

# Supply Chain Management in Competitive Structure of Sochi Health Resort and Spa Industry: Strategic Groups Analysis

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**Abstract-** In the health industry, distribution model, customers, and product catalog pose a unique set of problems for your supply chain. The article discusses the identification of strategic groups within health and resort services market based on the supply chain strategiers. Segmentation of competitors included the following steps: establishing mobility barriers; classification of sanatoriums and health resorts taking into account the mobility barriers; identification of strategic groups; description of strategic groups existing in the market of health-resort and spa services. Five strategic groups were identified. Recommendations on the selection of competitive strategies were made for each group. The results of strategic grouping can be used in forming competitive advantages allowing to successfully compete with rival firms in spa market. The article presents the results of the research supported by grant № 19-410-230059r\_a from the Russian Foundation for Basic Research.

**Keywords-** strategic groups, spa market, supply chain management, mobility barriers, sanatoriums and health resorts.

## 1. Introduction

Supply chain management (SCM) has been broadly practiced by many organizations. Over past decades healthcare sector is continuously facing challenges of increasing costs. Both researchers and practitioners have been increasingly focusing on various supply chain practices for SCM to cope with the continuous changes in their nature, context and requirements [1-4]. Many papers on SCM have been published in the past decades. However, we consider only those papers that regard with SCM for healthcare as a whole entity in the review [5-10]. In general, the enterprise competitiveness is considered in the light of following approaches:

- some researchers consider the enterprise competitiveness as its ability of to effectively manage the available resources when performing production and sales activities. This view is supported by G.L. Azoev, A.P. Chelenkov [2], D.O. Samodurov [14];

- enterprise competitiveness is considered as its comparative advantage over the other enterprises of the same group. This is, in particular, the view of V.D. Gribov, V.P. Gruzinov [5], R.A. Fathutdinov [4];

- the competitiveness of enterprises can also be viewed as outcomes of interaction with the competitive environment. This opinion is shared by Yu.Ya. Eleneva [3], N.A. Saveleva [15], N.S. Yashin [19].

Strategic grouping of competitors, i.e. segmentation of market competitors, is advantageous as part of the process of building competitiveness of resort-treatment companies [9]. Within a strategic group, the similar competitive strategies and identical sources of competitive advantages are used by competitors [10]. Strategic grouping allows concentrating the company efforts on obtaining advantages over direct competitors having the similar strategic settings and guidelines, serving to optimize the company's activities in the competition.

The problem of increasing the competitiveness of Russian health-resort enterprises both on the domestic and foreign markets is perceived and solved at various levels of the economy [7]. In modern economic literature there is a large number of publications on the problems of health-resort industry. At the same time, there is a certain deficit of research relating to the problem of competitive interaction among the main players in the market of spa services.

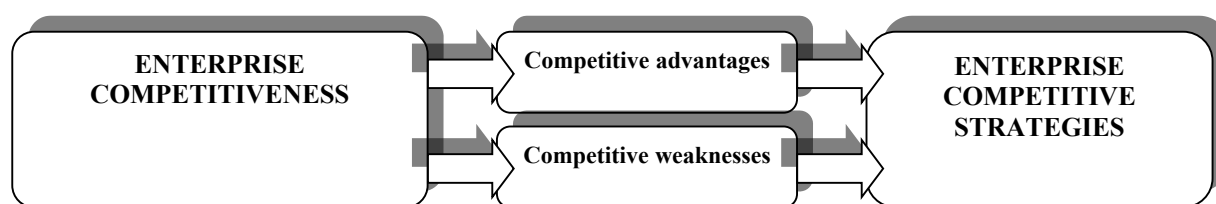
Due to tough competition in the sanatorium and spa services market, the objective of service providers is to increase their competitiveness by strengthening the existing competitive advantages and gaining the new ones. Therefore, there is a need for an objective assessment of company's competitive position and a regular monitoring of direct competitors. One of the most critical stages of competition analysis is strategic grouping of competitors, based on the identification of barriers used in the process of segmenting competitors. The choice of strategic grouping barriers should be based on sector specifics, as well as on the specifics of the consumer market segment.

In this regard, the issues of identifying strategic grouping barriers, important for segmenting competitors in spa services market, become increasingly urgent.

## 2. Methods

The work of Russian and foreign economists on the problem of enterprise competitiveness, regulatory acts of the Russian Federation, guidance materials, materials posted on the Internet served as methodological and theoretical basis of the current study.

The theoretical analysis, analytical methods, the method of expert estimates based on ranking of factors, the method of competitors' segmentation and others were used in the work.



**Figure 1.** Links between key concepts in the system of competitive relations

Since the concept of «enterprise competitiveness» is an aspect of a more general economic category of «competitiveness», the content of the former is largely determined by the nature and content of the latter.

The properties of competitiveness include:

- measurability – the quantitative assessment of study object [20];
- multidimensionality, which is expressed in the large variety of assessments with respect to the subjects and goals of competitiveness assessment. It applies to both the object and the subject of market relations [17],[18];
- multilevel nature - on each level of the economic system the competitiveness has different assessment criteria [16].

In our view, the most complete definition of competitiveness is presented in [15]:

«Competitiveness is a multi-level, multi-aspect concept related to the dynamic, controlled property of the assessment subject, determined by the combination of competitive advantages and weaknesses and expressed in the ability to withstand competition in the system of market relations in the considered period of time».

Key features of competitiveness include the possibility to control it. The competitiveness of a company is not something fixed, an eternal constant, it can be built and changed. Long-term competitiveness

management can significantly reduce the uncertainty of company's development prospects, increase its market stability, and ensure its sustainable development [6],[8]. In this regard, the problem of

## 3. Results

The main idea of ensuring the enterprise competitiveness is to search for key success factors to gain competitive advantages based on specifics and structure of the sector, factor terms, demand parameters, and the development of specialized infrastructure.

The role of key concepts «competitive advantages» and «competitive weaknesses» in the competitiveness subject area is presented in Figure 1. The competitive strategy of the enterprise should be developed taking into account both categories.

strategic management of enterprise competitiveness is becoming increasingly relevant.

The enterprise competitiveness is a dynamic property, which is due to the high variability of external competitive environment. Hence, the specifics of its strategic management can be revealed using theoretical developments of the famous American scientist I. Ansoff in the field of strategic management. In his work [1], he distinguishes four main stages in the development of strategic management methodology:

1. Management by control of performance (1900–1950): the company's response to changes develops after the events. Given the increasing pace of changes, this is unacceptable.

2. Management by extrapolation (1950s - 1960s), when the change is accelerating, but the future can still be predicted by extrapolating past trends (long-term planning).

3. Management by anticipation of changes (1970s - 1980s), when discontinuities began to occur and the change is slow enough to permit foreseeing future trends and determine the reaction by developing an appropriate strategy (strategic planning).

4. Management through flexible/rapid response (1990s to the present) - the transition from strategic planning to strategic management, defined not only as a set of strategic managerial decisions that form the long-term development strategy, but also as specific actions ensuring the rapid company response to the changes in external environment, which may entail the need for strategic maneuver, adjustment of general development orientations. At the same time, two areas of strategic management are currently distinguished. The first one (regular strategic management) consists of two complementary subsystems: analysis and

strategy planning subsystem and strategy implementation subsystem. The second direction (real-time strategic management) is associated with the solution of unexpectedly arising strategic tasks.

The strategic management of enterprise competitiveness is closest to the fourth stage by I. Ansoff, i.e. to the management by flexible /rapid response.

The response of strategic competitiveness management to external changes has dual nature: it is long-term and short-term at the same time. A long-term reaction is laid down in the strategic plans for the formation of company's competitiveness, while the

short-term one is realized outside the planned cycle in real time.

Competitiveness management should be based on a set of scientific approaches systematized by R.A. Fathutdinov [4]. The scientific approaches characteristic for strategic aspects of competitiveness management at the level of enterprise have been identified and included, among others, a logistics approach.

Table 1 provides a brief description of the scientific approaches to the strategic enterprise competitiveness management.

**Table 1.** Scientific approaches to the strategic management of enterprise competitiveness

Scientific approaches to the strategic management of enterprise competitiveness	Characteristics of approach
1. Systematic approach	Study of objects as systems
2. Logical approach	Cognitive science. The principles of dialectic and formal logic form the basis of the logical approach
3. Innovative approach	It consists in the orientation of enterprise development to accelerated innovation-driven activities
4. Complex approach	Technical, environmental, economic, organizational, social, psychological, and, if necessary, other aspects of competitiveness management and their relationship should be taken into account
5. Global approach	While ensuring the competitiveness of large businesses, the point of view should mentally be above the global system, and not at the level of object under consideration
6. Integrationist approach	Strengthening the cooperation of management entities, their integration, deepening the interaction and relationships between components of management system
7. Marketing approach	It provides consumer orientation of control subsystem when solving any problems
8. Functional approach	It consists in considering a need as a set of functions that must be performed to meet the needs. Object Development Chain: needs → functions → → future object indicators → changes in the structure of the system The instrument of application is functional and cost analysis
9. Structural approach	Determining the priorities among factors, methods, principles, and other tools in their totality in order to establish the optimal ratio and to increase the validity of resources distribution
10. Situational approach	It is based on the alternative in achieving the same goal during the adoption or implementation of a management decision (plans, etc.), taking into account uncertain circumstances
11. Normative approach	It consists in establishing competitiveness standards.
12. Logistics approach	It consists in optimizing and rationalizing the economic flows of the enterprise

There can be a lot of competitors in the industry market. Tracking their activities could be long and expensive. The method for strategic grouping of competitors or competitors' segmentation method proposed by M. Porter can be useful [10]. This method allows carrying out a more specific analysis convenient for the company's practical activities.

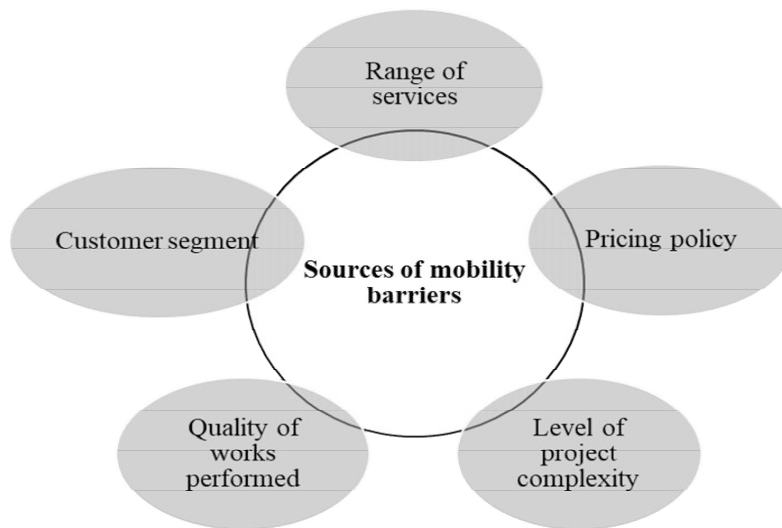
The study of strategic groups is based on the understanding that assessing the competition in the entire sector is fruitless [13]. In this context, it is difficult to establish the boundaries of potential competitors. Tracking all competitors is not possible. Spa and resort enterprises can have very different strategic orientations, goals, interests, and rely on various sources of competitive advantages. From the point of view of competition, M. Porter identified the level of competition for a company within the industry as a whole - a strategic group of competitors. He considered the strategic group as a set of firms achieving similar strategic objectives and using similar

resource base, offering a similar product to the market [11]. This level allows analyzing competitors' activities based on a clearer understanding of content and nature of competition, taking into account sectoral specifics and the competitive structure of the market.

The strategic group of competitors includes companies within an industry that use similar combinations of strategies and the same resource base, with comparable final products, close in properties and characteristics [10].

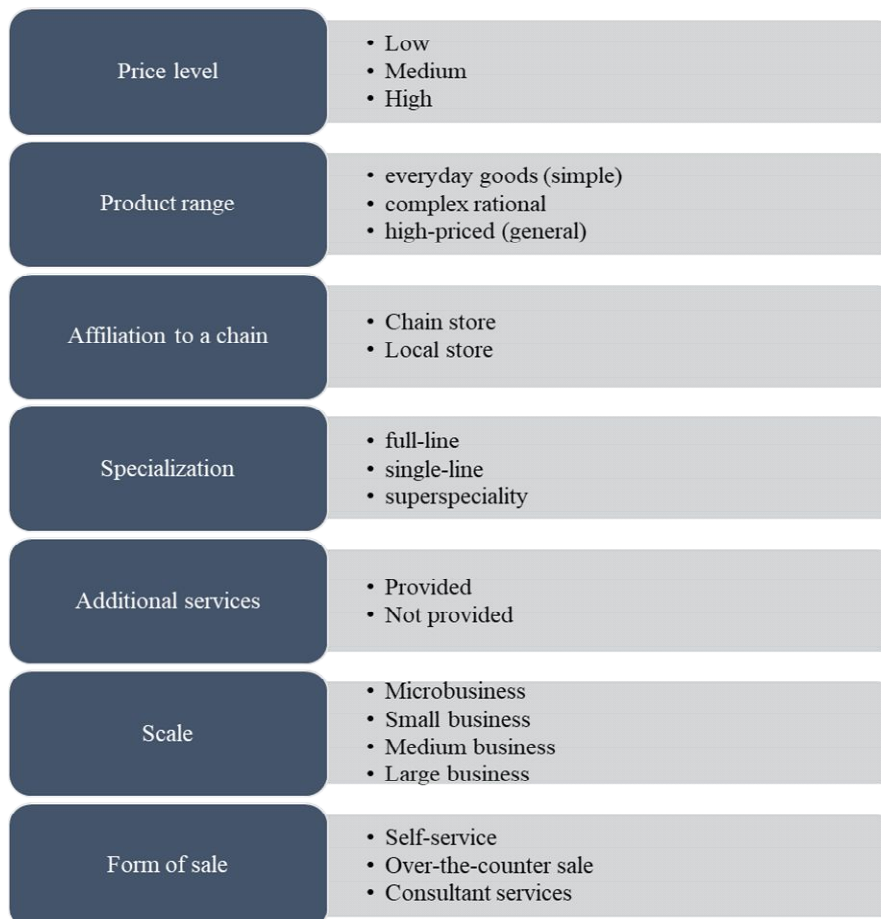
Strategic groups are identified on the basis of mobility barriers. A small number of barriers determined by the industry specifics is recommended to be used for the purposes of strategic groups mapping. However, even within the same industry, barriers can change their dynamics depending on the external and internal conditions of firms operation.

For example, the mobility barriers in the sector of building design are shown in Figure 2 [16].



**Figure 2.** Mobility barriers in strategic group mapping for building design services market (compiled from materials [16])

The barriers for retail market are presented in Figure 3. [16]



**Figure 3.** Mobility barriers for retail market (compiled from materials ([15]))

The subject of this study was the identification of strategic groups in the sector of sanatorium and resort services rendered to consumers without special health problems, using sanatorium and spa services for the purpose of recreation and general health

improvement. Sochi region is one the most representative examples: here, the concentration of health resort service providers is one of the highest in the Russian Federation with a wide diversity of companies, which allows giving the most prominent

example of strategic groups mapping, including from the position of strategic aspects.

The strategic groups mapping was based on the principle of «nesting dolls». Mobility barriers served as segmentation criteria for Sochi spa services market. Segmentation criteria are factors based on which the market competitors are classified into separate groups with similar strategic characteristics.

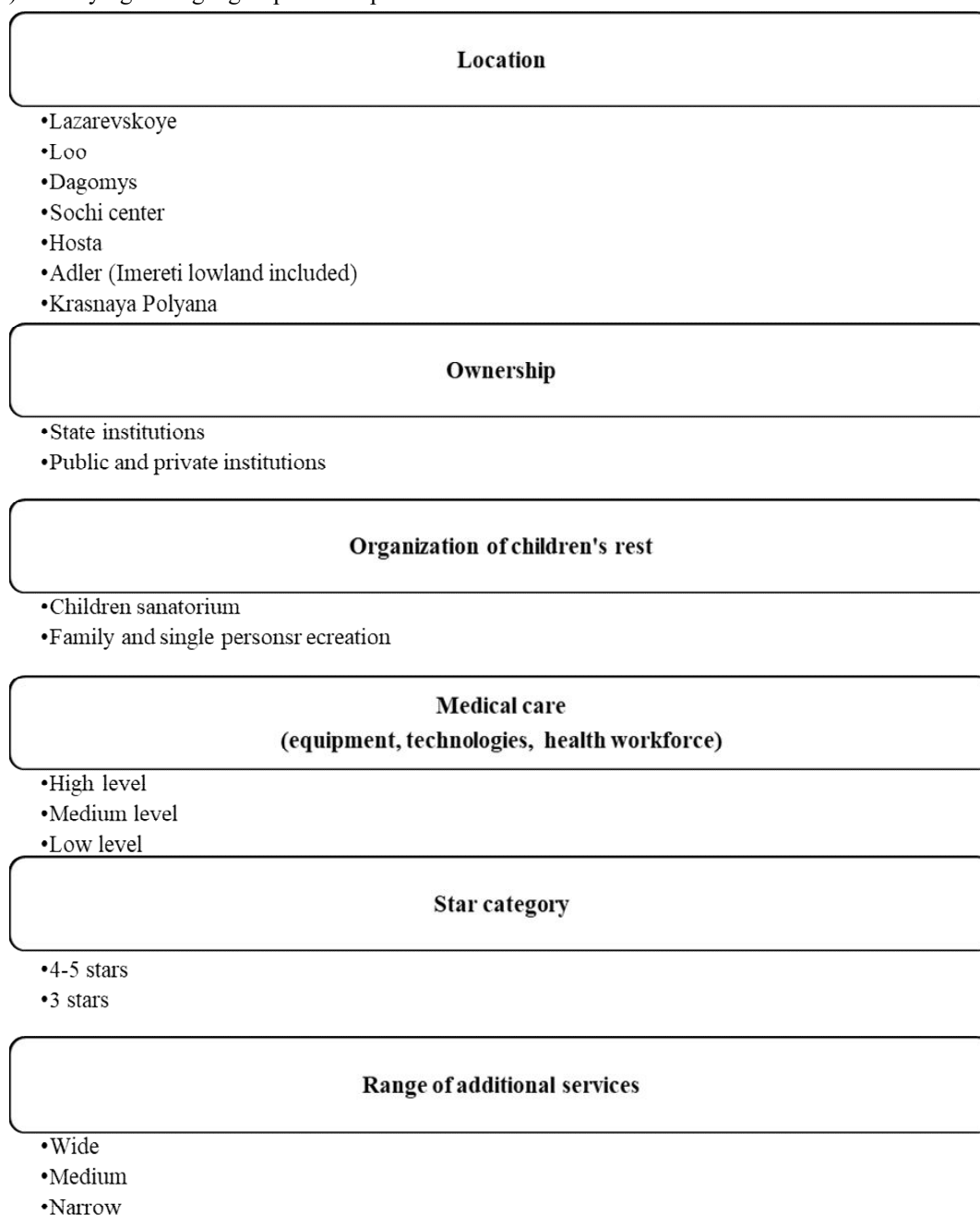
Segmentation of competitors in spa services market included the following steps:

- 1) Establishing mobility barriers between competitors in the market of spa services;
- 2) Classifying sanatorium and resort organizations relating to the established barriers.
- 3) Identifying strategic groups of competitors.

Let us present the content of each stage.

Stage 1. Establishing barriers between strategic groups. Location, ownership, children care programs, available medical technologies, star categories and the range of additional services were considered as sources of mobility barriers (Figure 4).

Stage 2. Classification of sanatoriums according to the identified barriers. A detailed study of each barrier (Figure 4) was carried out, then the sanatoriums were grouped according to the identified barriers in order to ensure the convenience of segmenting competitors in the market of sanatorium and resort services.



**Figure 4.** Sources of mobility barriers between strategic groups of competitors in spa services market

Stage 3. Identifying strategic groups of competitors. Based on the results of performed analysis, five strategic groups of competitors in the market of sanatorium and resort services in Sochi (the «relaxation» segment: it includes consumers obtaining general health care and recreation) were identified. The location of resort facilities is of major importance in this segment, thus the groups should be distinguished separately in each area of Sochi. Commonly, consumers first choose the sanatorium location, and then select the most suitable sanatorium.

The characteristics of each group are given below.

#### Group 1

The first group contains all State institutions where the services are rendered mainly to State employees working in relevant government agencies. In these institutions, commercial activity is complicated by high bureaucratic barriers. Hence, it is difficult to create competitive advantages necessary for working in a free market. As a rule, these sanatoriums are closed to foreign tourists. These sanatoria have a fairly high level of medical care. They also provide a average range of additional services.

Within this group, two subgroups can be distinguished:

- 1) sanatoriums with a high level of medical care;
- 2) sanatoriums with a medium level of medical care.

#### Group 2

The second group includes sanatoriums for children and their parents, both private and public, where the level of medical care and «starship» is high. The 3+ sanatoriums are also included, since according

to star rating, the requirements of 3 stars are significantly exceeded, but they still do not reach the 4 stars level. However, the medical services rendered in these institutions are of high quality. The sanatorium «Green Grove» can serve as an example.

Within the second group, two subgroups of sanatoriums can be distinguished:

- 1) sanatoriums with a wide range of additional services;
- 2) sanatoriums with a medium range of additional services.

#### Group 3

The third group differs from the second one by the level of medical care provided to customers.

#### Group 4

The fourth group includes sanatoriums for children and their parents, both public and private, with medium and low level of medical care (corresponding to 3 stars).

Within the fourth group, two subgroups of sanatoriums can be distinguished:

- 1) sanatoriums with a medium range of additional services;
- 2) sanatoriums with a low range of additional services.

#### Group 5

The fifth group includes children's sanatoriums with a narrow range of additional services and a medium level of medical care (corresponding to 3 stars). In Sochi, there are two sanatoriums of this type: «Youth» and «Dream». Table 2 summarizes the characteristics of strategic groups in the market of health-resort and spa services.

**Table 2.** Summary characteristics of strategic groups for the market of health-resort and spa services in Sochi

Strategic group	Sources of mobility barriers				
Group 1	Public institution	Recreation of families with children or single persons	High	All categories	Medium
Group 1a	Public institution	Recreation of families with children or single persons	Medium	All categories	Medium
Group 2	Public and private institutions	Recreation of families with children or single persons	High	4-5 stars	Wide
Group 2a	Public and private institutions	Recreation of families with children or single persons	High	4-5 stars	Medium
Group 3	Public and private institutions	Recreation of families with children or single persons	Medium	4-5 stars	Wide
Group 3a	Public and private institutions	Recreation of families with children or single persons	Medium	4-5 stars	Medium
Group 4	Public and private institutions	Recreation of families with children or single persons	Medium	3 stars	Medium
Group 4a	Public and private institutions	Recreation of families with children or single persons	Low	3 stars	Narrow
Group 5	Private institutions	Children only	Medium	3 stars	Narrow

Table 3 presents recommendations for choosing competitive strategies for each strategic

group of competitors mapped according to M. Porter's classification [12].

**Table 3.** Competitive strategies

Strategic groups	Competitive strategies
Group 1	Concentration strategy based on differentiation focus
Group 1a	Concentration strategy based on cost leadership
Group 2	Concentration strategy based on differentiation focus
Group 2a	Concentration strategy based on differentiation focus
Group 3	Concentration strategy based on differentiation focus
Group 3a	Concentration strategy based on differentiation focus
Group 4	Concentration strategy based on differentiation focus
Group 4a	Concentration strategy based on cost leadership
Group 5	Concentration strategy based on cost leadership

All strategic groups of Sochi health-resort enterprises should use a competitive concentration strategy focused on individual market segments. This strategy can be based both on the differentiation of services, and on cost leadership. Cost leadership strategy can be recommended:

- to the fifth strategic group of competitors, i.e. children's sanatoriums;
- to the fourth group of competitors, particularly, to the subgroup with a low level of medical care and a narrow range of additional services;
- to the first group of competitors, particularly, to the subgroup with medium level of medical care.

#### 4. Conclusions

This paper presents a review of the literature on the relationship between supply chain practices and SCP, and is based on the premise that more the efficiency of the supply chain, the better the performance of organization. Thus, five strategic groups of competitors in Sochi sanatorium and resort services market and their characteristics have been identified; recommendations on the selection of competitive strategies have been developed. The results of market segmentation will allow health-resort enterprises to determine their strategic group based on identified mobility barriers. They can be used in forming competitive advantages over the businesses with similar strategic characteristics and in making a more informed choice of competitive strategies. Strategic groups mapping carried out for the market of sanatorium and resort services of Sochi can be used for other regional markets of spa and resort services because it reflects the typical situation in this sector. The high concentration of sanatorium organizations in one place made it possible to identify the entire spectrum of competitors in the sector of sanatorium and resort services.

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