calculated according to the presented scheme (**Fig. 7.2**).

The value of the taxonomic indicator takes values from 0 to 1. The value of the taxonomic indicator, which is close to 0, indicates an unsatisfactory state with respect to the optimal indicators. Conversely, if the value of a taxonomic indicator is close to 1, this indicates a positive situation in a certain period compared to others. The calculation results are shown in **Table 7.4**.

Thus, the results of calculating the integral indicator of the development strategy of the hotel and restaurant industry in Ukraine indicate an uneven state of development of the industry. In 2013, the value of the indicator is 0.38. During 2014–2015, the indicator decreased, reaching the minimum value for the entire study period in 2015, 0.09. These trends are explained by a drop in the tourist flow as a result of the annexation of Crimea, military events in the East of the country and a difficult socio-economic situation.

Table 7.3 Matrix of standardized indicators

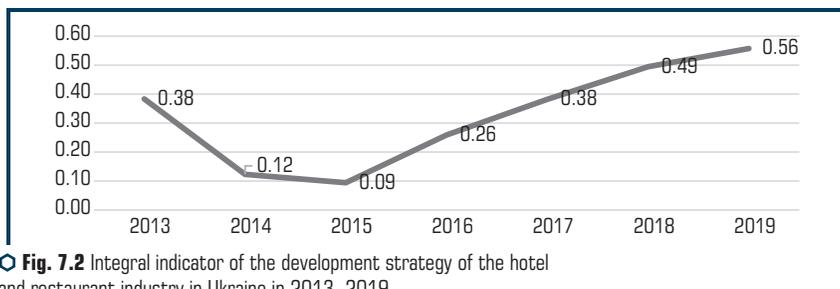
Indicator	2013	2014	2015	2016	2017	2018	2019	Reference (Z0j) (stimulant – max; stimulant – min)
X1	-1.33	-0.31	-0.15	-0.29	-0.31	0.46	1.93	1.93
X2	-0.63	-0.83	-0.91	-0.34	0.09	0.81	1.82	1.82
X3	-2.15	-0.11	0.07	0.75	0.25	0.43	0.75	0.75
X4	1.49	-0.78	-1.10	-0.82	-0.19	0.34	1.07	1.49
X5	0.68	-0.92	-1.50	-0.55	0.35	0.71	1.22	1.22
X6	1.73	-0.79	-0.91	-0.76	-0.36	0.17	0.90	1.73
X7	0.87	-0.68	-1.20	-0.84	-0.37	0.93	1.28	1.28
X8	1.68	-0.78	-1.09	-0.78	0.02	0.09	0.86	1.68
X9	2.01	-0.42	-0.82	-0.85	-0.41	0.03	0.47	2.01
X10	2.14	-0.25	-0.67	-0.84	-0.35	-0.21	0.18	2.14
X11	0.92	0.54	1.08	0.60	-1.03	-0.87	-1.23	1.08
X12	-1.59	-0.97	-0.42	0.97	0.82	0.48	0.70	0.97
X13	1.53	-0.94	-1.24	-0.65	0.08	0.43	0.79	1.53
X14	-0.86	-0.33	-1.15	0.81	1.59	0.54	-0.61	1.59
X15	2.22	-0.22	-0.69	-0.58	-0.36	-0.19	-0.18	2.22
X16	-0.37	-1.48	-1.00	0.09	0.74	0.83	1.19	1.19
X17	0.01	-1.65	-1.04	0.15	0.77	0.83	0.94	0.94
X18	-0.03	-1.53	-1.10	-0.01	0.77	0.83	1.07	1.07
X19	-1.46	-1.45	0.71	0.69	0.34	0.63	0.53	0.71

Source: calculated by the author based on the data [31]

Since 2016, a gradual growth of the integral indicator of the development strategy of the hotel and restaurant industry in Ukraine has been recorded. The high values of the taxonomic indicator obtained according to the data of 2019 – 0.56, however, indicate an insufficiently high level of development of the industry.

To interpret and analyze the obtained assessment results based on a certain level of the hotel and restaurant industry development strategy, a scale of intervals of the integral indicator was used. To solve this problem, the method of grouping the obtained data was used.

7 TAXONOMIC ANALYSIS OF STRATEGIC DECISIONS FOR THE DEVELOPMENT OF THE HOTEL AND RESTAURANT INDUSTRY



○ **Fig. 7.2** Integral indicator of the development strategy of the hotel and restaurant industry in Ukraine in 2013–2019

Source: built by the author

● **Table 7.4** Determination of the distance between the indicator and the standard

Year	$\sum_{i=1}^m (Z_{ij} - Z_{0j})^2 C_{i0}$	C_{i0}	C_0	d_i	K_i
2013	47.26	6.87	11.15	0.62	0.38
2014	95.62	9.78	11.15	0.88	0.12
2015	102.04	10.10	11.15	0.91	0.09
2016	68.28	8.26	11.15	0.74	0.26
2017	47.48	6.89	11.15	0.62	0.38
2018	31.77	5.64	11.15	0.51	0.49
2019	24.36	4.94	11.15	0.44	0.56

Source: calculated by the author based on the data [31]

The interpretation of the values of the integral indicator of the development strategy of the hotel and restaurant industry in Ukraine is given in **Table 7.5**. Depending on the quantitative value of the integral indicator of the development strategy of the hotel and restaurant industry, it is proposed to divide into four zones corresponding to different states of the industry development and for which the corresponding strategies and managerial decisions for their implementation have been established:

1) high level of development – a growth strategy that provides for a solution with an emphasis on improvement and proactive measures;

2) sufficient level of development – a restructuring strategy, according to which it is necessary to carry out active measures in all components;

3) satisfactory level of development – a stabilization strategy with an emphasis on adaptation to changes in the external environment;

4) pre-crisis level of development – a survival strategy that provides for the implementation of anti-crisis changes concerning the necessary measures to counter the destabilizing factors of development of various types.

● **Table 7.5** Initial data for calculating the taxonomic indicator of the development strategy of the hotel and restaurant industry in Ukraine

Integral indicator value	The degree of compliance of the development strategy with the maximum value	The state of development of the hotel and restaurant industry in Ukraine	Relevant industry development strategy	Managerial solutions for the further development of the industry
0.75–1	Parameters approaching maximum values	High	Growth strategy	Focus on improvement and proactive measures: further increasing the volume of sales and marketing of products (goods, services) by increasing the competitiveness and quality of products (goods, services), searching for new / non-traditional types of services, using innovations, increase in human and intellectual potential and further improvement of motivation, continuous improvement of personnel qualifications; improving the system of attracting investment resources; search for new / unconventional types of income, cost reduction to increase profit growth
0.5–0.74	Most of the parameters are at the level of fairly high values	Sufficient	Restructuring strategy	Focus on active activities: activation of innovative activities for the implementation of structural transformations, an increase in the volume of production of products (goods, services) by expanding the range, improving the quality of services, entering new sales markets; raising the qualification and professional level of personnel, improving the motivational mechanism; further attraction of various types of investments; increase in income, decrease in expenses for profitable activities
0.25–0.49	Most of the parameters are at a satisfactory level, some indicators may correspond to a sufficient level	Satisfactory	Stabilization strategy	Focus on adaptive measures: implementation of improvement in development indicators; measures for the sustainability of production volumes and sales of products (goods, services) for their further increase; building human resources, using an effective motivation system; measures to attract investment; recovery and growth of income, saving resources, looking for opportunities to reduce costs
0–0.24	Most of the indicators correspond to a low level	Crisis	Survival strategy	Focus on anti-crisis measures: focusing on profitable and rejection of unprofitable types of products, goods, services, activities; changes in marketing activities; measures to preserve human resources; optimization of business processes, hard economy of all types of resources to reduce costs

Source: compiled by the author according to [31]

Using the data in the **Table 7.5**, the distribution of observations for the period under study was carried out according to the value of the integral indicator of the development strategy of the hotel and restaurant industry in Ukraine (**Fig. 7.3**).

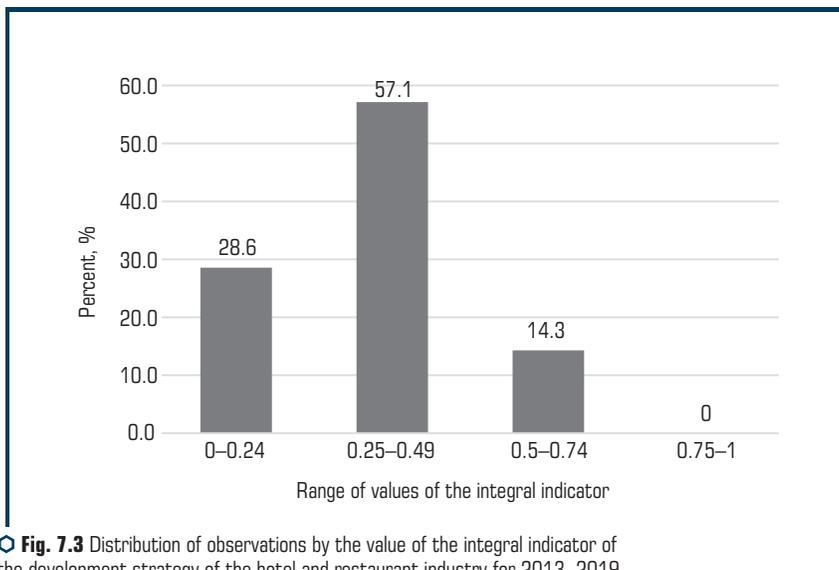


Fig. 7.3 Distribution of observations by the value of the integral indicator of the development strategy of the hotel and restaurant industry for 2013–2019
Source: built by the author

Thus, the obtained values of the integral indicator for the period under review indicate: the largest share is occupied by observations with an insufficient state of development – 57.1 %, in second place with a crisis state of development – 28.6 %, respectively. The smallest number of observations falls on periods with a sufficient state of development (only 14.3 %). At the same time, during the entire study period, a high level of development of the hotel and restaurant industry was not observed at all.

The low values of the integral indicators of development indicate the existing problems in the development of the hotel and restaurant industry.

Moreover, for the last studied period – 2019, the integral indicator of development indicates a sufficient level of development of the industry.

Therefore, it is necessary to develop managerial decisions for the implementation of a development strategy for the future, which made it possible to neutralize the negative phenomena of the external environment and overcome the irrationality of the development of internal problems of business entities in the industry.

The proposed managerial solutions are shown in **Table 7.6**. They can be divided into national and at the level of individual business entities.

Table 7.6 Managerial decisions for the implementation of the development strategy of the hotel and restaurant industry in Ukraine

Assessment component	Managerial decisions	
	Nationwide	At the level of individual business entities
Structural	Support activities: government projects for training small business organizations wishing to; simplification of procedures for organizing, doing business, reporting; investment in the industry, preferential taxation, preferential lending, business consulting and support, assistance in the development of infrastructure for supporting small businesses	–
Scale of production activities	Marketing activities to popularize the domestic tourist product, modernize the tourist infrastructure, support tourist areas (destinations) and projects at the national and regional level, promote the development of non-traditional types of tourism, introduce mechanisms to promote and stimulate the use of the latest technologies and technologies in production by subjects that ensure quality improvement goods (works, services)	Increasing the volume of production of products (goods, services) by expanding the range of products / services, diversifying the price offer, improving the quality of services based on compliance with international service standards, the use of innovation and digitalization
Marketing		Active marketing activities based on digital tools of Internet marketing, using new sales channels for products (goods, services), attracting new groups of consumers, increasing the competitiveness of products (goods, services)
Personnel	Organization of training, retraining and advanced training of personnel for business entities of the region	Measures to improve the qualification and professional level of personnel, improve the motivational mechanism (primarily material motivation), create a favorable psychological climate
Investment attractiveness	Attraction of investments, especially in regions with low rates of development of the hotel and restaurant business; measures to stimulate investment activities of entities (preferential taxation, preferential lending, business consulting and support), assistance in the development of public-private partnerships, crowdfunding, grant activities	Measures to increase investment in the industry through cooperation with authorities of various levels and other investors in order to attract various types of investments, attract grant funds
Financial performance	Measures for state support of business, optimization of the tax burden, provision of preferential loans, etc	Measures to optimize business processes, increase income, reduce costs to improve the financial and economic condition and increase the financial result of the activities of business entities

So, the proposed managerial solutions for the implementation of the strategy for the development of the hotel and restaurant industry in Ukraine at the national level include measures for state support of business, marketing activities to popularize the domestic tourism product, modernize the tourism infrastructure, promote the development of non-traditional types of tourism, introduce mechanisms to promote and encourage use in production by subjects of the latest technologies and technologies that ensure an improvement in the quality of goods (works, services), measures to organize training, retraining and advanced training of personnel, attracting investments in regions with low rates of development of the hotel and restaurant business, measures to stimulate investment activities of subjects of objects, assistance development of public-private partnerships, crowdfunding, grant activities and the like.

The main management measures at the level of individual business entities are: expanding the range of products/services, improving the quality of services based on compliance with international service standards, using innovations, active marketing activities based on digital tools of Internet marketing, using new sales channels for products (goods, services), attracting new consumer groups, increasing the competitiveness of products (goods, services), improving the qualification and professional level of personnel, improving the motivational mechanism, creating a favorable psychological climate, attracting various types of investments, attracting grant funds, optimizing business processes, increasing income, reducing costs to improve the financial and economic condition and increase the financial result of the activities of business entities.

The scientific novelty is the application of the taxonomy method for diagnosing the development strategy of the hotel and restaurant industry, for this it is proposed to use a conceptual descriptive model of taxonomic analysis. The paper identifies indicators for diagnosing the development strategy of the hotel and restaurant industry, which are grouped according to the dominant directions: structural, scale of production activities, marketing, personnel, investment attractiveness and financial performance. The proposed list of components and indicators is universal and can be used to diagnose the development strategy of any type of economic activity.

The interpretation of the values of the integral indicator of the development strategy of the hotel and restaurant industry in Ukraine has been substantiated. Depending on the quantitative value of the integral indicator of the hotel and restaurant industry development strategy, it is proposed to divide into four zones corresponding to different states of the industry development, for which the corresponding strategies and managerial decisions for their implementation have been established. The conducted studies have shown the uneven development of the hotel and restaurant industry in Ukraine during the study period: in 2013, the value of the integral indicator of the development strategy of the hotel and restaurant industry was 0.38, in 2014–2015. The indicator was decreasing, reaching a minimum value in 2015 of 0.09 and, starting in 2016, it gradually grew. The high values of the taxonomic indicator obtained according to the data of 2019 are 0.56, which indicates an insufficiently high level of development of the industry. The largest share is taken by observations with an insufficient state of development – 57.1 %, a crisis state of development was observed in 28.6 % of periods. Only in period 1 (14.3 % of observations) a sufficient state

of development was recorded. This indicates the existing problems in the development of the domestic hotel and restaurant industry and actualizes the problem of making appropriate managerial decisions for their successful solution.

The proposed managerial solutions for the implementation of the development strategy of the hotel and restaurant industry include events at the national level and at the level of individual business entities. National decisions include measures for state support of business, marketing measures to popularize the domestic tourism product, modernize tourism infrastructure, promote the development of non-traditional types of tourism, introduce mechanisms to promote and stimulate the use of innovations in production, measures to organize training, retraining and advanced training of personnel, measures to stimulate investment activities of entities, assistance in the development of public-private partnerships, crowdfunding, grant activities, and the like. The necessary managerial decisions at the level of individual economic entities are: diversification of the range of products/services and price proposals, improving the quality of services based on compliance with international service standards, using innovations, using digital tools for Internet marketing, using new sales channels for products (goods, services), attracting new groups of consumers, improving the qualification and professional level of personnel, improving the motivational mechanism, attracting various types of investments, optimizing business processes, measures to increase the financial result of the activities of business entities.

The results of the study prove the applied value of the taxonomic method for diagnosing the development strategy of the hotel and restaurant industry. The directions of further research are the development of scientific, methodological and practical recommendations for the formation and implementation of the development strategy of the hotel and restaurant industry, depending on the level of the value of the integral coefficient of the development strategy.

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