Development of a system of quantitative and qualitative indicators for assessing the competitiveness of the hospitality industry

Desarrollo de un sistema de indicadores cuantitativos y cualitativos para evaluar la competitividad de la industria hotelera

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ABSTRACT:
The purpose of this study is to develop a system of quantitative and qualitative indicators for assessing the competitiveness of the hospitality industry. Leading approaches to the study of this problem were the analysis of scientific and methodological literature on the topic, the generalization and classification of scientific research and the existing foreign and Russian experience in the field of competitiveness of hotel enterprises and services, quantitative and qualitative analysis methods, and comparative economic analysis. On the basis of the proposed system of quantitative and qualitative indicators of the competitiveness of hotel enterprises, promising areas of activity to improve the competitiveness of hotel companies in the Kaliningrad region have been identified, the purpose of which is to create conditions for the development and improvement of the competitiveness of the hotel business. The approach proposed by the authors of the article is novel and sums up the experience of structuring and studying

RESUMEN:
El objetivo de este estudio es desarrollar un sistema de indicadores cuantitativos y cualitativos para evaluar la competitividad de la industria hotelera. Los principales enfoques para el estudio de este problema fueron el análisis de la literatura científica y metodológica sobre el tema, la generalización y clasificación de la investigación científica y la experiencia extranjera y rusa existente en el campo de la competitividad de empresas y servicios hoteleros, métodos de análisis cuantitativos y cualitativos y análisis económico comparativo. Sobre la base del sistema propuesto de indicadores cuantitativos y cualitativos de la competitividad de las empresas hoteleras, se han identificado áreas de actividad prometedoras para mejorar la competitividad de las empresas hoteleras en la región de Kaliningrado, cuyo propósito es crear las condiciones para el desarrollo y mejora de la competitividad del negocio hotelero. El enfoque propuesto por los autores del artículo es novedoso y
1. Introduction
In the conditions of development of modern economic relations, any product, regardless of the market, must be competitive. For the hospitality industry, the competitiveness of services is the degree of the ability to satisfy a set of needs and thereby its attractiveness to the buyer. The generally accepted factors that determine the competitiveness of hotel services are usually the price (the price-to-price ratio of the main competitors), the quality (the degree of conformity of the hotel to the level of its classification, the professionalism of the staff, the security of services, etc.), the organization of services, and the hotel marketing complex, marketing channels and their effectiveness).

The theoretical basis of the developed approach to assessing the level of competitiveness of the industry is the work of M. Porter (2017), which defines it as "... the ability of companies, industries and regions open to international competition to provide a relatively high level of income and wages, that is, the quality of life of the population". J.J. Lamben (1996), T.L. Azoev & A.P. Chelenkov (2000), V.D Andrianov (2000) interpret the concept of "competitiveness of the industry" as a combination of consumer, quality and price characteristics that can determine its success in the domestic and foreign markets.

Scientists R.A. Fatkhutdinov (2000), L.P. Dashkova (2010), N.K. Moiseeva (2010), etc., who consider theoretical approaches to the issues of assessing the competitiveness of the service, note that it is conditioned both by qualitative and quantitative (cost, economic) factors. In their opinion, the qualitative indicators of the competitiveness of the services of the hotel sphere characterize the properties of the service in terms of the ability to meet a specific client's need. Quantitative (economic) criteria determine the cost of consumption of hotel services, the so-called consumer costs, necessary to take advantage of the provided service. The totality of the above elements, in our opinion, is the determining factor of the competitiveness of the subjects of the hospitality industry by the indicator.

Summarizing the above, it should be noted that the definition of "competitiveness" itself is universal, applicable not only to goods or services in general, but also to individual enterprises and industries. At the same time, competitiveness is one of the important properties of the industry, which determines the development prospects of the whole complex, as well as the enterprises that represent its structural elements. At the same time, as noted in the study by M. A. Novais, L. Ruhanen & C. Arcodia (2018), despite the wide coverage of the topic of competitiveness in the scientific literature, there is an inconsistency in its definition, measurement. It is the problem of studying the qualitative and quantitative indicators of the competitiveness assessment, and as a consequence the development of a competitive regional hotel complex has determined the relevance of our study.

2. Methods and Materials
The study of the key issues of the development and adaptation of quantitative and qualitative indicators of the competitiveness of the hospitality industry is carried out using the following sources of information:

- Tourism Market Trends UNWTO
- The Travel & Tourism Competitiveness Report 2017
- Calendar indicators markets forecasts
- materials of scientific conferences;
3. Results and Discussions

3.1. The main indicators of the competitiveness of the services of the hotel industry

The competitiveness of the hotel complex assumes the efficiency of individual hotel market operators, which are evaluated not only with the help of traditional criteria, but also the criteria inherent only in this industry.

In general, competitiveness is determined by the availability of technical, economic and organizational conditions for offering a competitive service that can meet the needs of the guest. Graphically, the indicators of the competitiveness of the hotel service are presented in Figure 1.

![Figure 1: Grouping of competitiveness indicators of a hotel servant](image)

The following are the most important parameters of the level of qualitative assessment of the competitiveness of hotel services:

- Communication skills;
- competence;
- courtesy;
- Confidence;
- responsiveness;
- Touchability;

1) degree of customer satisfaction
2) level and quality of service
3) the coefficient of classroom hotels
4) the level of consumer value

1) the brand name of the hotel
2) effectiveness of PR-activities
3) efficiency of distribution channels
4) the coefficient of growth of the market share of the hotel

1) the cost of the service
2) the price of service
understanding / knowledge of the client (Semenova, Korneevets & Dragilev, 2015).

It should be noted that the qualitative consumer appraisal of the services of the hotel industry is based on the fact that for each parameter of qualitative assessment there are two conventional values - the customer expectation and the real one. The difference between these two values is called the discrepancy (mismatch) and estimates the degree of customer satisfaction with the quality of the service and when the actual parameters match the expected values, the quality of hotel services is recognized as satisfactory.

Quantitative indicators represent an estimate of the price of consumption, i.e., consumer costs needed to meet his needs, which include:
- the price of the service;
- The price of service.

Scientists consider the competitiveness of hotel services, either as services of higher quality than competing analogues, or how the ability of a service to meet the requirements of a specific market in comparison with the services of competitors.

It seems appropriate to consider a broader, third approach. Therefore, the following definition of the concept of "competitiveness of hotel services" will be used in the paper: the ability of the service to be attractive to the consumer in comparison with other hotel enterprises of the same type and purpose, due to better matching of its quality and cost characteristics to the requirements of this market and consumer estimates.

This definition is considered broader because the quality of the service depends on the set of consumer parameters, that is, the characteristics that characterize the most important consumer functions of the service and in order to meet the needs of the potential and real consumer.

And also there are two types of quality parameters: rigid parameters that must comply with state standards for constructive and technological features, as well as some consumer properties and functions, clearly defined by standards and regulations; soft consumer parameters, reflecting the requirements of customers, including the psychological properties of the service.

3.2. The influence of quantitative and qualitative indicators for the development of the hotel industry

Successful development of the economy assumes the combined influence of qualitative and quantitative indicators on the activities of both the whole industry and its individual subjects. For example, the tourist attractiveness of cities (qualitative characteristics) determines their financial success, which is a quantitative indicator. T. Oggionni & L. Kwok (2018) in their study showed that targeted marketing organizations bring business to hotels by promoting their destination. This is clearly seen from the data in Table 1. However, it should immediately be noted that not all tourists bring a significant financial income (Table 1).

<table>
<thead>
<tr>
<th>Rating</th>
<th>City</th>
<th>Tourist spending, billions of dollars</th>
<th>2016/2017 году, %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2016</td>
<td>2017 (forecast)</td>
</tr>
<tr>
<td>1</td>
<td>Dubai</td>
<td>28,50</td>
<td>31,40</td>
</tr>
<tr>
<td>2</td>
<td>New York</td>
<td>17,02</td>
<td>17,28</td>
</tr>
<tr>
<td>3</td>
<td>London</td>
<td>16,09</td>
<td>15,35</td>
</tr>
<tr>
<td>4</td>
<td>Singapore</td>
<td>15,69</td>
<td>15,74</td>
</tr>
</tbody>
</table>

Table 1
Cities with the highest level of international tourists spending
<table>
<thead>
<tr>
<th></th>
<th>City</th>
<th>2014</th>
<th>2016</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Bangkok</td>
<td>14,08</td>
<td>15,61</td>
<td>+ 10,9</td>
</tr>
<tr>
<td>6</td>
<td>Paris</td>
<td>12,03</td>
<td>12,62</td>
<td>+ 4,9</td>
</tr>
<tr>
<td>7</td>
<td>Tokyo</td>
<td>11,28</td>
<td>11,70</td>
<td>+ 3,7</td>
</tr>
<tr>
<td>8</td>
<td>Taipei</td>
<td>9,91</td>
<td>10,59</td>
<td>+ 6,9</td>
</tr>
<tr>
<td>9</td>
<td>Seoul</td>
<td>9,38</td>
<td>9,55</td>
<td>+ 1,8</td>
</tr>
<tr>
<td>10</td>
<td>Barcelona</td>
<td>8,90</td>
<td>9,51</td>
<td>+ 6,9</td>
</tr>
</tbody>
</table>

*Resource: Mastercard Global Destination Cities Index 2017*

The same trends can be traced in the hospitality industry market of the Russian Federation. For example, according to the statistics of 2014-2016, the most popular objects of urban tourism are the historical cities of central Russia and the millionaires, whose popularity was influenced by the favorable geographical position, proximity to the capital, the development of the city as a resort, the popularity and ubiquitous promotion of the Golden brand Ring”, etc.

The authors of the article agree with the results of the research of S. Ivanov & M. Ivanova (2016) on the basis of cross-section regression analysis in 116 countries, which showed that the competitiveness of the final point is positively and significantly dependent on the number of affiliated hotels and rooms in affiliated hotels at the destination point. The share of the hotel market in the hospitality industry does not affect its competitiveness. The results also indicate that the overall business environment (level of corruption and globalization of the country) has a positive and stronger impact on the competitiveness of the destination than the availability of hotel chains.

The figure shows the change in the dynamics of the attractiveness of cities in 2014 and in 2016.

**Figure 2**
Indicators of the attractiveness of Russian cities on search terms in 2014 and in 2016
To form the presented rating of the attractiveness of cities (Figure 2), the queries on Internet portals about the main cities and their sights were taken as a basis. The rating was based on statistics of two search queries in Yandex for 2016 "attractions ..." and "What to see in ...". It is these phrases introduced most often by tourists who have plans to visit a particular city. It should be noted that the cities of Moscow and St. Petersburg were excluded from the presented rating, as unconditional leaders among Russian and foreign tourists, and also the cities of the Crimean peninsula.

Thus, it can be concluded that both qualitative and quantitative indicators have an impact on tourism attractiveness, which undoubtedly has a positive effect on the development of the hotel industry in the above-mentioned urban areas.

Below consider the impact of the above indicators on the competitiveness of the hotel industry in the Kaliningrad region.

3.3. The influence of quantitative and qualitative factors on the development of the hotel industry in the Kaliningrad region

As noted earlier in this study, the competitiveness of the industry is the ability to produce goods and services that meet the requirements of the world and domestic markets and create the conditions for the growth of the competitiveness potential of industry enterprises.

For the hotel industry in the Kaliningrad region, this is also a clear fact that allows for a fairly dynamic development both on the international and the Russian tourist market. The illustrations below confirm the main thesis of the authors, that the qualitative characteristics that determine the level of competitiveness (image, quality of services rendered, etc.) directly affect the level of loading of hotels and their financial success (quantitative indicator). The presented rating was compiled on the basis of independent tourists' reviews. The experts analyzed more than 175 million reviews and recommendations of tourists, more than 200 portals for hotel reservations. It should be noted that when selecting in the ranking, cities with a number of hotels of at least 130 hotels were counted, for each of which not less than 60 reviews were written.

<table>
<thead>
<tr>
<th>Rating</th>
<th>Destination</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Göreme, Turkey</td>
<td>86.821</td>
</tr>
<tr>
<td>2</td>
<td>Matera, Italy</td>
<td>86.724</td>
</tr>
<tr>
<td>3</td>
<td>Rust, Germany</td>
<td>86.476</td>
</tr>
<tr>
<td>4</td>
<td>Lijiang, China</td>
<td>85.6</td>
</tr>
<tr>
<td>5</td>
<td>Belgrade, Serbia</td>
<td>85.599</td>
</tr>
<tr>
<td>6</td>
<td>San Gimignano, Italy</td>
<td>85.547</td>
</tr>
<tr>
<td>7</td>
<td>Zagreb, Croatia</td>
<td>85.187</td>
</tr>
<tr>
<td>8</td>
<td>Killarney, Ireland</td>
<td>85.039</td>
</tr>
</tbody>
</table>
One of the strategic objectives of the development of tourism in the Kaliningrad region should be called the formation of a competitive hotel complex that can meet the demand for accommodation services and the accelerated development of the hotel complex of the region due to both the growth of budget revenues and the increase in the number of jobs, preservation and rational use of cultural and historical heritage.

The urgency of building a competitive hotel market is due to the increasing tourist flow throughout 2010-2016 in the Kaliningrad Region (Table 3)

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of tourists visiting the Kaliningrad region, thousand people.</td>
<td>420</td>
<td>450</td>
<td>500</td>
<td>575</td>
<td>600</td>
<td>1080</td>
<td>1260</td>
</tr>
<tr>
<td>The growth rate of the indicator, %</td>
<td>-</td>
<td>107,1</td>
<td>111,1</td>
<td>115,0</td>
<td>104,3</td>
<td>180,0</td>
<td>116,7</td>
</tr>
<tr>
<td>Number of persons placed in collective accommodation facilities (people)</td>
<td>169 993</td>
<td>210 473</td>
<td>307 468</td>
<td>336 871</td>
<td>464 956</td>
<td>535 094</td>
<td>520 291</td>
</tr>
<tr>
<td>The growth rate of the indicator, %</td>
<td>-</td>
<td>123,8</td>
<td>146,1</td>
<td>109,6</td>
<td>138,0</td>
<td>115,1</td>
<td>97,2</td>
</tr>
<tr>
<td>The number of foreign citizens placed in collective accommodation facilities (people)</td>
<td>n/d</td>
<td>n/d</td>
<td>n/d</td>
<td>51 068</td>
<td>77 061</td>
<td>62 780</td>
<td>59 088</td>
</tr>
<tr>
<td>The growth rate of the indicator, %</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>150,9</td>
<td>81,5</td>
<td>94,1</td>
</tr>
</tbody>
</table>
From year to year, the popularity of visiting the Kaliningrad region is growing due to the development of different types of tourism: event tourism, business tourism, sports and cultural tourism, etc. This factor affects the competitiveness of hotel companies. However, when developing a strategic program for the development of the hotel sector in the Kaliningrad region, it should be borne in mind that a large proportion of tourists stop for a short time, in spite of the significant increase in the number of tourists who visited the Kaliningrad region, the number of persons placed in collective accommodation facilities in the analyzed period decreased.

According to experts, the pronounced seasonality of tourist flows, which has a significant impact on the loading of hotel companies in Kaliningrad and its region and its competitiveness in general, should be attributed to the number of negative factors affecting the competitiveness of hotel companies in the region. This is due to the fact that there is a huge gap between the average occupancy factor of the accommodation facility in the high season (May-September) compared to the low season occupancy (October-April).

In Kaliningrad, accommodation facilities are developing significantly and are getting a massive international scale, for the analyzed period their number has increased almost 4-fold. The speed of their development and construction is facilitated by the expansion of political, economic, scientific and cultural ties. In 2018, the World Cup in Kaliningrad will be held, this is a significant factor affecting the constantly increasing competition of hotels and other accommodation facilities.

The analysis of the influence of quantitative and qualitative factors on the development of the hotel industry in the Kaliningrad region made it possible to identify the main problems that adversely affect the development of the hotel complex and the direction for the formation of a competitive regional hotel complex.

The Kaliningrad region is an attractive region for Russian and foreign tourists, however, the
existing problems (negative image of the region, insufficient information, advertising and marketing support of the hotel business, poor quality of the hotel services offered) do not allow attracting massive tourist flows, despite the availability of unique resources. The lack of a clear strategy at the regional level to support and develop the hotel business in conjunction with the accompanying sectors of the economy is a negative factor affecting the competitiveness of the entire tourism industry.

3.4 Recommendations for the development of a competitive regional hotel complex on the basis of a system of quantitative and qualitative indicators of competitiveness assessment

The solution of the urgent task of increasing the competitiveness of hotel enterprises can have an important socio-economic significance for the business structures of the region. From the general conceptual point of view, the development of a competitive hotel complex in the region should, according to the authors of the study, develop in three directions.

1. Formation of competitive advantages of the subjects of hotel business. If there are wide opportunities for the development of external tourism and significant health potential in the region, the development of green hotels (Lee & Cheng, 2018), competitive advantages will be formed as a tool for combating various types of tourist flows: cognitive, historical, health, business, sports and other. The direction includes the formation of competitive advantages, primarily between market entities in the region.

2. Organization of software and infrastructure support for the development of the hotel complex. This direction should be a function of regional and municipal authorities, whose activities should include the development and adoption of regional regulations on supporting and stimulating the development of the hotel complex, the preparation of technical and region-wide infrastructure to accelerate the development of the hotel complex and ensure its competitiveness (construction of transport communications, bus stations and airports, etc.)

3. Development of a regional hotel complex, taking into account external and internal conditions. An indispensable condition for the functioning of a competitive regional hotel complex and the realization of this direction is the creation of a network of hotel enterprises in the region that are able to respond flexibly to the variability of external and internal factors, taking into account the specifics of regional development. This activity should be carried out within the framework of the developed strategy and program at the expense of various sources of financing - private, state, foreign, municipal, public organizations. The system-wide representation of the formation of a competitive regional hotel complex is shown in Figure 3.

Figure 3
System-wide presentation of the development of a competitive regional hotel complex
Hotel business as a special type of commercial activity depends and is strongly influenced by other activities. For example, the development of tourism itself, transportation, communication and the degree of the improvement of territories, expansion of business partnership relations between domestic and foreign firms. At the same time, the hotel business itself actively influences other areas of economic activity in the regions of the country.

4. Discussion

Studies currently under way to study approaches to assessment and competitiveness (Algieri, Aquino & Succurro, 2018; Peng, Zhao & Mattila, 2015; Ivanov & Mayorova, 2014; Arbelo-Péreza, Arbelo & Pérez-Gómez, 2017; Saenko et al., 2017) allow to draw a conclusion about their undoubted importance for realization both for the tourism industry and for the hotel industry. Thus, it can be noted that the relevance of the study of the influence of quantitative and qualitative indicators of competitiveness in the hotel business is clearly expressed both on the international market and on the Russian or regional markets.

The authors of the study agree with the conclusions of M.J. Turner et al. (2017) who argue that in order to increase the competitiveness of the hotel services, they must develop and implement internal policies and procedures such as strategic management accounting that matches their business strategies and takes into account changing competitive requirements. Undoubted is the assertion that the quality of relationships with customers completely mediates the relationship between managerial competence and the competitive advantage of hotels (Cheraghalizadeh & Tümer, 2017). Many studies emphasize the importance of the location of the hotel as a determining factor of competitiveness. In particular, the study by M. Vivel-Búa, R. Lado-Sestayo & L. Otero-González (2018) notes...
that seasonality, market concentration and distance to the tourist destination center have a significant impact on the financial stability of the hotel. Other factors related to the characteristics of the hotel, which are significant, are diversification, liquidity, debt, operational efficiency and profitability.

Some of the authors (Zaitseva, Goncharova & Androsenko, 2016; Zaitseva, 2013; Semenova et al., 2017; Dzhandzhugazova et al., 2015), have repeatedly written about the importance of studying the competitiveness of key industry indicators and the hospitality industry as a whole to create and offer a significant product to consumers.

The approach proposed by the authors of the article is novel and generalizes the experience of structuring and studying various qualitative and quantitative approaches to the competitiveness of the industry aimed at creating an effective infrastructure, a product designed to meet the needs of consumers in the hospitality industry. Author's research confirmed the hypothesis that it is necessary to use an integrated approach when developing a strategy for the development of the hospitality industry, despite its complexity in the implementation.

5. Conclusion

Summarizing the above, it must be said that the competitiveness of the hotel complex can be determined by such competitive forces as the magnitude of the region's tourist potential, the demand for accommodation services and its structure, the volume and nature of its growth; availability of suppliers, related industries; the level of competition in the domestic tourism market, the scale and growth prospects of domestic tourism products; price level; character of the organization of management of the sphere of tourism (policy, planning, marketing, etc.). Some of the above determinants are interdependent and complimentary.

To achieve a high level of competitiveness of the Kaliningrad region's location, it is necessary to constantly accumulate benefits, open and develop new segments, diversify the tourist product and hotel services. To maintain the achieved competitive advantages, it is necessary to constantly improve the quality of tourist services, introduce modern information technologies, improve the methods of marketing the territory, improve the quality of service.

The article can be of interest to specialists of federal and regional offices of the hospitality and tourism industry, as well as for all interested in theoretical and practical issues of the competitiveness of the hotel complex.

Bibliographic references


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