ANNOTATION

Dissertation work of Amanbek Nurlan on the topic "Standardization of assessing methods of service quality", submitted for the degree of Doctor of Philosophy (PhD) in the specialty 6D073200 – "Standardization and certification"

Relevance of the research topic.

The introduction of the concept of public service is connected with the process of reforming the state management system of the country's development, administrative reform, changes in the budget system and the introduction of egovernment. Standardization of the same activity is aimed at achieving optimal order in a certain area by establishing universal and multiple rules of application for specific existing or potential tasks.

"Public dialogue, openness, prompt response to people's needs are the main priorities of the activities of state bodies," reads the Message of the President of the Republic of Kazakhstan K. Tokayev to the People of Kazakhstan dated September 2, 2021. Repeated complaints about the unfairness of decisions in a particular area mean systemic problems in a particular state body or region. He noted that now it is necessary to treat it that way and make appropriate decisions.

On June 6, 2022, President of Kazakhstan expressed his opinion on the service quality to the population, the effectiveness of the management system will be measured not by the progress of work, but by the final result. Civil servants should conduct their work as transparently as possible and report honestly to the public. This may well be attributed to the service sector, in which the issues of standardization of methods for assessing the service quality are crucial.

The main problem of evaluating the effectiveness of the system of public services is to determine the criteria for their evaluation, containing an exhaustive list of indicators that have cumulative effectiveness, have budgetary, economic and social efficiency.

The methodological basis for standardization and conformity assessment of services is the "Concept for the development of standardization and certification of services", developed by the All-Russian Scientific Research Institute of Certification and approved by the Committee of the Republic of Kazakhstan on Technical Regulation.

The solution of the above problems required the development of new methodological approaches to assessing the service quality and determined the purpose of the dissertation research. Based on the listed features of the services, it is concluded that it is necessary to improve the methods of assessing their quality. To do this, it is necessary to conduct a comprehensive assessment of the quality of a complex multiparametric object (service), if there is additional information about the relative significance of the individual indicators taken into account, presented in an unciphered form; when making a comprehensive assessment, it is necessary to take into account quantitative and qualitative indicators. In particular indicators characterizing the subjective perception of service quality on the part of consumers.

The task of creating an unified approach to a comprehensive assessment of the service quality, taken into account as objective indicators (related to compliance with established regulatory requirements), and subjective indicators (the degree of customer satisfaction, expert opinions) are studied just a little these days.

In the context of global interstate competition, as well as global economic and social upheavals, an important issue is the reform of the quality management system of public services in a system that ensures the stability and flexibility of state foreign and domestic policy. Since Kazakhstan is in the process of developing information and communication technologies, the issues of systematization of service quality provided by the state through the introduction of advanced information technologies, the development of standards for quality parameters and an objective assessment of these parameters are becoming relevant.

The purpose of the dissertation research. Preparation methodology for a comprehensive assessment based on quality indicators that take into account the public service quality, the specifics of the type of activity and the requirements of the parties. To achieve this goal, we have set the following tasks:

Research objectives:

- 1. Examination of methods for assessing the service quality;
- 2, Study of criteria and issues of quality and evaluation of public services;
- 3. Analysis of the maintenance process of the research object and the results of the work;
- 4. Development of a methodology for determining the consumer satisfaction index and important-performance analysis;
- 5. To carry out a hierarchical analysis of the criteria for assessing the quality of public services and to develop a mathematical model for calculating the degree of influence on the service quality;
- 6. Consideration of methods aimed at preventing service quality, including SWOT analysis, drawing up a model for assessing the service quality and identifying the main risks of public services;
- 7. Development of a draft standard for the organization of methods for assessing the service quality.

Research methods.

During the research work, the object of the study was the process of providing public services to the population. Including a specialized department of public services in Almaty (Special Center) as part of the corporation "Government for Citizens", working on the principle of one window.

At the first stage to theoretically substantiate the focus of the topic was collected primary material and carried out literature analysis.

At the second stage, carried out an examination and familiarization with the regulations, standards, working procedures and documents of the state corporation "Government for Citizens".

At the third stage, considered methods aimed at determining the criteria for the service quality, quality measurement indicators and as a result of improving quality indicators.

At the fourth stage, carried out an examination and a mathematical analysis of the results of a specialized public service center (PSC) on methods aimed at assessing the service quality and quality improvement.

At the fifth stage, prepared a methodological recommendation aimed on assessing the quality of service in a specialized PSC.

In the course of the dissertation work, in order to obtain the information necessary to improve the quality of activities and analyze the information received, the following methods were used:

To assess the activities and quality of public services:

- Registration method;
- Pareto diagram;
- Ishikawa diagram.

Creation of a public service process-prepared according to the IDEF0 standard.

In order to obtain the primary information necessary to assess the service quality and assess customer satisfaction:

- The method of sociological survey;
- Customer Satisfaction Index (CSI) method.
- The method importante-performance analysis (IPA).
- The hierarchical method of analysis.

During the analysis of methods aimed at preventing the quality of public services:

- 1. To build a service quality assessment model, used the GAP model or interruption analysis, the CSI model or the customer satisfaction index and the EPSI model. The model is prepared according to the IDEF0 standard.
- 2. For determination of the main parameters of the activity to establish a link between requirements and indicators, applied the method of the link matrix;
- 3. In order to analyze the strengths and weaknesses of the "Electronic Government" of the Republic of Kazakhstan, were applied the SWOT analysis method and the SWOT analysis evaluation matrix.
- 4. To manage risks affecting the quality of public services, the following methods were used: the method of refusal (refusal from excessively risky activities); the method of reduction (prevention or diversification); the risk probability scale.

The main provisions submitted for defense (proven scientific hypotheses and other conclusions that are new knowledge).

- 1. Application of statistical methods of quality control in the provision of public services.
- 2. Determine the level of customer satisfaction with the quality of public services based on the results of a sociological survey.
- 3. Important performance analysis for assessing improving the quality of public services.
- 4. Hierarchical analysis of the significance of factors affecting the quality of activity.
 - 5. Creating a model for assessing the quality of public services.

- 6. SWOT analysis: analysis of the strengths and weaknesses of the "Electronic Government" of the Republic of Kazakhstan.
 - 7. Risk management in special public services centers.

The materials of experimental studies were included in the developed methodological recommendations: «Assessment of the service quality provided in specialized public service centers».

The materials of the dissertation were introduced into the educational process of EP 6B07501- Standardization and certification (by industry).

Description of the main results of the study

The methods aimed at assessing and improving the quality of public service centers operating on the principle of one window are considered and obtained following results:

- 1. The need to consider evaluation methods in three areas has been identified: quality control tools aimed at making operational and specific decisions in the process of providing services have been mastered: Pareto and Ishikawa diagrams;
- 2. Based on a systematic review of the causes and defects in the provision of services in a specialized Public Service Center, in comparison with 2021, in 2022, the number of defects in general services decreased by 7,043 units or by 40%;
- As a result of brainstorming, a team of experts compiled an Ishikawa diagram to identify the causes of violations in the provision of driver's license issuance services, such as: violations in the operation of the circuit and violations in the exchange of information. The main causes and consequences affecting important quality indicators are identified: the design of vehicles, the human factor, technological conditions and operating conditions.
- 3, As a result of a study aimed at assessing the level of quality of public services:
- The Customer satisfaction Index (CSI) was determined by conducting social research: the customer satisfaction index for services provided in a specialized Public Service Center was 80.28% and received the status of "satisfactory", since it is in the range from 66.00% to 80.99%
- Important and performance analysis for assessing the service quality was carried out. To do this, 15 attributes were selected, a matrix was compiled reflecting the level of significance and satisfaction by evaluating a 5-point system. It has been shown that based on this method, it is possible to get the right plan and direction. As a result of the analysis, it was found that three of the 15 indicators (7,12,13) have higher significance but are less effective, six have higher efficiency (1,2,3,4,9,10), all three have lower importance and effectiveness, i.e. have a lower priority (3,6,8), three (11,14,15) have higher efficiency with low significance.
- A hierarchical analysis of the significance of factors affecting the service quality was carried out. The analysis was carried out in 3 stages by the expert method. Calculations throughout the hierarchy were at an acceptable level of consistency. As a result of the hierarchical analysis, it was found that the condition of the equipment and the suitability to receive electronic services (A8), the reception and consideration of complaints (A5) and qualified, pleasant staff (A7) through the

expert consistency index have priority and special attention should be paid to these indicators when developing a service standard.

- 4. During the study of methods aimed at preventing the improvement of the quality of public services:
- A model for assessing the quality of public services has been developed and a communication matrix has been compiled based on GAP, ACSI, EPSI models used by leading global organizations;
- Based on the results of the SWOT analysis, internal and external factors of the organization's development, their strengths and weaknesses are identified, and based on mathematical analysis, S-O 295.16 units, W-T 71.63 units are shown, and based on the final matrix, you can see the strengths and weaknesses affecting the work of e-government, according to the point system, thanks to which corporations are known in the development strategy, one of the most dangerous parties has the opportunity to take preventive measures or give priority to the most likely parties;
- To manage risks affecting the service quality, risks affecting the quality of public services have been identified, a scheme for implementing risk management measures and a list of risks in the process of issuing driver's licenses to citizens have been prepared;
- 5. A methodological recommendation has been prepared aimed at improving the quality and assessing the quality of public services.
- 6. The standard of the organization has been developed by the method of determining the index of consumer satisfaction with the quality of public services and Important-Performance analysis.

Substantiation of novelty and importance of the obtained results.

The scientific novelty of the dissertation work is that:

- The criteria, measuring instruments and indicators of the service quality necessary for assessing the quality of public services are defined;
- A model has been developed that allows to systematically consider the assessment of the quality of public services using modern advanced models;
- Based on the relationship between the requirements of the interested party to the quality of public services and quality indicators, a mathematical model has been developed for calculating the degree of influence of indicators that do not meet the specified range of values on the service quality;
- A conceptual justification has been developed that can be used in future research, that is, the role of the relationship between quality service and customer satisfaction has been determined based on changes made to services that are accompanied by changes in customer satisfaction.

Practical significance.

The experimentally performed work solves the problem of applying statistical methods of quality control in the provision of public services.

The main risks in the provision of public services have been identified, which make it possible to consider measures to prevent risk and reduce the number of deviations;

The developed model for assessing the quality of public services allows the subjects of this sphere to determine the factors affecting the quality by classifying

objects and reflecting the role of the state, thereby improving the quality of the work of the Public Service Center;

The developed mathematical model for calculating the degree of influence on the quality of indicators that do not meet a given range of values allows us to determine the main measures aimed at improving the organization's activities with minimal costs;

Based on the results of the study, a draft standard of the organization was developed for the "Method of determining the customer satisfaction index (CSI) and Important-Performance analysis (IPA)";

Methodological guidelines have been developed, based on the results of the work, they are used in the educational process in the preparation of bachelors and undergraduates in the specialty "Standardization and certification".

Compliance with the directions of science development or state programs:

The dissertation work was prepared within the framework of the state program "Digital Kazakhstan", approved by the Decree of the Government of the Republic of Kazakhstan dated December 12, 2017 No. 827, aimed at improving the activities of the corporation "Government for Citizens".

Description of the doctoral student's contribution to the preparation of each publication:

All the results and conclusions given in the dissertation were obtained and formulated with the direct participation of the applicant in accordance with the results of the study. The doctoral student mastered the research methodology, developed a questionnaire for social research, took an active part in the discussion and publication of the results obtained, preparation and registration in domestic and foreign scientific journals.

The main results of the research work are published in the collection of works of international scientific and practical conferences. Based on the materials of the dissertation, 11 scientific papers were published, including 1 article in the journal "International Journal of Systems Assurance Engineering and Management", which is part of the Scopus database (impact factor 2.018, Q3, percentile 60).

The doctoral student developed the organization's standard "Assessment of the service quality of a specialized public service center. The method of determining the customer satisfaction index (CSI) and Important-Performance analysis (IPA)" and implemented in the Public Service Center of Almaty.

The volume and structure of the dissertation:

The volume of the dissertation is 179 pages of typewritten text. The dissertation work consist of an introduction, a review of the literature, object and methods of research, stages and scheme of research, the results of own research and their discussion, conclusions and suggestions to the production, information on the practical use of the obtained results, list of references and appendices. The dissertation includes 36 tables and 29 diagrams. The list of references includes the works of 224 domestic and foreign scientists, including references to the doctoral student's own works.