

INSTITUTIONAL SUPPORT OF THE COMPETITIVE EDUCATIONAL ENVIRONMENT

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Abstract. The article examines the institutional foundations of the functioning of a competitive educational environment. The article represents the market of services in the field of higher education, which is a system of exchange relations. There is the sustainable demand for educational services from the main economic entities and their supply by various educational institutions interact in a competitive environment.

The identification of the methodological foundations for the formation of a competitive educational environment allowed the author to justify the expediency of using the diglossia principle, which is based on the characterization of higher education as a mixed public good provided in the field of higher education in accordance with the differentiation of the level of development of higher educational institutions. Based on the analysis of supply and demand in the market of educational services, the characteristics of the competitiveness of higher education organizations are identified, including taking into account the use of e-Learning project technologies. The institutional approach has made it possible to justify the role of the quality of education in a competitive educational environment.

It is argued that an important institutional method of ensuring the competitiveness of HEOs is the establishment of the integrated system of educational quality management. This allows us to meet the needs of the labor market for qualified specialists. The use of distance learning is a particular tool for improving education, especially in the context of the coronavirus pandemic. In competitive education markets, there are the higher education organisations, which use modern technical means and technological techniques to successfully deliver information to students.

Keywords: Competitiveness, institutional support, higher education, educational environment, e-learning.

JEL codes: I23

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Introduction

An important part of a market economy is a competitive educational environment, which is the part of a market economic system directly deals with the labour market. The competencies acquired as a result of educational activities are implemented in various areas of working life.

The market of services in the field of higher education as a system of exchange relations has formed. There is the sustainable demand for educational services from the main economic entities and their supply by various educational institutions interact in a competitive environment. New concepts have appeared in the educational environment: market, services, marketing. In particular, specialists of the marketing service of higher education institutions carry out the process of planning and promotion of educational services, determine the parameters of pricing, monitor and analyse the behaviour of entities in the market of educational services. Open days and public information fairs are held in order to carry out promotional activities for the promotion of education among the population.

The development of the market for higher education services is directly linked to the functioning of the labour market, generating supply and demand for labour. A entity-object relationship arises with regard to the training of professionals for the labour market. The level of development of higher education has become the most important indicator of the state of the labour market, the social sphere and the entire national

economy.

The establishment of educational services market is linked to the establishment of a system of market relations. It was formed in the context of the collapse of the Soviet economic system, based on planned methods of development. A new educational system in higher education was created in the context of insufficient budget financing and institutional problems related to the legal and regulatory framework. In the 1990s, there was a low level of income for employees in the state institutions at higher education system, and there was a public demand for educational services from non-state higher education institutions. These factors have led to the emergence of a market for educational services in a competitive Higher Education Organisations (HEOs) and fee-paying forms of study.

Methodology of the study

The analysis of the higher education market is supported by a theoretical and methodological framework based on the work of domestic and foreign scientists dedicated to the analysis of higher education institutions as an element of a market-based socio-economic system. On the basis of the results obtained, the economic nature of competition in the market of educational services is conceptualized, instruments and methods are defined, capable to ensure the competitiveness based on the high quality of the educational process in higher education organizations.

Dialectical method was used as the main method of research. The work is based on the principles of unity of historical and logical approaches to the analysis of economic phenomena in higher education; rationality of construction and functional specialization of economic systems and subsystems, which include the activities of higher education institutions. The methods used were comparative, structural, coefficient and index analysis, generalisations and clustering, as well as graphical and statistical visualisation techniques in order to investigate the competitive educational environment.

Results

The identification of the methodological foundations for the formation of a competitive educational environment allowed the author to justify the expediency of using the diglossia principle, which is based on the characterization of higher education as a mixed public good provided in the field of higher education in accordance with the differentiation of the level of development of higher educational institutions. Based on the analysis of supply and demand in the market of educational services, the characteristics of the competitiveness of higher education organizations are identified, including taking into account the use of e-Learning project technologies. The institutional approach has made it possible to justify the role of the quality of education in a competitive educational environment.

Discussion

The development of a competitive educational environment is influenced by the internal and external environment in which higher education institutions operate. External environment factors are based on the influence of political, financial, economic and technological influences on the activities of HEOs. The political impact is determined by the need to provide specialists for the national economy in order to ensure economic growth in an internationally unsustainable environment. Financial and economic factors determine the need to ensure the competitiveness of a higher education organisation in terms of the use of material and financial resources. Technological factors characterize the impact of new technologies specific to the digital economy on the organization of the educational process. Internal factors reflect the intellectual, financial and economic capacity of HEOs to operate effectively in the education services market. The basic foundations for the organization and functioning of the education market can be found in the studies of Antonova (2012), Abdulkirimov (2011), Gaynutdinova (2011), Lashko (2008), Semenyak (2007), Shevereva (2005), Shishkina (2007) and other scientists.

The quantitative and qualitative changes are characterizing the emergence of a competitive educational environment. The significant increase of number of higher education institutions in the late 1990s and early 2000s effects on the declining of the quality of education. HEIs mainly competed on educational programmes

in order to recruit applicants on a fee-paying basis, which led to a significant increase in students enrolled in law, economics and management studies. The concept of «buy a diploma» has appeared. This has required radical institutional changes. As a result, the number of higher education institutions has been optimised and the system of two-tiered bachelor's and master's degrees has been introduced. A competence-based model for training students in higher education institutions was introduced.

There have been quantitative changes in higher education system in recent years. According to Rosstat data (Russian Statistical Yearbook - 2020), the total number of graduates has decreased by 559,300 over the last 10 years (Table 1). The number of graduates in private higher education institutions has decreased significantly, too. Their quantity decreased by 181,900. This is the result of the stricter requirements of Ministry of Education and Science's for licensing and accrediting the activities of educational institutions.

Table 1 - Number of HEOs graduates

	2000	2010	2019
Total:	635.1	1467.9	908.6
State and municipal HEOs	578.9	1177.8	800.4
Private HEOs	56.2	290.1	108.2

Source: *Russian Statistical Yearbook, 2020*

The main socio-economic pre-conditions for the formation of competitive foundations in the educational environment are radical changes in the system of organizational, managerial and economic relations of education, the use of the achievements of the sixth technological mode, based on the widespread use of digital technologies (Irodov & Korechkov, 2018). Institutional maintenance of a competitive educational environment includes:

- modernization of the normative and procedural framework for higher education;
- transformative processes in education;
- development of new forms of activities of higher education organizations;
- use of innovative management methods;
- use of the digital economy through the widespread use of information and communication technologies and e-learning products;
- active development of scientific research in higher education institutions;
- application of modern forms of marketing;
- enhancing the HEOs interaction with organisations of the real economy, state and municipal administration authorities.

By implementing these institutional approaches, HEOs consolidate their position on the market of educational services and apply technologies to achieve the mission of the educational institution. Launching the educational programmes, a higher education institution graduates with specific competences. Actually, the HEOs present the results of activities to the labour market in the form of the knowledge, skills and abilities of the graduates. The opportunity to experiment by introducing new educational technologies enhances the competitiveness of a higher education institution by making it an innovative structure.

The research of the competitive educational environment can be conducted in many ways. On the one hand, it is a way for HEOs to develop the abilities of students, moulding them into individuals with the necessary knowledge and patriotism as a result of the educational process. On the other hand, it is a way of infrastructural innovative development of the economy of the individual regions and country as a whole. The research area combines an analysis the educational needs of individuals and society. To achieve a sustainable competitive advantage in an educational environment through the efficient management of financial or logistical factors of production alone is becoming almost impossible. By D. Bell's «The coming of post-industrial society: A venture of social forecasting», the mental work prevails over physical one (Bell, 1999). It is confirmed by the experience and level of technology of digital companies. The development from an industrial to a post-industrial society has substantially increased the role of intellectual production factors.

In the information economy, the ability to increase the intellectual capital has come to play a central role, characterised by the growing role of intellectual property.

The scientific level of the teaching staff in higher education has been declining in recent years. Over the last 10 years the number of doctors of sciences in HEOs has decreased by 7.7 thousand and the number of candidates of sciences has decreased by 52.6 thousand (Table 2). At the same time, the requirements of the Ministry of Education and Science for the implementation of research in higher education are increasing significantly.

Table 2 - Number of scientists in higher education institutions

	2010-2011	2019-2020
Number of lecturers and teaching staff - total	356.8	229.3
With a degree of		
Doctor of Science	44.0	36.3
Candidate of Science	185.5	132.9
With an academic degree of		
Professor	35.8	24.0
Associate Professor	115.7	87.4

Source: *Russian Statistical Yearbook, 2020*

Innovative ways of managing the educational process play an important role in the acquisition of a competitive advantage for HEOs (Korechkov, 2017). Choosing the educational technology most appropriate to their mission, higher education institutions should focus on quality of teaching staff and the innovative forms and methods used to organise the successful students training. The growing role of intellectual capital is based on the realisation of the ability to perform mental work. In this regard, by G. Becker, each person can be considered as a combination of one unit of simple labour, which any capable individual possesses, and a certain amount of human capital (additional, specific knowledge, skills) incorporated into it (Becker, 1993).

The development of competitive relations in the educational environment is determined by the following prerequisites:

1. Management in the digital economy is changing. The transition from the vertical integration, typical for energy companies, to the horizontal integration, typical for IT organizations.

2. The higher education system is transforming into a platform for the knowledge based on the concept of «lifelong learning». There is a view defining the society as «the knowledgeable», «society knowledge society», and the modern economy as «knowledge economy». A «knowledge industry» has appeared in the educational environment. Education is characterized as a branch of economy (in the USA it ranks 5th among other branches; already in 1998 the educational «branch» brought \$265 billion profit and employed 4 million people (Galagan, 2013), in 2020 the structure of the US GDP was as follows: services (education; health care; science; finance; trade; transport and communication; public services) - 78 %; industry - 21 %; agriculture - 1 % (US GDP, 2020-2021). In contrast to China, where the manufacturing sector dominates the economy, the US economy is a «service economy» and education takes a leading role there.

A Tinkoff Data analytical survey of more than 7,000 respondents found that since the end of March 2020, when the self-imposed exclusion regime was introduced, Russian citizens have spent 58% more on education than in the comparable previous period. And the first quarter of 2021 figures compared with the first quarter of 2019 show that education costs have risen by 165%. At the same time, during the pandemic year, people's expenditure on retail chains increased by 22% and on purchases of medicines and drugs from pharmacies by 14% (Lapina, 2021).

In recent years, new processes have taken place in the education system, which indicate a change in the essence of competition. The definition «coopetition» has appeared, derived from the English words «competition» and «co-operation», to denote a situation where competing organisations team up to solve problems that they cannot solve alone. This has led to the emergence of industry associations, such as EdTech

Finland, founded two years ago by educational start-ups to exchange experiences, create services, organise professional events, etc. In June 2021, the European Edtech Alliance was created, which is a consortium of nineteen organisations working in the field of educational technology. The alliance accounts for over 1,500 European educational technology companies (Karppinen & Korhonen, 2021).

The new electronic technologies play a significant role in ensuring the competitiveness of higher education institutions in the market environment. Nowadays, especially during the pandemic, all HEOs have set up e-learning systems. Thus, the university competitiveness is the quality and the price of the technology used. Therefore, cost assessment is a necessary element of an e-Learning project. The main purpose of cost assessment is to develop an optimal project budget and to organise the monitoring of the project's implementation. The calculation of the total cost of an e-Learning project in a HEO should be based on a methodology including the following components: hardware costs (software and hardware platforms); off-the-shelf course purchase costs; development, updating and implementation costs; training costs; administrative costs. The cost of developing, updating and implementing training materials leads in terms of quantity. The following costs of an e-course are taken into account: its creation, updating, localisation and implementation of the e-course in the company's LMS. Leading HEOs with greater financial resources are achieving a competitive advantage in the market for e-learning courses and related products.

The e-learning system is a way of solving the problem of migration from remote areas, town and villages. The appearance of distance education, based on the use of modern information technologies and e-courses, reflects the essence of the transformation of society in a digitised economy. The relevance of distance-learning systems was particularly evident in the context of the COVID-19 pandemic (Velikorossov et al., 2021). Effective use of e-learning is not only a factor in increasing the competitiveness of higher education institutions, but also the only possible form of knowledge acquisition and implementation of the educational process in times of public concern.

The analysis allows us to highlight the forms of competitiveness of an educational organization (Table 3).

Table 3 - Forms of ensuring the HEOs competitiveness

Name	Content
1. Application of new organisational forms	1.1. Integration processes 1.2. Networking 1.3. Streamlining of internal governance. 1.4. Public reorganisation.
2. Sustainable use of resources	2.1. Enhancing in-university specialisation 2.2. Sharing the technology base 2.3. Forming a unified service infrastructure.
3. Enhancing the effective use of scientific and pedagogical capacities	3.1. Creating conditions for highly qualified lecturers at different levels of education. 3.2. Wider involvement of students in scientific research. 3.3. Expanding opportunities for creative and professional growth. 3.4. Enhancing opportunities to overcome the social and welfare problems of the staff.
4. Lifelong learning introduction	4.1. Creation of new educational trajectories demanded by the economy. 4.2. Enhancing the different forms of work in the regions. 4.3. Start-ups creating.
5. Financing the competitiveness of HEOs	5.1. Implementation of educational programs with budgetary resources. 5.2. Implementation of a system of contractual relations with organisations on the basis of targeted training for students.

Name	Content
	5.3. Enhancing e-learning opportunities for additional education through e-technology. 5.4. Attracting additional financial flows and implementing multi-channel financing. 5.5. Fundraising opportunities using. 5.6. Implementing fee-based research work.
6. HEOs image improving	6.1. Marketing programs implementation. 6.2. HEOs goodwill increasing. 6.3. Extracurricular activities opportunities enhancing. 6.4. Educational component of the educational process enhancing. 6.5. High level of social protection ensuring.

Source: composed by the author

In addition to the forms of competitiveness of HEOs listed in the table, methods and tools for increasing the sustainability of educational structures should be considered. However, it is important to note that the quality of the main educational programmes, curricula and programmes of study, the creation of an effective system of management decision-making and implementation, the increasing importance of the scientific component, and the introduction of new forms of educational work with students are important.

Conclusions

The institutionalization of the higher education system allows to improve the quality of HEOs in the educational environment,

use organizational, managerial, pedagogical and other methods to improve the educational process.

Competitiveness of higher education institutions is an important challenge for educational services market. The development of the system of paid services leads to appearing of new forms of competitive relations. They reflect the «usefulness of HEOs» in the economic system and facilitate the implementation of new educational programmes based on the use of modern educational technologies.

An important institutional method for providing the competitiveness of HEOs is the establishment of an integrated quality management system for education. Это позволяет удовлетворить потребности рынка труда в квалифицированных специалистах. The use of e-Learning projects is a special tool for improving the educational process, especially in the context of the coronavirus pandemic. In competitive educational environment, the most successful is the HEO, which uses modern technology provide the students with information.

References

1. Antonova, O. V. (2012). *Market for Educational Services: Current Conditions and Development Trends. Thesis of Candidate of Economical Sciences*. M.: Insitute of Economics RAS (in Russian).
2. Abdulkerimov, I. Z. (2011). *Organizational and Economic Mechanism for the Development of Integration Processes in the Market of Educational Services. Thesis of Candidate of Economical Sciences*. Makhachkala: Dagestan State Technical University (in Russian).
3. Gainutdinova, I. M. (2011). *Entrepreneurial university as a promising model for higher education development in Russia in the context of globalization and international integration. Thesis of Candidate of Sociological Sciences*. Kazan' (in Russian).
4. Lashko, S. I. (2008). *Integration of the System of Economic and Business Education of Russia in the World Market of Educational Services: Theory, Models, and Practice. Thesis of Doctor of Economical Sciences*. Rostov-on Don: Southern Federal University (in Russian).
5. Semenyak, O. V. (2007). *State regulation of the market of educational services of higher education as an economic system. Thesis of Candidate of Economical Sciences*. Saratov: Moscow State University of Service

(in Russian).

6. Shevereva, E. A. (2005). *Economic foundations of functioning of state educational institutions of higher professional education. Thesis of Candidate of Economical Sciences*. M.: Moscow State Academy of Instrument Engineering and Computer Science (in Russian).

7. Shishkina, N. A. (2007). *Institutional bases for the formation of a regional educational environment. Thesis of Candidate of Economical Sciences*. Yaroslavl: YSTU (in Russian).

8. Irodov, M. I., & Korechkov, Y. V. (2018). Higher education in the digital economy. *Vestnik Evraziyskoy nauki*, 10(1). Retrieved from <https://esj.today/PDF/69ECVN118.pdf> (in Russian).

9. Bell, D. (1999). *The Coming of Post-Industrial Society: A Venture in Social Forecasting*. M.: Academia (in Russian).

10. Korechkov, Yu. V. (2017). Process Approach to Higher Education Organisation Management. *Naukovedenie*, 9(3). Retrieved from <http://naukovedenie.ru/PDF/107EVN317.pdf> (in Russian).

11. Becker, G. (1993). Human Capital (chapters from the book). The Impact on Earnings of Investing in Human Capital. *USA and Canada: Economics, Politics, Culture*, (11), 109-119 (in Russian).

12. Galagan, A. I. (2003). Problems of Accession to the General Agreement on Trade in Services (GATS) in Education: Analysis of World Trends. *Izvestiya IHEAS*, (3), 65 (in Russian).

13. VisaSam.ru. (2021). *US GDP in 2020-2021*. Retrieved from <https://visasam.ru/emigration/canada-usa/vvp-usa.html>

14. Lapina, A. (2021). *Since the beginning of the pandemic, spending on education has taken the first place in the growth of expenses of Russians*. Retrieved from https://skillbox.ru/media/education/s_nachala_pandemii_traty_na_obrazovanie_zanyali_pervoe_mesto_po_rostu_raskhodov_rossiyan/

15. Karppinen, H., & Korhonen, A. *New cooperation network to strengthen the European educational technology industry*. Retrieved from <https://edtechfinland.com/uusi-yhteistyoverkosto-eurooppalaista-edtech-toimialaa-vahvistamaan/>

16. Velikorossov, V. V., Maksimov, M. I., Prodanova, N. A., Korechkov, Yu. V., Starostin, S. Yu., & Rakauskiene, O. G. (2021). On the evaluation of the effectiveness of states' measures to overcome the Covid-19 Crisis: statistics and common sense. *International Journal of Applied Exercise Physiology*, 10(1), 217-222.

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