MANAGEMENT OF QUALITY-OF-SERVICE PRODUCTION IN THE CLUSTERS OF TOURISM AND HOTEL-RESTAURANT BUSINESS

Within the scope of the article, it is proved that the modern system of views on quality management is oriented on its understanding as an independent, complex function of regulation of business processes of tourist and hotel-restaurant business cluster and its participants. As to the content of the function described, it is pointed out that it is directed on the general process of quality management, which is based not only on planning and implementation of improvements of key characteristics of services quality (outlined in the diagram of Isakov) but also on control of changes in such characteristics. The basis of the general management process should be the etalon key quality categories, defined based on the method "House of quality". The study focuses on providing a targeted and systemic impact on quality parameters, which are interpreted as the most important technical characteristics of the production of services in the tourist and hotel-restaurant business cluster. The definition of the most important technical characteristics of services is proposed by multiplying the average rating by the rank of importance for the consumer. The authors pay attention to the specific increase of competitiveness and profitability of the activity of clusters and its participants which should be carried out constant control of the quality of services and parameters of all main, auxiliary, and management processes in comparison with the competitors, which are produced. It is proved that such control will allow understanding of how best to bring the activity on the production of services to the standard. The prospects of further developments in this direction lie in the study of the peculiarities of transformation of quality management in the conditions of military conditions.
PROBLEM-SOLVING IN GENERAL FORM AND ITS CONNECTION WITH IMPORTANT SCIENTIFIC OR PRACTICAL TASKS

In previous research, authors have proved and precisely illustrated the specifics of the cluster production activity, which has the features of the community, in connection with the interrelation and coordination of all production processes of its participants.

Thus, there is no doubt that within the clusters of tourism and hotel-restaurant business the process of methodological algorithmizing of such activity is obligatory, performed in the area of its technological stability. Within the framework of the outlined process, it is necessary to ensure effective planning, a realization of quality improvement, and control of the processes of achievement of its target level, which is determined by the orientation of activity of the cluster participants on the end-user and international quality partners. This is due to the fact that quality management is the ultimate goal of increasing the technological level of a member of the cluster and achieving strategic competitive advantages.

ANALYSIS OF THE LATEST STUDIES AND PUBLICATIONS, WHICH HAVE BEGUN THE SOLUTION OF THE PROBLEM AND THE ALLOCATION OF PREVIOUSLY UNSOLVED PARTS OF THE GENERAL PROBLEM

The importance of quality management systems of products works and services in their research is confirmed by many scientists, among them Bagautdinova N. [1], Beznoschenko N. [2], Danchenko A., Belova A., Safar H. [3], and others. Their work has had a significant impact on the modern understanding of quality management, components of quality management, etc. However, despite the large number of scientific researches devoted to quality management, the problems of conception formation of quality management in clusters of tourist and hotel-restaurant businesses are not enough attention. This concept is crucial to the competitiveness and profitability of such clusters.

FORMULATION OF THE AIDS OF THE ARTICLE (SETTING THE TASK)

The purpose of the article is a systematic description of the concept of quality management in clusters of tourist and hotel-restaurant businesses.

THE BASIC MATERIAL OF THE RESEARCH

Components of management of quality of production of services of tourist clusters and hotel-restaurant business should be:

1) improvement planning process (aimed at analyzing consumer needs, basic characteristics of service quality; analysis of the internal production capabilities of the cluster to improve service quality by improving the basic characteristics of service quality);

2) improvements realization process (aimed at bringing the basic characteristics of the quality of
services to the level at which they meet the international standard and the needs of consumers);  
3) process of control of changes in key characteristics of quality of services.

At the same time, these processes should be built around the standard of key characteristics of quality services, illustrated according to the data in Fig. 1.

One of the following methods can be used to improve:
— Ishikawa’s diagrams (focused on defining a baseline set of service quality characteristics and graphical highlighting the relationship between service quality issues and the reasons that influence them);
— Pareto diagrams (oriented on the illustration of types of non-conformity of the actual quality of services to their target level, frequency of problems arising within the framework of the basic set of characteristics of quality of services, etc.);
— dispersion diagrams (identification of the basic set of quality-of-service characteristics, dependence between two types of data, about the such set — errors, and factors, which cause them);
— Failure modes and effects analysis (identification of the causes and consequences of service quality problems in the basic set of quality characteristics).

The following methods of improving the basic characteristics of service quality are described in Table 1.

We believe that it is expedient to use the Ishikawa diagram to plan improvements of key quality characteristics of tourism and hotel-restaurant clusters. It should be considered as a basic method of identifying the causes of quality problems, with their subsequent distribution by key categories that influence the characteristics of services (their ideal condition forms real points of the actor).

The specific thing is that the Ishikawa diagram reveals a number of reasons that cause problems with key characteristics of quality of services in the areas of personnel support, business processes, marketing, quality control and external conditions. Therefore, the content of the diagram allows to move from planning to implementation of improvements (in particular, to search for an ideal solution of the problem in terms of ensuring compliance of the services of the member of the cluster on which depends the level of satisfaction of the client with the international standard ISO series 9000 version 2000 and the established requirements of consumers).

The actual process of quality management should be based not only on planning/implementation of improvements on key characteristics of quality of services outlined in the Ishikawa diagram, but also on the control of changes on such characteristics. For this purpose, important to define the standard state of key quality categories based on the method adapted to the defined needs "house of quality". For this purpose, it is expedient to use "House of quality" as a possible element of deployment (based on a system approach to their design, at all life cycle stages) of component technological quality. This element is based on the understanding of the needs of the consumer of tourist services, which are produced by the cluster member or services within the range of their quality categories, provided that they can be measured qualitatively.

The general process of quality management in the clusters of tourism and hotel-restaurant business should be based on the processes of allocation/planning and control of the key quality categories outlined in the Ishikawa diagram. The basis of the general management process should be a standard state of key quality categories, determined based on the adapted to the defined needs method "House of quality" as a possible element of deployment (uses a systematic approach to their design, at all stages of life cycle) of the component technological quality, based on the understanding needs of the service consumer. Within the framework of the outlined process, it should be ensured that the subjective perceptions of consumers regarding the quality of the services, produced by each member of the cluster, are
Table 1. Methods of planning of improvements of basic characteristics of quality of services of tourist clusters and hotel-restaurant business

| Methods                        | Specifics of application and construction                                                                 | Advantages                                                                 | disadvantages                                                  |
|--------------------------------|----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|-----------------------------------------------------------------|
| Diagram of Isakova or "fish bone" | Used in combination with brainstorming method allows to quickly separate causes of problems by key quality categories. To build a diagram of causes and problems are divided by key categories that influence the characteristics of services (their ideal state forms real-estate points of the actor). Such places include: Employees (human factor), methods of work, mechanisms, materials and raw materials, control and environment. However, the list is approximate and can be expanded or narrowed depending on the specific work of the cluster member. | densifies key parameters of the process service characteristics affected, and determines the cause of process problems or the factors that cause inconsistencies. If a team of specialists in the diagram works to solve the problem, it is possible to reach it. Simple understanding and use of staff. Its application does not require high qualifications or additional training important for small and medium-sized businesses. | The difficulty of determining the relationship between the problem and the cause if the problem is investigated qualitative (that is, simultaneously influences the deviation from several fixed points of the attractor). The problem is solved when it is applied in a complex with a dispersion diagram. Limited space for building and illustrated the whole range of reasons for deviation of the actual quality characteristics of service from real points. |
| Pareto Diagram                  | A thick chart where the intervals are sorted by the falling line. Intervals can be illustrated by the types of discrepancies, their localization and errors, and their height – the defects frequency and their percentage ratio. | The diagram is used to identify the most significant and significant factors that caused inconsistencies. This sets the priority for action to resolve the problem | Forms the possibility of misleading, relative to the importance of a problem, especially in connection with the fact that the cost of the consequences of inconsistencies is not taken into account |
| Dispersion diagram              | The tool is designed to identify dependencies between two types of data. This tool allows you to determine the correlation between certain key quality categories and the factor that influences them. | Can be used for limited data (paired)                                      | Convenient tools for identification of the pair data dependencies |
| FMEA (Failure modes and effects analysis) | Tool for analysis of reasons and consequences of failures. Used to identify potential discrepancies and their causes when providing the service | Does not identify key quality categories                                    | Identifies problems before they affect the level of customer satisfaction |

Source: developed on the basis of [3; 7].

translated according to the condition that their basic parameters can be measured and outlined [3]. A defined advisable to implement in the following order [7; 3; 4]:

1. determination of consumer requirements (based on questionnaire) and importance of such requirements in cutting key categories of technological quality of Ishikawa diagram;

2. determination of the actual competitive rating of an autonomous member of the cluster among other members of the cluster environment (among enterprises producing identical services). At the same time, the low rating identifies the underlying problems around the center lines of the Ishikawa diagram;

3. determination of the standard, by each key category of technological quality, based on the characteristics of similar services, produced in the cluster or outside it (for which there is considerable demand);

4. construction of a matrix "house of quality", which provides identification of the relationship between the consumer's requirements (according to the quality categories) and the standard condition of the service (7), produced by cluster members. For this purpose, communication markers (M) can be introduced, in the course of strong — S; medium — N; weak — W;

5. subject to a significant deviation from the standard and low competitive rating, the key categories of service quality are the determination of the overall difficulty of increasing the technological stability of the cluster member. For example, the relevant participant may not possess the necessary specialists, equipment, and technologies of rendering services to meet the consumer’s requirements and standard quality level approach. That is why it is expedient to add the matrix "House of quality" to the additional column "difficulty of reaching the standard and satisfaction of the requirements of consumers". Such assessment can be carried out based on the estimation scale, with markers: Easy to reach — S; average weight of achievement — N; impossible to reach — W.

To maintain a high level of technological stability of a cluster necessary to allocate algorithms for optimization of the services quality of each cluster member. It is advisable, based on constant control of the quality of services, as well
as the basic, auxiliary, and management processes available in this sphere, in comparison with those produced by competitors (identified in the actual competitive rating of the quality house), on the structural form offered by us on fig. 2.

Such control will help to understand how best to approach the standard to achieve the competitiveness and profitability of the cluster and the entrepreneurs who are its participants.

Quality control of the quality of services should be aimed at determining:

1) technological characteristics of the own production process of the cluster participants;

2) technological characteristics of the competitive production process (in terms of their influence on key quality categories);

3) highlight areas of improvement of technical characteristics of the production process of cluster participants (optimal values, which along with the standard will also determine the real points of the actor).

At the same time the general technological characteristics of the production process of the participant of the tourism and hotel-restaurant business cluster are as follows [1; 3; 4; 7]:

1. description of processes, forms, and methods of customer service. For example, forms of preparation of advertising, information and cartographic materials, description of the trip; preparation of information materials describing the route of the event and drawing of safety measures; the normative number of tourist equipment, equipment, and vehicles, etc.;

2. customer service process settings. These are travel routes, leisure complexes, and catering services;

3. composition of excursions and attractions, a list of dishes and drinks served in cafes, restaurants, or bars;

4. list of tourist trips and walks, gastronomic tours, and events;

5. list of companies-suppliers described services;

6. typology and capacity or strength of used equipment. For example, types of transport for tourist transport, the trade zone capacity;

7. staff number. For example, trainer's methodologist on tourism, excursion tours, hydro interpreters, and other service personnel;

8. level of professional training and personal characteristics of personnel;

9. contractual provision of delivery of related services, materials, and raw materials necessary for their production.;

10. insurance or privacy policy;

11. necessary coordination (with owners of recreational resources, bodies of sanitary-epidemiologic and fire supervision, etc.).

Each technological characteristic of the production process corresponds to quality measurement individual indicators (quantitative or qualitative). Therefore, the planning and control of the described characteristics should be carried out on the condition of their bringing comparable appearance. It is possible, based on the rating scale (taking into account the mutual influence on the actual competitive rating). To determine the mutual influence of technological characteristics one on one and the actual competitive rating, as settings to the "House of Quality" additional columns of the type "roof" are formed.

**CONCLUSIONS ON THIS RESEARCH AND PROSPECTS OF FURTHER EXAMINATION IN THIS DIRECTION**

According to the above provisions, it is possible to conclude that quality management is a modern system of views oriented on its understanding as an independent, complex function of regulation of

| Key quality categories | Actual competitive rating of cluster member (influence of technological characteristics) | mutual influence on the actual competitive rating (↑ + )* | ↑ individual influence on characteristic s | identification of the most important technological characteristics and identification of their impact | ↑ individual impact on rating |
|------------------------|------------------------------------------------------------------------------------------|--------------------------------------------------------|-------------------------------------------|--------------------------------------------------------------------------------|-----------------------------|
| Name                   | measurement indicators                                                                  | absolute importance of technological characteristic (AV) | rating (ε) Scale (from 1 to 3 points) ** | 1 point — the lowest rating; 3 point — the highest rating | Source: Developed by the author based on [7; 4; 1]. |

Fig. 2. Form for monitoring of quality of tourist service in of a cluster of tourism and hotel-restaurant business

* Mutual influence on the actual competitive rating: (↑) is positive, characterized by the fact that when one technological characteristic improves another and the competitive rating improves; (↓) is negative, characterized by the fact that at the deterioration of one technological characteristic there is the deterioration of another and the competitive rating worsens.

** 1 point — the lowest rating; 3 point — the highest rating.
business processes of the tourist and hotel-restaurant business cluster and its participants. The following provisions can be separated from the contents of the function described:

1. The overall process of quality management should be based not only on the planning and implementation of improvements on key characteristics of quality of services (outlined in the Isakova Diagram) but also on the control of changes in such characteristics. The basis of the overall management process should be a standard condition of key quality categories, defined based on the needs of the "House of Quality" method adopted.

2. Providing targeted and systemic impact on quality parameters is among the most important technical characteristics of service production. The definition of the most important technical characteristics of services is offered by multiplying the average rating assessment by the characteristic by the rank level of importance for the consumer.

3. Increase of competitiveness and profitable activity of cluster and entrepreneurs who are its participants. It is expedient due to constant quality control of services and all main, auxiliary, and management processes in comparison with competitors produced (the buildings of quality identified in the actual competitive rating). Such control will allow understanding of how best to bring the activity on the production of services to the standard.

The prospects of further developments in this direction lie in the study of the peculiarities of transformation of quality management in the conditions of military condition.

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