

Influence of remote education on consumer value of university education

Influence of remote education

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Abstract

Purpose – The purpose of this paper is to study the influence of remote education on the consumer value of university education by the example of modern Russia.

Design/methodology/approach – The authors determine the consumer value of university education in modern Russia in the conditions of the availability of predominantly traditional education; determine socio-economic problems that are caused by the low consumer value of university education in modern Russia; determine the potential of remote education in the increase of the consumer value of university education; and develop recommendations for the increase of the consumer value of university education in modern Russia through the development of remote education.

Findings – It is concluded that traditional university education is dominating in Russia. It is standardized and does not allow for the full consideration of individual capabilities and needs of each separate student, which causes the low consumer value of university education. The limitation of traditional and remote education, caused by the fact that educational services in each form are provided by completely different universities, hinders the development of the potential of remote education in stimulating the increase of the consumer value of university education.

Originality/value – In order to solve this problem, it is recommended to unify traditional and remote education within the diversification of the forms of the provision of educational services by modern Russian universities. For that, a conceptual model for increasing the consumer value of university education in modern Russia through the development of remote education is presented. This model focuses on applicant and students with their individual capabilities and needs and universities with their material and technical, intellectual, marketing and other resources. At that, the educational form goes to the background, being not a self-goal but a method of its achievement – the provision of the high consumer value of university education.

Keywords Consumer value, University education, Remote education

Paper type Research paper

Introduction

University education is a fundamental basis for achieving economic growth and social progress, as well as the formation of knowledge economy, which is the key landmark of the development of modern economic systems. First, universities are the environment in which foundations are set and research activities are performed – which result in the creation of innovations. Though entrepreneurial structures can also perform R&D, this is a direction of the diversification of their activities, which goes to the background, while for universities, it is one of the most important directions of specialization.



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Second, in the process of the provision of university education, apart from narrow professional training, the foundations of the conduct of entrepreneurial activities are set. That is why the more the popular university education in a socio-economic system is, the higher the level of business activity and rate of its economic growth will be. Third, university education is a means of the preparation of highly qualified specialists that are capable of multi-profile activities and manifestations of high innovational activities.

These advantages of university education emphasize its importance and significance for modern economic systems. However, the possibility and level of obtaining them depend on population's interest in the receipt of university education – e.g., its popularity, which is determined by its consumer value. This paper offers a hypothesis that modern Russia is peculiar for the low value of university education, and the development of remote education allows increasing it. The purpose of the work is to study the influence of remote education on the consumer value of university education by the example of modern Russia. In order to achieve this goal, it is necessary to solve the following tasks:

- determining the consumer value of university education in modern Russia in the conditions of dominating traditional education;
- determining socio-economic problems that are caused by the low consumer value of university education in modern Russia;
- determining the potential of remote education in increasing the consumer value of university education; and
- developing recommendations for increasing the consumer value of university education in modern Russia through the development of remote education.

Materials and method

The performed literature overview showed that there are a lot of studies that are devoted to the consumer value of university education, which include Aima *et al.* (2015), Andreou *et al.* (2017), Bostan *et al.* (2015), Botti *et al.* (2017) and Woodall *et al.* (2014).

Peculiarities and advantages of remote education are reflected in the works of Bogoviz *et al.* (2017), Chashchin *et al.* (2013), Coelho *et al.* (2018), Darajat (2018), Douce (2017), Evangelista *et al.* (2017), Firat *et al.* (2018), Harsasi and Sutawijaya (2018), Ozturk *et al.* (2018), Kravets *et al.* (2013) and Popkova *et al.* (2015).

However, despite the high level of elaboration of separate components of the topic of this paper, conceptual and applied studies that are devoted to the elaboration of the influence of remote education on the consumer value of university education are scarce and do not allow forming a strong scientific basis on this topic, which causes a need for its further research.

The performed content analysis of the existing scientific literature on the issues of the consumer value of university education, supplemented by our own studies, allows defining it as the ratio of the product of the aggregate characteristics of the quality of university education and the level of their correspondence (justification) of consumers' expectations to aggregate expenditures for receiving it. In the form of a formula, the economic and mathematical expression are given as follows:

$$CVue = (Que/Eue) \times CEue, \quad (1)$$

where CVue is the consumer value of university education, Que the totality of the characteristics of the quality of university education, Eue the total expenditure for the receipt of university education and CEue the increasing/decreasing coefficient that reflects the level of the correspondence (justification) of quality and expenditures to the expectations of consumers.

As is seen from the given expression, a consumer value is the effectiveness of university education for consumers. As the indicators of quality and expenditures are measured in different units and a lot of them do not have precise quantitative measure, here calculations with the formula will be performed not with absolute but with the relative values of indicators (in shares of 1 with finding the direct average) and will have not mathematical but logical sense.

The following characteristics of the quality of university education are determined as follows:

- Theoretical competence: the level of theoretical preparation, which allows manifesting flexibility during mastering of various professions by the obtained educational specialty and adapting the influence of technological progress.
- Practical competence: practical skills that allow performing professional duties.
- Innovational capabilities: creative potential, level of its opening and the skill to use it with high effectiveness for the manifestation of innovational activity by the mastered profession.
- Convenience of study (service): level of accounting of individual capabilities and needs of students during learning.
- Possibility of employment: simplicity of employment according to the specialty.
- Payment for labor: additional income that is received due to university education.

Expenditures of consumers for university education include the following points:

- cost of university education; and
- complexity (labor and time intensity) of studying in university, including the loss of income due to time spent for university education.

The following methods are used: structural and functional analysis, logical analysis, synthesis, induction, deduction, formalization and economic modeling. The information and analytical basis includes the materials of the All-Russian Public Opinion Research Center and the Research Institute of the Higher School of Economics on the issues of the consumer value of university education in modern Russia.

Results

As a result of the research, it was determined that 41 percent of Russian population that received university education estimate the level of their theoretical competence as high. At that, only 17 percent of the consumers of university education see their level of practical competence as high, and 9 percent see their innovational capabilities as high (All-Russian Public Opinion Research Center, 2018a, b). This shows that traditional university education in Russia allows obtaining sufficient knowledge but insufficient practical skills and capabilities for the execution of professional duties and does not stimulate the development and opening of the innovational potential of students for further manifestation of high innovational activity at work.

Convenience of learning (service) in university is considered to be high only by 22 of the respondents (All-Russian Public Opinion Research Center, 2018a, b). It is probably caused by the fact that schedule does not take into account individual capabilities and needs of students and is common for everyone. Also, the flexibility of interaction between lecturers and students is not present – this interaction supposes the necessity of the personal presence of subjects in university.

In total, 38 percent of Russians with university education consider their prospects of employment to be high (All-Russian Public Opinion Research Center, 2018a, b). The average

salary of employees with university education in Russia was RUB43,362 in 2017, which is by 1.32 times higher than average salary in Russia (RUB32,911) (Higher School of Economics, 2018). Based on this, the calculation of the indicator of totality of the characteristics of the quality of university education in Russia in 2017 is performed in the following way: $Q_{ue} = (0.41 + 0.17 + 0.09 + 0.22 + 0.38 + 1.32)/6 = 0.43$.

The cost of university education is considered to be high by 35 percent of the respondents (All-Russian Public Opinion Research Center, 2018a, b). It is probably caused by the fact that cost of the paid education in university is by several times higher than in the establishments of vocational secondary education, but a lot of students in Russian universities use the state-funded program (financing from the state budget).

Complexity (labor and time intensity) of studying in university is considered to be high by 65 percent of the respondents (All-Russian Public Opinion Research Center, 2018a, b). It is probably caused by the fact that in order to enter a university in Russia, it is necessary to graduate 11 grades in secondary and high school, pass the uniform state exam, spend four years with the bachelor's program and then two years with master's program, while in order to enter a vocational secondary educational establishment, it is necessary to have a school diploma at the end of nine years of study, without any state uniform exam.

Therefore, the loss of income due to studying in university could be presented as average statistical salary for four years (eight years of education after nine years in school within for university education minus four years of education after nine years in school for vocational secondary education), i.e., $32,911 \times 4 = 131,644$. Based on this, the indicator of total expenditures for university education in Russia in 2017 is given in the following form: $E_{ue} = (0.35 + 0.65)/2 = 0.50$.

The expectations of consumers as to quality and expenditures for university education in Russia were justified by 64 percent. Based on this coefficient, which reflects the level of correspondence (justification) of quality and expenditures to the expectations of consumers, (CE_{ue}) equals 0.64. This allows evaluating the consumer value of university education in Russia in 2017: $CV_{ue} = (0.43/0.50) \times 0.64 = 0.55$.

The obtained value of the indicator CV_{ue} shows the low consumer value of university education in modern Russia. This could be a cause of the following socio-economic problems:

- Unemployment of population with university education: as of 2017, 3.4 percent of the unemployed in Russia had a college diploma (Higher School of Economics, 2018).
- Difficulty of the execution of professional duties (including the manifestation of innovational activity) of employees with university education.
- Non-return of resources that are spent for university education, including material and time resources.

Probably, due to these reasons – despite the fact that 73 percent of the respondents deem it necessary for them and their friends to have higher education (All-Russian Public Opinion Research Center, 2018a, b) – only 60.53 percent (4,399,000) of students study in universities, while 2,868,000 students study in secondary vocational educational establishments (Federal State Statistics Service, 2018).

We think that the potential of remote education in the increase of the consumer value of university education is rather high. Due to the remote form of study in universities, it is possible to consider the individual needs and capabilities of students. This allows compiling individual schedules for each student and conduct online interaction between student and lecturers without personal presence in the university.

Due to the possibility of the additional usage of electronic study guides (e.g. listening to lectures), it is possible to fill the emerging gaps in students' knowledge, which allows increasing the level of theoretical and practical competence. At that, lower cost – as

compared to traditional education – allows ensuring the wide accessibility of university education in the remote form and its larger return rate from the point of view of material expenditures.

At the same time, it is necessary to note that due to the innovational character of remote education in modern Russia, employers might be suspicious toward job applicants with remote education. Allowing work practice while studying in university, remote education provides the experience of work that is highly evaluated by modern Russian employers, expanding the possibilities of employment for applicants with remote education (University of History of Cultures, 2018).

In order to increase the consumer value of university education in modern Russia through the development of remote education, it is recommended to use the conceptual model shown in Figure 1.

The model that is shown in Figure 1 offers to cancel differentiation between universities in modern Russia according to the form of study, thus making remote education one of the main forms that are provided by any university. Due to this, the initial stage of obtaining university education is the applicant's choice of the university depending on his preferences. At that, the applicant selects the university, which provides applicants with a wider choice.

The next stage is a university considering individual capabilities and needs of each student and selecting the optimal form of education for the student. This could be only traditional education, only remote education, or a combination of

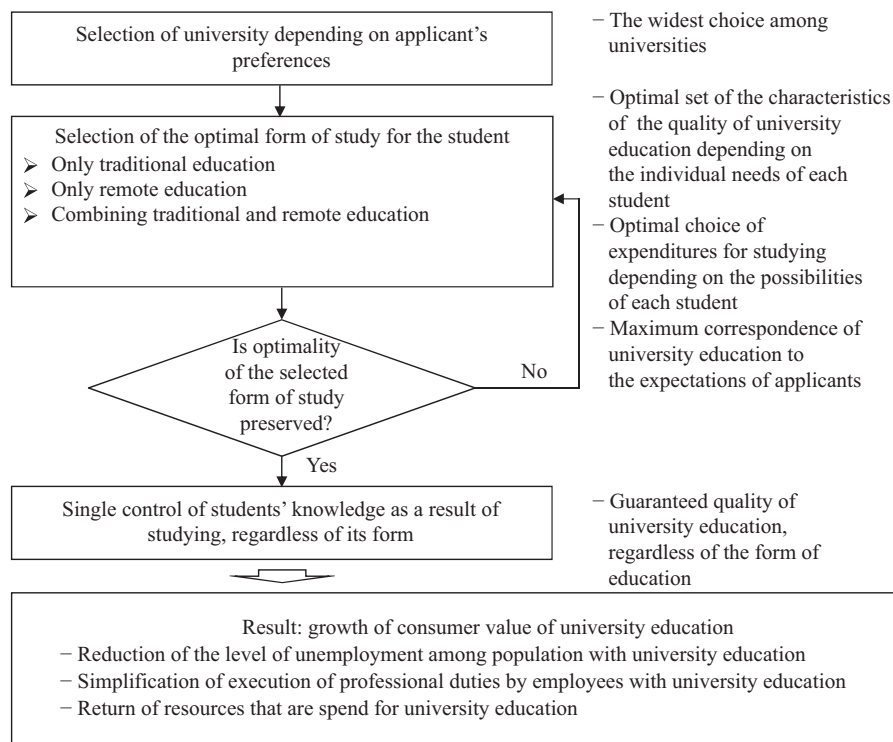


Figure 1. A conceptual model of the increase of the consumer value of university education in modern Russia through the development of remote education

Source: Compiled by the authors

traditional and remote education. In any moment, a student is granted a possibility to change the form of study. Due to this, the optimal set of the characteristics of the quality of university education is achieved depending on individual needs of each student, as well as optimal expenditures for education depending on each student's possibilities and maximum correspondence of university education to the expectations of applicants.

As a result of education (intermediary and final), the unified control of students' knowledge, regardless of the form of education, is performed. This ensures the guaranteed quality of university education, regardless of the form of education. This allows overcoming mistrust of interested persons to universities that provide remote education, as they will cease to be separate and will instead become integrated into existing universities.

As a result, growth of the consumer value of university education and the corresponding reduction of the unemployment level of population with university education are achieved, as well as the execution of professional duties by employees with university education and return of resources that are spent for the receipt of university education.

Conclusions

Thus, the offered hypothesis is proved: traditional university education is dominating in modern Russia, and it is peculiar for standardization and cannot fully take into account individual capabilities and needs of each separate student, which leads to the low consumer value of university education. Differentiation of traditional and remote education, caused by the fact that educational services in each of the above forms are provided by different universities, hinders opening the potential of remote education in the stimulation of the increase of the consumer value of university education.

In order to solve this problem, it is recommended to unify traditional and remote education within the diversification of the forms of the provision of educational services by modern Russian universities. This measure has to ensure the termination of the opposition of traditional and remote education and unify their capabilities in the interests of increasing the consumer value of university education. The main conclusion is that remote education should not compete with traditional education – instead, it should supplement it.

For that, a conceptual model of increasing the consumer value of university education in modern Russia through the development of remote education is presented. This model focuses on applicants and students with their individual capabilities and needs and universities with their material and technical, intellectual, marketing and other resources. At that, the educational form goes to the background, being not a self-goal but a means of achieving it – the provision of the high consumer value of university education and the formation of “accessible environment” for students with limited possibilities.

It should be emphasized that the consumer value is a complex economic category in which social factors dominate. Due to this, during logical (qualitative) evaluation of the consumer value of university education in modern Russia, the results of sociological surveys of the Russian population were used. The development of the methodological provision of the evaluation of the consumer value of university education, which allows using the data of official statistics and conducting precise quantitative (mathematical, not logical) calculations, determines the perspectives of the conduct of further scientific research.

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