International Journal for Quality Research 17(1) 27–40
ISSN 1800-6450

Aleksei V. Bogoviz[1]
Svetlana V. Lobova
Vladimir S. Osipov

QUALITY OF MANAGEMENT IN HIGHER EDUCATION BY THE EXAMPLE OF TOP UNIVERSITIES OF RUSSIA

Article info:
Received 22.12.2021.
Accepted 05.09.2022.

UDC – 37.014.6
DOI – 10.24874/IJQR17.01-03

Abstract: *In the modern conditions of globalisation, universities find themselves in the conditions of large international competition. The national programs of socio-economic development of most countries, including Russia, envisage large requirements to universities to drivers of the development of the "knowledge society", the innovative and digital economy and the acceleration of the rate of economic growth. This paper dwells on the methodological aspects of the modern paradigm of quality of higher educational institution management, which substantiates the scientific basis of adapting educational establishments in the sphere of market relations. The authors determine the scientific approaches that form the modern paradigm of university management quality, develop a conceptual and theoretical model of quality of higher educational establishment management as a subject of the market of the educational services market, and elaborate the essence of the main technical attributes. The offered principles stimulate the increase of the effectiveness of educational activities of a higher educational establishment and are manifested in its using the economic levers, in particular the entrepreneurial mechanisms in the activities of an educational subject of the market in the conditions of competitive environment and formation of the information society in Russia.*

Keywords: *Quality of Education Management, Higher Education, Top Universities, Priority 2030*

1. Introduction

Higher educational establishment performs an important economic function in society and state on the provision of population with educational services, and economic system of a country – with skilled personnel. As is known, the market determines what society needs and decides for whom services are manufactured and how they are distributed. These factors determine the demand for educational services of universities. That's why, taking into account the functioning of universities in the conditions of market relations, as well as the competitive environment, informatization of society, and quick technological progress in the educational sphere, solving the problems of universities' development requires the reconsideration of strategic milestones and approaches to managing the activities of an educational establishment, as well as the development of the conceptual framework of managing a higher educational establishment, which is the subject of the educational services market.

[1] Corresponding author: Aleksei V. Bogoviz
Email: aleksei.bogoviz@gmail.com

The purpose of this work is to consider the quality of management in higher education by the example of top universities in Russia.

This work is aimed at studying the main processes and strategies of education management quality by the example of top universities in Russia according to the government program "Priority 2030".

The following hypothesis is elaborated: the reason for the problem is the insufficient quality of management in higher education, which does not allow Russian top universities to take the leading positions in university rankings, in particular The, QS, and ARWU.

This paper determines criteria and measures the quality of management in higher education by the example of top universities in Russia and gives recommendations for increasing quality, to support the practical implementation of the program "Priority 2030".

2. Literature review

Quality management issues in higher education institutions are studied in the works of the following authors Tight and Huisman (2020), Gulden et al., (2020), González Bravo et al. (2022), Heavin and Power (2018), Nistor et al. (2020), Garone, et al. (2019), Mensah (2020), Papanthymou and Darra (2017). Noteworthy is the work of Tight and Huisman (2020), which presents the theoretical foundations of the concept of quality, its management in a higher education system. It is necessary to note the important contribution of the authors to the disclosure of the categorization of such concepts as quality management, quality assurance in relation to higher education. It should be noted that the methodological aspects of quality assessment presented in the study can be applied to the study of this indicator in Russian universities. The study of Gulden et al. (2020) identifies the main institutional approaches to the quality of management of higher education institutions in modern market conditions, which make it possible to determine the state and problems in this area in terms of assessing the norms, rules, and behavioral models in these organizations. Attention should be paid to the work González Bravo et al. (2022) which, using cluster analysis, formulated different categories of higher education managers, depending on their commitment to a digital orientation. The role of each of the categories of managers in the development of the quality of higher education during the Covid-19 pandemic is shown. In the context of the need to study the profiles of managers of organizations in the context of their attitude to digitalization, which affects the quality of management, we can highlight the following works Heavin and Power (2018), Garone et al. (2019), Nistor et al. (2020). The provisions of the work of Mensah (2020) highlight the effectiveness of the implementation of strategic planning as the basis for achieving the parameters of quality management at the university for the prospective period. The value of the study lies in determining the place of participants (including stakeholders) in the quality management system of university management; one can also note the importance of considering such a phenomenon as collective responsibility for results. The article of Papanthymou and Darra (2017) deserves special attention, which defines an approach to the formation of quality assessment indicators of higher education.

Despite the existence of a certain body of research in this direction, there is a need to assess the features of achieving the quality of management in Russian universities.

3. Methodology

Despite the different approaches to the analysis of the quality of universities' activities, scholars have a common view of educational establishment as an organization that works in the conditions of the educational services market under the

government's control. The basis of activities is the processes that are conducted in universities are obey the laws peculiar for commercial organizations. A competitive advantage in the market of educational services could be the systemic use of information technologies at all levels of educational establishment management, unified in one information environment.

According to Yu. Baryshnikov, the model of university management is the theoretically built integrated totality of view of the management system, its influence on the management object, and adaptation to changes in the external environment for the organization to achieve the set goals, develop, and ensure its functioning (Baryshnikov, 2006)

One of the first approaches to typologization of the systems of university management was the three-level model of B. Clark (1980s). According to this model, developed and industrial companies have coordination means in managing the sphere of higher education in the three following directions:

- coordination, in which an important role belongs to the market (USA);
- coordination, in which an important role belongs to the government (Sweden, countries of the CIS);
- coordination with a large influence of academic oligarchy (Italy, UK) (Clark, 1983).

It should be noted that Clark did not develop criteria for classifying countries by the characteristics of the systems of higher education management, but considered the interrelations between government and educational establishment from the position "manager-subordinate". This approach was criticized by researchers who tried to transfer the theoretical provisions of B. Clark in the practical sphere. The main problem issue was the absence of alternatives for countries which system of education did not fall under any of the three variants.

However, it should be noted that B. Clark's studies became the basis of another, more popular, approach to typologization of the management models in the sphere of education, offered by F. van Vught (Vught, 1995), who reduced the three-dimensional space of Clark down to two types of models of higher education management.

- government-controller (low level of autonomy – rational planning and control). Within this model, the government is a controller and the government bureaucratic machine has a strong influence, on the one hand, with a strong position of academic oligarchy, on the other hand. The purpose of government's interference with management is regulation of the conditions of accessibility of education, development of educational programs, requirements to diplomas, a system of exams, HR issues, and system of wages;
- government-observer (high level of autonomy – self-regulation, at which the above parameters are determined without government's participation). The government's impact consists in the observation of the system of higher education for the provision of quality of education, with the help of "transparent reports". The government does not interfere with the functioning of the higher education system through comprehensive regulation and strict control (Vught, 1995).

Combination of different approaches to typologization of the models of higher education management, as well as popularization of the model of new managerialism in education management, allowed D. Braun (1990s) to develop a "cube of management" based on the following parameters:

- level of universities' autonomy;
- level of attraction to market relations;
- level of bureaucratization.

Based on the above parameters of D. Braun, it is possible to distinguish eight types of management models – from bureaucratic (with a low level of autonomy and market and high bureaucratization) to market (with a high level of autonomy and market and low bureaucratization) ones.

It should be noted that the "cube of management" was developed by D. Braun for showing the place of new managerialism among other models of higher education management. However, the model of new managerialism, presented in the "cube" by a high level of autonomy and market component and low level of bureaucratization, is now new; it consists in transferring the methods and practice of commercial sector management to its non-commercial establishments. That is, the activities of educational establishments are analysed from the position of the commercial sphere of activities, and solutions for its improvement are based on the market mechanisms and regulators. Still, market mechanisms of regulation do not have enough tools to avoid the problems that arise as a result of uncontrolled competition between universities.

4. Results

4.1 Change of the management models on the example of the experience of the USA

El Abbadi et al. (2011) notes that the availability of a large number of approaches to management in the sphere of education does not prove that the transition from one model to another is progress and improvement of management.

An example of a change of the management models could be the experience of the USA, which was studied by a lot of scholars. In chronological order, they could be presented in the following way:

- system of planning, programming, and budgeting (the 1960s – 1970s). It includes determination of long-term goals, development of alternative means of their achievement, and evaluation of costs and results from these means;
- budgeting on a zero basis (the 1970s). It is based on monetary evaluation of each performed action and strict substantiation of the necessity for spending money for their performance and substantiation of the volume of expenditures;
- measuring effectiveness (the 1970s). This approach is based on the management of the educational process of its improvement based on the search, study, and use of the experience of similar activities in other organizations;
- management based on purposes (the 1970s – 1980s). If an educational establishment realizes and sees long-term perspective goals, a hierarchy of tasks should be built for their achievement;
- strategic planning (the 1980s). It envisages determining of the most important – for the educational establishment – process on the whole or separate process of the future state, i.e., the goal and selection of the ways, means, and methods of achieving this state;
- reengineering of business processes (the 1990s). It implies finding the ratio between the structure of departments, their functioning, forms and methods of interaction, equipment, control, etc. at which the state of the educational establishment's functioning will be considered more effective as compared to the current functioning;

- quality management (the 1990s – present time). This model is based on the principle according to which the totality of quality sub-processes creates a qualitative process and qualitative result.

It is possible to state that each model focuses on one of the elements of the management process: goals, results, processes, strategy, etc., which is most topical for the specific type of development of economic processes in society. However, as of now, there is no effective model of managing a higher education establishment that would be adequate to the requirements of the complex and dynamic environment in which Russian universities function. The considered models could be integrated and used as a basis for developing a management model that would improve the very process of management and increase the effectiveness of the functioning of Russian universities (Endovitsky et al., 2020).

4.2 The Russian model of quality of management in higher education based on a case study of top universities of Russia

To determine the Russian model of quality of management in higher education let us consider the experience of top universities of Russia (Table 1).

Table 1. Top 10 universities of Russia according to Forbes in 2021

Position in the Forbes ranking	University	Quality of education, points 1-30	Networking, points 1-30	Employers, points 1-30	International recognition, points 1-10	Integral estimation by Forbes, points 1-100
1	HSE University, Moscow	24.24	28.77	26.35	6.43	85.78
2	Lomonosov Moscow State University, Moscow	15.72	28.34	24.47	10.00	78.53
3	National Research Nuclear University MEPhI (Moscow Engineering Physics Institute), Moscow	27.63	19.13	21.58	5.71	74.05
4	Moscow Institute of Physics and Technology (MIPT/Moscow Phystech), Dolgoprudny	19.24	20.71	23.68	7.86	71.50
5	National University of Science and Technology MISIS, Moscow	20.11	17.54	20.53	4.29	62.47
6	ITMO University	24.71	18.77	14.28	4.29	62.03
7	Tomsk Polytechnic University	22.90	16.50	16.28	2.86	58.53
8	Bauman Moscow State Technical University	13.05	17.81	22.52	5.00	58.38
9	St. Petersburg State University, St. Petersburg	17.98	20.18	12.35	6.43	56.94
10	Peter the Great St. Petersburg Polytechnic University	18.66	16.74	12.63	4.29	52.31

Source: compiled by the authors based on Forbes (2021).

As shown in Table 2, Lomonosov Moscow State University, which is the leader (ranked 1st in the national ranking) among Russian universities in all three international university rankings QS (2021) ARWU (2021) and THE (2021) in 2021, is ranked 2nd in the Russian ranking by Forbes. This is a sign of a vivid difference between the Russian model of quality of management in higher education and the generalized model, which has been formed in international practice.

In the Forbes ranking, the 1st position belongs to the National Research University "Higher School of Economics", which is ranked 7th in the QS ranking, 3rd – in the THE ranking, and 4th-5th – in the ARWU ranking (in the national ranking). St. Petersburg State University, which is ranked 2nd in the national ranking QS (2021) and ARWU (2021), is moved by Forbes to the 9th position. Universities that are not presented in the ARWU ranking, are included in the Forbes ranking and have the leading positions in it:

- Moscow Institute of Physics and Technology (MIPT/Moscow Phystech): 4th position;
- National University of Science and Technology MISIS: 5th position;
- ITMO University: 6th position;
- Tomsk Polytechnic University: 7th position;
- Bauman Moscow State Technical University: 8th position;
- Peter the Great St. Petersburg Polytechnic University: 10th position.

The considered experience of top universities of Russia and its comparison with the generalized model, which has been formed in the international practice, allows determining the main characteristics of the Russian model of quality of management in higher education:

- Priority of satisfying the economy's current needs for personnel through the provision of the high quality of services of higher education;
- Large attention is paid to prestige and creation of useful connections of universities, i.e., networking;
- Leadership of Moscow and St. Petersburg universities, which position in the ranking by Forbes (2021) (Table 1) is 9th out of 10 (90%).

In the existing model, quality of education is valued higher than the universities' global competitiveness. However, the start of the program "Priority 2030" by the Ministry of Science and Higher Education of the Russian Federation (2021) in 2021 might be a driver of changes, leading to the transformation of the Russian model of quality of management in higher education.

First, the program "Priority 2030" pays a lot of attention to the global competitiveness of universities. Thus, it is obvious that in 2022, the quality of management in higher education will be evaluated with larger attention to international recognition, the importance of which among other criteria will not be lower, but, perhaps, even higher compared to the quality of higher education services.

In the second case, this will start a trend of the division of Russian universities into those specializing in the training of personnel for the Russian economy and those specializing in the strengthening of the prestige of Russian higher education – they attract foreign students and lecturers, demonstrate high cultural and gender neutrality, and conform to other criteria of international university rankings.

Second, the program "Priority 2030" seeks the goal of achieving strategic academic leadership. Its implementation will require from universities the wider scale of scientific research. That's why it is possible to expect that the quality of management in higher education in 2022 will be assessed from the

positions of the patent and publication activities of universities.

Third, the program "Priority 2030" also emphasizes the development of technological entrepreneurship of universities. Therefore, it is possible to expect that during the evaluation of the quality of management in higher education in 2022 the preference will be given to the activity and success of university innovations' commercialization.

Fourth, the program “Priority 2030” envisages the development of collaboration among universities and between universities and business structures. Therefore, starting 2022, during the evaluation of the quality of management in higher education consideration will be given to universities’ involvement with consortiums (unions of universities) and clusters (collaboration of universities and companies). In 2021, it is possible to see a significant increase of the integration processes in the system of Russian higher education.

Fifth, the program “Priority 2030” envisages the reduction of the gap between universities from Moscow and St. Petersburg and regional universities. In particular, this will be achieved through an increase of financing of the educational and scientific activities of regional universities. This will allow overcoming the "institutional trap", which consists in the following: due to the constant deficit of financing, regional universities do not have development opportunities and are constantly behind universities from Moscow and St. Petersburg by most of the indicators.

That’s why the assessment of quality of management in higher education in 2022 might envisage the consideration of the region of the university's location. It is also possible (but less probable) that two separate rankings will be compiled – for Moscow/St. Petersburg and regions. An argument in favour of this is the fact that many regional universities of Russia were selected for the program “Priority 2030”.

Thus, the performed case study of Russian top universities has shown that the Russian model sets high requirements to the quality of management in higher education. Transformations of this model, which are expected in 2022, create new challenges for management in higher education, but quality remains the central category.

5. Discussion

Unfortunately, most modern universities of Russia still work based on the command-and-control system of management.

Most Russian universities undergo a managerial crisis, which is caused by the mismatch between the existing system of management and new economic conditions. At present, the system of managing a university – as a subject of market relations – is not yet formed as the specific activities, characterized by structure, mechanisms, and processes. Soviet universities, which were created in other conditions, were not oriented at achieving the economic results by the best satisfaction of the consumer demand and achieving the minimum level of expenditures. They were aimed primarily at the execution of state plans. Hence, most universities have too large personnel, low efficiency, uncompetitiveness of graduates, etc. While in the stable planned economy these factors were not very important, they reduced the position of higher educational establishments in the crisis conditions (Petrov and Kurakova, 2019).

That’s why taking into account the modern conditions of functioning of higher educational establishments, it is offered to develop a new concept of managing a university as a subject of the educational services market, which is treated in this work as a system of managing a higher educational establishment, build on the concept of educational services as economic activities, consumer-oriented, systems, process, and entrepreneurial approaches. It is aimed at the increase of quality of

educational services and satisfaction of consumers and development in the competitive environment. The purpose of managing a university – as a subject of the service market – is ensuring the effectiveness of the higher educational establishment's activities in the educational services market and progressive development by means of the maximum use of the potential and satisfaction of the consumers' needs for educational services (Ruban, 2020).

This definition accumulates not only the essence of economic activities of universities as a subject of the service market, but it also emphasizes the role of consumer and quality of educational services in the process of provision of effective economic activities and development of universities, which could be achieved through consumer orientation and systems, process, and entrepreneurial approach to managing a higher educational establishment.

Osipov et al. state that a higher educational establishment is a complex of material & technical, labour, information, and other resources, aimed at the satisfaction of the educational needs. The diversity of the used resources envisages the search for the ways of rational communication and their application for achieving the set goals of an educational establishment (Osipov et al., 2020). Besides, the competitive market offers a large spectre of educational services, and it is very difficult to find one's special niche for universities. The previous methods of fighting for students depleted their potential, and marketing strategies, which are oriented at price, do not provide the desired result. At present, for universities – as a subject of the educational services market – the transition of the emphasis from the process of production of educational services to the efforts on the satisfaction of consumer needs and replacement of product-oriented strategy at a consumer-oriented, as well as development of the effective algorithms of building relations with a consumer, is especially topical. Thus, there's a need to develop a concept of managing universities as subjects of the market.

Cardoso et al. (2020) state that one of the current problems of the economy is the mismatch between the structure of specialists and the content of educational programs and the needs of the labour market. Higher education trains specialists according to the individual needs of consumers, which are oriented at the attractiveness of a speciality and the possibility of employment with high wages (IT, law, international relations, journalism, and management) (Cardoso et al., 2020). At the same time, the Russian labour market requires specialists in engineering & technical and technological specialities. Thus, universities should move the emphasis from the process of production of educational services to the efforts on the improvement of the final consumer's needs (government and employers), as well as develop the effective algorithms of building relations with each of them. Therefore, the consumer-oriented approach changes the focus of management in the favour of the maximum satisfaction of the consumers' needs, forming new tools of the effective competitive struggle of the higher educational establishment in the educational services market.

From the positions of a systems approach, university, which provides educational services, is an open dynamic system, which interacts with the external environment and can adapt to its conditions; its central element is consumer and consumer's needs. The system of university management – as a subject of the service market – is a totality of interconnected elements: object and subject, goals, and tasks, process, structure, technology, mechanisms and principles.

The main object of the university management system is consumers, their needs, and their experience of interrelations with the educational establishment. Other objects are all processes and elements of the system of universities – internal and external.

The process of university management as a subject of the educational services market – is characterized by the consumer needs and the requirements of the market, government, and society at the "input", and satisfaction of these needs and requirements at the "output". Evaluating the results of the educational activities, the management strives to receive the fact of confirmation of the desired progress in the university's development. Educational activities are the basis, but the provision of educational services' quality is impossible without interconnection with the research and international activities of universities, which ensure the development and implementation of innovations in the educational process.

An important aspect of managing a university as a subject of the educational services market is the provision of development in the modern information society (Figure 1). The process of provision of development consists of independent types of works: constant production and implementation of innovations and improvement of educational services, popularization of educational services and increase of universities' image, formation of a positive consumer experience and loyalty, and expansion of the range of consumers. Progress in the university activities confirms the success of its development.

All elements of the system of university management are combined in the mechanism, which includes methods, tools, and levers of management, the regulatory framework, and the information system of the university. The methods of university management are the impacts of the managing sub-system (subject of management) on the managed sub-system (object of management).

The tools of managing a university, as a market subject, are the means of influencing the management objects: a system of power (hierarchy), standards of education, the strategy of university development, grant programs of development, investments, quality policy, norms, wages, decrees, orders, instructions, corporate ethics, the culture of management, etc.

Levers of the management mechanism are the regulators of the impact of tools and methods of management, which create the preconditions for the effective functioning and development of universities. External levers of the management mechanism ensure the functioning of the managing sub-system of management, these are market regulators (price, competition, demand, and offer), state regulation, and connections with other subjects of the educational services market. Internal levers, which predetermined the system's movement, are the system of bonuses, ranking evaluation of academic employees, subsidies, sanctions, dismissals, personal motives, micro-climate, information, etc.

In view of consumer orientation of university management, which determines the specific feature of its concept, the main principles of management are as follows:

1) orientation at consumer; 2) orientation at quality; 3) orientation at development.

The entrepreneurial approach to the management of universities treats the university's activities as independent activities that are aimed at the development in the long term. Implementation of the entrepreneurial approach to the management of universities forms a university of the entrepreneurial type, which has to demonstrate entrepreneurial behaviour as an organization; develop entrepreneurial competencies with employees (lecturers, students); interact closely with the environment, in particular business structures; initiate the generation of knowledge and their implementation in practice; ensure high quality of the educational product.

Thus, the entrepreneurial approach to the management of the university, as a market subject, allows raising the effectiveness of the use of own potential, accelerate the search for new directions of development

that is based on innovations, obtaining additional income, raising competitiveness in the educational services market, and strengthening the image of an educational establishment.

When developing a system of university management and implementing entrepreneurial ideas, it is necessary to take into account the following factors that influence the effectiveness of universities' activities (Moskovkin and Zheng, 2020):

- needs of the country's economy and labour market for the corresponding specialists;
- individual needs and requests of direct consumers are the basis of educational services' quality;
- determining the cost of educational services and its ratio with quality is usually difficult;
- academic staff must have a high level of qualification in their speciality and communicative skills;
- production capacities are calculated according to the highest – not average – demand from consumers;
- reduction of effectiveness of the work of educational departments could be caused by low popularity and absence of demand for certain specialities from the direct consumers, not by bad work of academic staff.

The above factors, which determine the specifics of university management, make the management in the sphere of education more complex than in any other sphere.

The year 2013 saw the start of the Russian program of global university leadership "5-100". This program envisaged five main universities of Russia entering the top 100 most prestigious world rankings of universities, among which are Quacquarelli Symonds (QS, 2021), Times Higher Education (THE, 2021) and Academic Ranking of World Universities (ARWU, 2021), RAEX-Analytics (2020), Global Ranking of Academic Subjects (2021), Impact Rankings 2021 (2021), and IREG Inventory of International Rankings (2021). This program was ended in spring 2021 and was replaced by a new program "Priority 2030".

The program "Priority 2030" was started by the Government of the Russian Federation for the formation of the 100 most progressive universities of Russia in the scientific and technological and socio-economic directions. This program's duration is 2021 – 2030. The main directions of the program are presented in Figure 1.

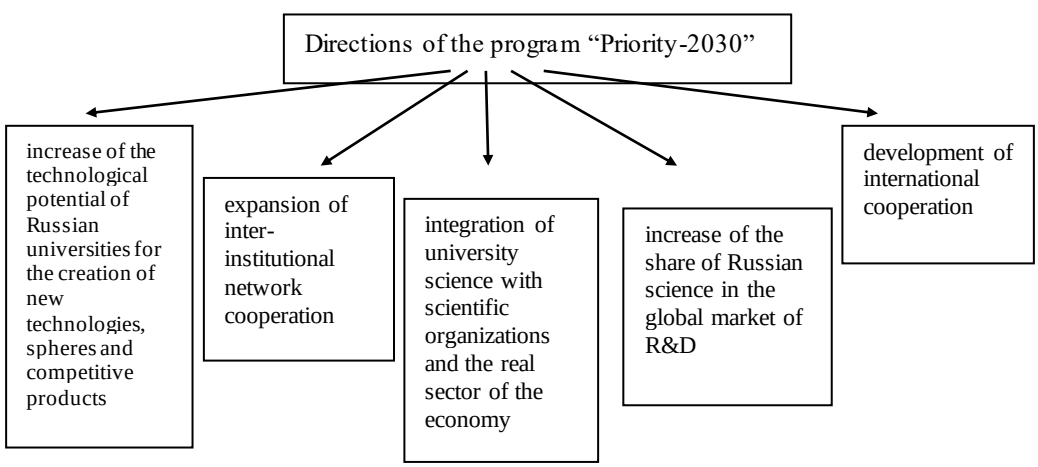

Figure 1. Directions of the program "Priority 2030"

Each of the universities participating in this program develops its program of actions for high-quality training of students and change of the structure of lecturing, as well as the program of high-quality management.

Each university's strategy is aimed at the increase of quality of specialist training.

Quality of management of the educational process is one of the directions for improvement, according to the program "Priority-2030".

The quality management system of educational services – as a sub-system of university – has to conform to the goals and tasks of the Russian system of education. The quality management system has to conform also to the goals and tasks of universities in view of their position in the system of Russian and world education. Development and implementation of the quality management system of educational services should be conducted based on the systemic approach, which implies the creation and practical implementation of certain procedures and processes. One of the main directions of development is the formation and implementation of the common approaches to provision and assessment of the quality of higher education. It is supposed that the quality of specialist training in universities is ensured by two main components – quality management system of educational services and quality of the educational programs' contents. As of now, most of the models of managing the quality of education and scientific research in Russian universities are built with the help of statistical processing of formalized indicators and achieved results. The global tendency in this sphere is the transition to models based on the concept of total quality management (TQM) and the requirements of international quality standards ISO 9000:2000. The TQM concept envisages universities' having a formulated mission and strategic goals, developed with the help of a comprehensive study of the external environment's (national and international) needs for the main products of the establishment's activities. Total quality management leads to the process approach to the activities of educational establishments and uses a range of specific methods and tools of quality management. The TQM concept has become very popular with most European universities. The approach to building the system of quality management, which is based on the ISO requirements, implies the demonstration of the universities' ability to provide educational services that satisfy a consumer, with constant tracking and research of the consumers' demands. According to the ISO requirements, the main purpose of the system of higher education should be the increase of satisfaction of the needs of customers – individuals, society, and government – for educational services, training of specialists, scientific products, etc.

6. Conclusion

Thus, Russian universities work based on the outdated command-and-control system of management, which cannot ensure the development of universities in the dynamic environment and their survival in crisis conditions. To ensure the competitiveness of higher educational establishments in the educational services market, it is necessary to change the paradigm – perform a transfer from the qualitative concept of managing a university as a social institution to the concept of managing a university as a subject of market relations. Such a university will be able to accumulate and pass the national heritage from generation to generation and to provide the labour market with the required personnel; it will be the flagship of a new society – knowledge society, remaining autonomous and independent. The Russian program "Priority 2030" is aimed at the qualitative management of the university as a market subject.

Further studies on this topic should develop the methodological framework for evaluating the effectiveness of managing a higher educational establishment as a subject of the educational services market.

References:

ARWU (2021). Academic Ranking of World Universities 2021. Retrieved from: https://www.shanghairanking.com/rankings/arwu/2021 (data accessed: 25.11.2021).

Baryshnikov, Yu. N. (2006). Modeli upravleniya personalom: zarubezhnyy opyt i vozmozhnosti ego ispol'zovaniya v Rossii [Human Resource Management: the international experience and the possibility of its use in Russia], Mezhdunarodnye otnosheniya [International relations], Moscow, Russia.

Braun, D. (1999). Changing governance models in higher education: The case of the new managerialism. *Swiss Political Science Review*, *5*(3), 1-24. https://doi.org/10.1002/j.1662-6370.1999.tb00276.x

de Sousa Alvarenga, A. B. C., Espuny, M., da Motta Reis, J. S., Silva, F. D. O., de Souza Sampaio, N. A., Nunhes, T. V., ... & de Oliveira, O. J. (2020). The main perspectives of the quality of life of students in the secondary cycle: an overview of opportunities, challenges and elements of greatest impact. *International Journal for Quality Research*, *15*(3), 983-1006.

Clark, B.C. (1983). *The Higher Education System. Academic Organization in Cross-National Perspective*. Berkeley, CA: University of California Press.

El Abbadi, L., Bouayad, A., & Lamrini, M. (2011). Generic quality standards vs. specific quality standards: the case of higher education. *International Journal for Quality Research*, *5*(2), 123-129.

Endovitsky, D. A., Korotkikh, V. V., & Voronova, M. V. (2020). Competitiveness of Russian universities in the global system of higher education: a quantitative analysis. *Higher Education in Russia*, *29*(2), 9-26. (In Russ.)

Forbes (2021). Ranking of the best universities of Russia 2021. Retrieved from https://education.forbes.ru/authors/rating-vuzov-2021 accessed: 25.11.2021.

Garone, A., Pynoo, B., Tondeur, J., Cocquyt, C., Vanslambrouck, S., Bruggeman, B., & Struyven, K. (2019). Clustering university teaching staff through UTAUT: Implications for the acceptance of a new learning management system. *British Journal of Educational Technology*, *50*(5), 2466-2483. https://doi.org/10.1111/bjet.12867

Global Ranking of Academic Subjects (2021). *Academic Ranking of World Universities (ARWU)*, 21.05.2021. Retrieved from http://www.shanghairanking.com/ rankings/gras/2021

González Bravo, L., Nistor, N., Castro Ramírez, B., Gutiérrez Soto, I., Varas Contreras, M., Núñez Vives, M., & Maldonado Robles, P. (2022). Higher education managers' perspectives on quality management and technology acceptance: A tale of elders, mediators, and working bees in times of Covid-19. *Computers in Human Behavior*. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8843415/ (data accessed: 16.01.2023).

Gulden, M., Saltanat, K., Raigul, D., Dauren, T., & Assel, A. (2020). Quality management of higher education: Innovation approach from perspectives of institutionalism. An exploratory literature review. *Cogent Business & Management*, *7*(1), 1749217. https://doi.org/10.1080/23311975.2020.1749217

Heavin, C., & Power, D. J. (2018). Challenges for digital transformation - towards a conceptual decision support guide for managers. *Journal of Decision Systems*, *27*(sup1), 38-45. https://doi.org/10.1080/12460125.2018.1468697

Impact Rankings 2021 (2021). *Times Higher Education Ranking*, 21.05.2021. Retrieved from https://www.timeshighereducation.com/world-university-rankings.

IREG Inventory of International Rankings (2021). *IREG Observatory on Academic Ranking and Excellence*, Retrieved from https://ireg-observatory.org/en/. Accessed 21.05.2021.

Mensah, J. (2020). Improving Quality Management in Higher Education Institutions in Developing Countries through Strategic Planning. *Asian Journal of Contemporary Education*, *4*(1), 9-25. https://doi.org/10.18488/journal.137.2020.41.9.25

Ministry of Science and Higher Education of the Russian Federation (2021). Program "Priority 2030". URL: https://minobrnauki.gov.ru/action/priority2030/ (data accessed: 25.11.2021).

Moskovkin, V. M., & Zhang, H. (2020). Methods of mathematical modeling in the problem of predicting the entry of universities into the TOP-100 global university rankings. *Economic analysis: theory and practice*, *19*(7), 1360-1384. (In Russ.)

Nistor, N., Dascalu, M., Tarnai, C., & Trausan-Matu, S. (2020). Predicting newcomer integration in online learning communities: Automated dialog assessment in blogger communities. *Computers in Human Behavior*, *105*, 106202. https://doi.org/10.1016/j.chb.2019.106202

Osipov, V. S., Martynov, D. V., Shulyatyev, I. A., & Panova, T. V. (2021). Financial provision of quality: State financing of innovations vs. Direct foreign investments. *International Journal for Quality Research*, *15*(3), 811-830. https://doi.org/10.24874/IJQR15.03-08

Papanthymou, A., Darra, M. (2017). Quality Management in Higher Education: Review and Perspectives. *Higher Education Studies*, *17*(3), 132-147.

Petrov, A. N., & Kurakova, N. G. (2019). The problem of achieving consistency of target indicators of the national project "Science". *The Economics of Science*, *5*(1), 4-18. (In Russ.)

QS (2021). *World University Ranking 2021*. Retrieved from https://www.topuniversities.com/university-rankings/world-university-rankings/2021 accessed 25.11.2021.

QS World University Rankings 2021 (2021). *QS Top Universities Rankings*, 21.05.2021. URL: https://www.topuniversities.com/university-rankings.

RAEX-Analytics (2020). *Rating of the best universities in Russia RAEX-100*, URL: https://raex-a.ru/rankings/vuz/vuz_2020#2 (In Russ.) Accessed 21.05.2021.

Ruban, D.A. (2020). The success of Russian economists in publishing articles in leading international journals: an analysis of the main conditions. *In the Center of Economics*, *1*(1). 40-45. (In Russ.)

THE (2021). *World University Rankings 2021*. Retrieved from https://www.timeshighereducation.com/world-university-rankings/2021/world-ranking#!/page/0/length/25/sort_by/rank/sort_order/asc/cols/stats Accessed: 25.11.2021.

Tight, M. (2020). Research into quality assurance and quality management in higher education. In J. Huisman & M. Tight (Eds.), *Theory and Method in Higher Education Research*, pp. 185-202). Emerald Publishing Limited. https://doi.org/10.1108/S2056-375220200000006012

Vught, F. A. van (1995). Policy models and policy instruments in higher education: The effects of governmental policy-making on the innovative behaviour of higher education institutions. Retrieved from http://aei.pitt.edu/32444/1/1264672129_ pw_26.pdf Accessed: 25.11.2021.

Aleksei V. Bogoviz
Independent Researcher,
Moscow,
Russia
aleksei.bogoviz@gmail.com
ORCID 0000-0002-6667-5284

Svetlana V. Lobova
Altai State University,
Barnaul,
Russia
barnaulhome@mail.ru
ORCID 0000-0002-5784-1260

Vladimir S. Osipov
Moscow State Institute of International Relations (University) of the Ministry of Foreign Affairs Russian Federation,
Moscow,
Russia
vs.ossipov@gmail.com
ORCID 0000-0003-3109-4786