Higher Education Marketing Strategies Based on Factors Impacting the Enrollees’ Choice of a University and an Academic Program

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ABSTRACT

The relevance of studying the stated problem is due to the fact that for increasing the efficiency of higher education marketing it is necessary to take into account several factors, namely, factors that impact the choice of a university and an academic program by enrollees, as well as socio-psychological characteristics of the latter, while systematic research of this problem has not been done by now. The goal of this paper is to give recommendations for the implementation of higher education marketing strategies aimed at potential enrollees. The main method used by us for studying the stated problem was the questioning of 1515 enrollees of Kazan (Volga region) Federal University (KFU) with subsequent statistical data processing. Namely, by using techniques of cluster, factor, and correlation analysis we have succeeded in determining certain characteristic features of enrollees and main factors that impact the choice of a university and an academic program by enrollees; we have also ranked these factors. We refine factors that impact the choice of a university and an academic program by enrollees, rank their motives for entering a university, reveal factors that influence the total number of enrollees in a university, and determine new academic programs demanded by enrollees. Basing on the obtained results, we propose a model of an enrollee of one of Russian universities and prove that the implementation of an education marketing strategy should take into account the factors that impact the choice of a university and an academic program by enrollees, as well as socio-psychological characteristics of the latter. The practical value of obtained results consists in their applicability to the implementation of higher education marketing strategies. The recommendations proposed by us can contribute to increasing the competitiveness of universities among enrollees.

KEYWORDS
Higher education marketing, enrollee, university choice factor, socio-psychological model of enrollee

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Introduction

The relevance of the study

The implementation of higher education marketing strategies should be aimed at potential applicants, i.e., graduates of educational establishments who want and are able to obtain a higher education. It is necessary to take into account factors that impact the choice of a university and an academic program by potential enrollees.

However, the research performed in the higher education marketing evidently is insufficient.

Modern trends

A graduate of a high school or a secondary special educational establishment, as well as that of a university, during his/her professional training in a certain area goes through three main stages: an applicant – a student – an alumnus. On each stage he/she is subjected to factors that define the choice of a university and an academic program (on the first stage), the educational process (on the second stage), and the professional self-identification (on the third stage) (Shemeto, 2011). Moreover, on each of the mentioned stages, strategies of the marketing of education services based on the main factors impacting their choice by users can influence the target audience. But the first stage is the main one in the sense that it defines the next stages. On the first stage enrollees are subject to the impact of the following factors:

1. The contact audience. It includes people who influence the enrollees’ choice of a university and a future speciality. The contact audience of an enrollee includes his/her friends, acquaintances, parents, relatives, and teachers (Tikhomirova and Isaev, 2010).

2. Personal characteristics of a future student, his/her preferences, needs, aptitude (for example, to engineering, humanities or science), i.e., the mindset of the enrollee, his/her self-confidence, independence of thought and decision making and so on (Notman, 2008).

3. The residence of an enrollee. This factor often plays a decisive role in choosing a university by a school graduate (it includes the development of the network of educational institutions in the region, the region’s infrastructure and specialization, local customs and traditions, the level of income in the region, and the quality of school education) (Tikhomirova and Isaev, 2010). The introduction of Unified State Exams (USE) has provided school graduates with the possibility to apply to several universities in Russia, which increases the competition between universities.

4. The financial position of an enrollee (and, first of all, of his/her parents). This factor impacts not only the possibility to pay the tuition fee, but also the possibility to get education in a certain region or a certain city (Kirillina, 2000). Correspondingly, this factor can strengthen the impact of the «residence» factor on the choice of a university by an enrollee.

5. Mass media. Mass media represent the main source of information for enrollees and their contact audience (for example, the participation of top university officials in TV programs, the provision of information on salaries of university alumni, publications of papers, and the publication of university
ratings and forecasts of demand for certain professions in the labor market in future) (Kirillina, 2000).

6. The level of awareness of the situation in the higher education market. If an enrollee is aware of the situation in the higher education market (i.e., of the availability of universities and academic programs, of the demand for particular professions and their positions in ratings, of conditions of education and so on), then his/her choice of a certain university and a certain academic program is better motivated (Kirillina, 2000).

7. The professional experience. If an enrollee already has a certain professional experience, then this factor impacts his/her choice of an academic program and a form of education. This concerns, first of all, graduates of secondary special education institutions, those who want to get a second higher education degree or to improve their professional skills (Kirillina, 2000).

8. The availability of budget places in a university. The quantity of places financed by the federal budget is defined by the corresponding ministry or agency (mainly, by the Ministry of Education and Science of the Russian Federation) (Volkova and Zvezdova, 1999). At present time free academic programs (bachelor, master, and postgraduate ones) are offered, as a rule, by state universities. Private universities often have a flexible pricing policy, offering significant discounts to students. Some universities even make the education free for most successful students. However such universities are an exception to this rule, therefore state universities are more attractive for enrollees.

9. The material and technical base of a university. We understand this factor as the university infrastructure, including the availability of student dormitories, the availability of modern equipment (computers, laboratory equipment and so on), and the methodological support of the teaching process (library funds, tutorials, textbooks, and so on) (Volkova and Zvezdova, 1999).

10. A form of education. This factor defines, first of all, the schedule of studying, training dates and locations, the academic load, and the possibility of combining study and work. The choice of a form of education by an enrollee also depends on his/her financial well-being (or that of his/her parents) (Kirillina, 2000).

Materials and Methods

The goal of research

The goal of our research consisted in the experimental identification of factors impacting the choice of a university and an academic program by enrollees.

Research methods and techniques

After having analyzed many relevant publications, we have identified several probable factors impacting the choice of a university by enrollees. On the base of these factors we have made a questionnaire. This questionnaire, in particular, included several questions allowing one to identify specific characteristics of enrollees. The total number of questions was 38. Each question has allowed us to estimate the contribution of a certain factor characterizing KFU applicants to their decision and, moreover, to identify factors impacting the implementation of higher education marketing activities. The mentioned characteristics of KFU
applicants included the presence of a medal, the need in a dormitory room, the time when he/she has chosen the university and the academic program, the fact of training with an individual tutor or a school teacher or the absence of the pre-university training, and the mindset (engineering, scientific, or humanitarian). Among factors that impact the choice of a university by an enrollee we considered the following ones: the possibility of getting a good education, highly qualified faculties, the prestige of a university, the availability of a certain academic program, the availability of dormitory space, the coverage in the mass media, the quality of training facilities, the possibility to study on a budget-financed basis, the need in additional education (in particular, in engineering, economics, psychology, pedagogy, or foreign languages), plans for the future work after graduating the university (for example, business or industry), and so on.

For estimating results of our research we studied the contribution of each factor to the overall picture of factors impacting the choice of a university by enrollees. To this end, we measured the percentage of applicants who had indicated a certain factor. We have also used methods of the correlation analysis (for establishing interconnections between factors and characteristics under consideration (response variables)), the cluster analysis (for classifying enrollees), and the factor analysis (for ranking factors and response variables).

The experimental research base

The research was conducted in 2014-2016 in Kazan (Volga region) Federal University (KFU) in Russia. The questioning involved 1515 young people who applied to KFU in 2014.

Results

By questioning KFU applicants we have identified specific features, mechanisms, and trends in the implementation of higher education marketing strategies.

The obtained results are given in tables 1, 2, 3.
Table 1. The number of applicants to KFU institutes

<table>
<thead>
<tr>
<th>Institute number</th>
<th>Names of KFU institutes</th>
<th>Number of applicants</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Institute of Fundamental Medicine and Biology</td>
<td>143</td>
</tr>
<tr>
<td>2</td>
<td>Institute of Environmental Sciences</td>
<td>44</td>
</tr>
<tr>
<td>3</td>
<td>Institute of Geology and Petroleum Technologies</td>
<td>60</td>
</tr>
<tr>
<td>4</td>
<td>Institute of International Relations, History and Oriental Studies</td>
<td>185</td>
</tr>
<tr>
<td>5</td>
<td>Lobachevsky Institute of Mathematics and Mechanics</td>
<td>49</td>
</tr>
<tr>
<td>6</td>
<td>Institute of Physics</td>
<td>73</td>
</tr>
<tr>
<td>7</td>
<td>Alexander Butlerov Institute of Chemistry</td>
<td>35</td>
</tr>
<tr>
<td>8</td>
<td>Faculty of Law</td>
<td>119</td>
</tr>
<tr>
<td>9</td>
<td>Institute of Computational Mathematics and Information Technologies</td>
<td>92</td>
</tr>
<tr>
<td>10</td>
<td>Leo Tolstoy Institute of Philology and Intercultural Communication</td>
<td>161</td>
</tr>
<tr>
<td>11</td>
<td>Institute of Social and Philosophical Sciences and Mass Communications</td>
<td>88</td>
</tr>
<tr>
<td>12</td>
<td>Institute of Psychology and Education</td>
<td>108</td>
</tr>
<tr>
<td>13</td>
<td>Physical Education and Sports Academic Unit</td>
<td>9</td>
</tr>
<tr>
<td>14</td>
<td>Higher School of Information Technologies and Information Systems</td>
<td>75</td>
</tr>
<tr>
<td>15</td>
<td>Institute of Economics and Finance</td>
<td>126</td>
</tr>
<tr>
<td>16</td>
<td>Institute of Management and Territorial Development</td>
<td>147</td>
</tr>
<tr>
<td>17</td>
<td>Institute of Engineering</td>
<td>8</td>
</tr>
</tbody>
</table>

The total number of applicants involved in the questioning: 1515

Table 1 contains data on the number of applicants to various institutes of Kazan (Volga region) Federal University. These data allow one to estimate the demand for KFU institutes among applicants.

Table 2. Characteristics of KFU applicants (in percent)

<table>
<thead>
<tr>
<th>Institute number (see institute names in Table 1)</th>
<th>The total number</th>
<th>Number of participants of significant Olympiads</th>
<th>Number of winners of significant Olympiads</th>
<th>Number of participants of significant conferences</th>
<th>Number of winners of significant competitions</th>
<th>Number of applicants who have publications</th>
<th>Publications in economics</th>
<th>Publications in psychology or pedagogy</th>
<th>Publications in engineering</th>
<th>Publications in linguistics (foreign languages)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1515</td>
<td>1515</td>
<td>20.66</td>
<td>11.49</td>
<td>8.12</td>
<td>6.27</td>
<td>2.31</td>
<td>5.08</td>
<td>17.23</td>
<td>14.92</td>
<td>15.84</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<td>185</td>
<td>49</td>
<td>73</td>
<td>35</td>
<td>92</td>
<td>161</td>
<td>59,63</td>
</tr>
<tr>
<td>2</td>
<td>17,48</td>
<td>18,18</td>
<td>11,67</td>
<td>26,49</td>
<td>28,57</td>
<td>26,03</td>
<td>22,86</td>
<td>18,49</td>
<td>18,3</td>
<td>45,71</td>
</tr>
<tr>
<td>3</td>
<td>10,49</td>
<td>11,36</td>
<td>6,67</td>
<td>10,81</td>
<td>12,33</td>
<td>12,33</td>
<td>17,14</td>
<td>10,92</td>
<td>9,78</td>
<td>32,77</td>
</tr>
<tr>
<td>4</td>
<td>11,19</td>
<td>5,55</td>
<td>7,57</td>
<td>4,08</td>
<td>4,08</td>
<td>5,48</td>
<td>5,57</td>
<td>8,18</td>
<td>10,92</td>
<td>8,22</td>
</tr>
<tr>
<td>5</td>
<td>1,4</td>
<td>1,67</td>
<td>1,67</td>
<td>1,67</td>
<td>1,67</td>
<td>4,08</td>
<td>4,08</td>
<td>2,17</td>
<td>2,17</td>
<td>2,36</td>
</tr>
<tr>
<td>6</td>
<td>8,39</td>
<td>3,5</td>
<td>8,22</td>
<td>14,29</td>
<td>14,29</td>
<td>8,57</td>
<td>8,57</td>
<td>10,92</td>
<td>12,33</td>
<td>4,97</td>
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<tr>
<td>7</td>
<td>4,97</td>
<td>1,4</td>
<td>2,16</td>
<td>4,08</td>
<td>4,08</td>
<td>2,86</td>
<td>2,86</td>
<td>1,68</td>
<td>1,68</td>
<td>3,26</td>
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<tr>
<td>8</td>
<td>16,78</td>
<td>4,08</td>
<td>2,74</td>
<td>4,08</td>
<td>4,08</td>
<td>2,86</td>
<td>2,86</td>
<td>1,68</td>
<td>1,68</td>
<td>3,26</td>
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<tr>
<td>9</td>
<td>6,29</td>
<td>2,36</td>
<td>1,4</td>
<td>3,24</td>
<td>3,24</td>
<td>2,52</td>
<td>2,52</td>
<td>3,26</td>
<td>3,26</td>
<td>6,21</td>
</tr>
<tr>
<td>10</td>
<td>11,19</td>
<td>22,73</td>
<td>25</td>
<td>22,73</td>
<td>28,57</td>
<td>28,57</td>
<td>28,57</td>
<td>21,08</td>
<td>19,88</td>
<td>14,29</td>
</tr>
</tbody>
</table>

The table contains numerical data arranged in rows and columns.
Table 2 contains data on KFU applicants, namely, on their participation in Olympiads, conferences, and competitions, as well as on their publication activity and publication subjects. The data are given in percent (except those in the column named «The total number»).

Table 3. Applicants’ motives for entering KFU (quantities of applicants who have mentioned a certain motive)
Table 3 contains data demonstrating motives of applicants to Kazan (Volga region) Federal University.

**Discussions**


However there are only very few papers devoted to education marketing, and these papers are mainly debatable.

According to results obtained by the questioning, the ranking of KFU institutes among involved applicants is the following one:

1. Institute of International Relations, History and Oriental Studies.
2. Leo Tolstoy Institute of Philology and Intercultural Communication.
3. Institute of Management and Territorial Development.
4. Institute of Fundamental Medicine and Biology
5. Institute of Economics and Finance.
6. Faculty of Law
7. Institute of Psychology and Education.
8. Institute of Computational Mathematics and Information Technologies.
10. Higher School of Information Technologies and Information Systems.
12. Institute of Physics.
15. Alexander Butlerov Institute of Chemistry.
16. Physical Education and Sports Academic Unit.
17. Institute of Engineering.

Thus, as appeared, the Institute of International Relations, History and Oriental Studies, the Leo Tolstoy Institute of Philology and Intercultural Communication, and the Institute of Management and Territorial Development were most popular among applicants, whereas the Institute of Engineering and the Physical Education and Sports Academic Unit were least popular.

This ranking demonstrates the urgent need in raising the prestige of engineering specialties in the eyes of high school pupils in Russia.

The obtained results have allowed us to draw a socio-psychological portrait of an applicant to Kazan (Volga region) Federal University. We have established that applicants involved in the questioning were, first of all, young people with a high level of the following characteristics: they were participants of international and all-Russian scientific-practical conferences, participants of international and all-Russian Olympiads, winners of international and all-Russian competitions, graduates of high schools awarded with medals (for example, 27% of applicants to the Lobachevsky Institute of Mathematics and Mechanics were awarded with medals), many applicants had publications in engineering, law, psychology or pedagogy, some of applicants were winners of international and all-Russian competitions. According to results of the correlation analysis, the applicants who had publications in engineering more often were awardees of international and all-Russian Olympiads.

Most of participants of international and all-Russian Olympiads have applied to the Lobachevsky Institute of Mathematics and Mechanics (28%) and the Institute of International Relations, History and Oriental Studies (26,5%). As for the winners, most of them have applied to the Institute of Chemistry (17%), the Leo Tolstoy Institute of Philology and Intercultural Communication (16%), and the Lobachevsky Institute of Mathematics and Mechanics (4%).

Many KFU applicants have got additional (beyond the high school) training before entering the university: namely, 65% of enrollees of the Lobachevsky Institute of Mathematics and Mechanics have got additional training (they hired individual tutors) and 33% of applicants were trained additionally at school. Moreover, results of the correlation analysis show that the training of school graduates with an individual tutor positively correlates with the presence of a medal. This training impacts the further life activity and self-confidence of graduates and even stimulates these qualities. However 23% of enrollees had got no special additional training before applying to the university. As for individual tutors, most often they were experts in mathematics.
According to results of the questioning, many respondents had a high level of considered characteristics. It is necessary to note that a high level of the development of enrollees (i.e., future KFU students) with respect to the mentioned factors is very important for their success in the study and for forming their professional competences. Therefore, when deciding about the enrollment of applicants to the university, it makes sense to take into account not only their learning progress but also their research and social activity.

The cluster analysis of results of the questioning has given 5 groups of enrollees formed on the basis of a prevailing mindset: engineering, humanitarian, scientific, or mixed one (two groups).

Most of enrollees with the engineering mindset have applied to the Institute of Engineering, the Institute of Physics, the Higher School of Information Technologies and Information Systems, and the Institute of Computational Mathematics and Information Technologies, i.e. institutes with the engineering education content. However some enrollees with the engineering mindset have applied to the Alexander Butlerov Institute of Chemistry and the Institute of Environmental Sciences.

The second group consisted of applicants with a humanitarian mindset. Most of them have applied to the Faculty of Law, the Institute of Economics and Finance, the Institute of Social and Philosophical Sciences and Mass Communications, the Leo Tolstoy Institute of Philology and Intercultural Communication, the Institute of International Relations, History and Oriental Studies. Some enrollees with a humanitarian mindset have applied to the Institute of Economics and Finance.

The third group consisted of enrollees with a scientific mindset. Most of them have applied to the Institute of Psychology and Education and the Institute of Fundamental Medicine and Biology. Some representatives of this group have applied to the Lobachevsky Institute of Mathematics and Mechanics.

Two groups of young people with a mixed-type mindset have applied to the Institute of Engineering and the Physical Education and Sports Academic Unit. Since numbers of members in these groups are rather small, we cannot make any conclusion about their choice.

The mentioned facts show that the choice of an institute by applicants sometimes does not correspond to their mindset. The diagnostics of the mindset would help applicants to make a true choice, i.e. to choose an institute and an academic program in accordance with their mindset, mental abilities, specific features of mentality, and aptitudes.

According to results of the questioning, in the 8th form of a high school only 8% of pupils were definite of their future speciality, in the 9th form this value was 20%, in the 10th form it was 24%, and in the 11th form near a half of pupils (more precisely, 48%) were definite with respect to the choice of their future speciality. This fact demonstrates the necessity of psychological testing of schoolchildren and of the career guidance work in the high school (in 8 – 11th forms). Moreover, the career guidance work should be also performed with parents of schoolchildren, though most of enrollees think that parents, relatives, and friends minimally impact their choice.

The performed factor analysis has allowed us to establish the following conditions impacting the choice of KFU by enrollees: the good equipment and
good training facilities in the university, the availability of dormitory rooms, the possibility to obtain a high quality education.

Results of the correlation analysis show that the total number of KFU applicants depends on the availability of dormitory rooms, on the financial well-being of enrollees (or their parents), and on the possibility to study on a budget-financed basis.

The questioning of enrollees has also allowed us to rank their motives for entering KFU, namely, it included the possibility to obtain a high quality education (thus, 76% of applicants to the Lobachevsky Institute of Mathematics and Mechanics have indicated the high level of education at KFU), the prestige of the university, the availability of a certain academic program, the good equipment and teaching facilities, highly qualified faculties, and the availability of dormitory rooms (for nonresidents of Kazan). These motives and factors for application to KFU inessentially differ for various KFU institutes.

The final choice of a university depends on three factors: the availability of budget-financed study places, the prestige of the university, and the low tuition fee. Thus, 88% of applicants to the Lobachevsky Institute of Mathematics and Mechanics have mentioned that they would choose a university with budget-financed study places, while 6% of enrollees were going to choose a university and an academic program with the lowest tuition fee.

The correlation analysis has revealed positive significant correlations between such factors as the prestige of the university, the possibility to obtain a high quality education, and highly qualified faculties.

The least valuable factors impacting the choice of a university, in the opinion of enrollees, were the advertisement in the mass media and advices of parents, relatives, and friends. This means that decisions made by applicants were well thought and independent.

However, results of the correlation analysis demonstrate a significant dependence between advertising in media and the total number of applicants to the university. Therefore it is necessary to increase the value of the advertisement. It is also important to make applicants pay attention to the information related to valuable factors impacting the enrollees' decision.

Having surveyed advertising booklets of several universities, we came to the conclusion that the booklets contained, mainly, the following information:

1. The university structure and the list of academic programs, as well as levels of education, i.e., pre-university preparation, undergraduate, graduate, higher professional, postgraduate and second degree (Volkova and Zvezdova, 1999). Publicity experts often believe that the better the university structure and its «final product» are described in the advertisement, the more enrollees trust the university.

2. Specialities (academic programs) offered by the university. There exists an opinion that young people first decide what they want to be and then where to get the corresponding education. Even the university title often reflects the branch of education provided by it (e.g., the Mining University, the Banking Institute, the Transport University). Education advertising experts assume that such names emphasize the university specialization and imply the high quality of education, which helps to increase the trust of potential applicants to such universities. As for the list of academic programs, on one hand, the large number
of them can attract applicants who would appreciate the possibility of a wide choice (Kirillina, 2000). On the other hand, a too large variety of academic programs (especially in new universities and those which are not widely known) can cause suspicion about the quality of education there.

3. Forms of education. Marketing experts assert that the information on available forms of education (e.g., face-to-face, part-time, mixed, or distance learning) is very important for future applicants, as well as the information on the possibility to get a pre-university training or the possibility of the skill improvement (Kleshchevskii, 1998). This variety of forms of education provides a wide choice for applicants and helps in improving the university ranking position.

4. Specific features of university faculties (Kotler, 1998; Pankrukhin, 1997). It is assumed that the additional information on faculties of a higher educational establishment represents an important argument in favor of the latter.

5. Partners of the university. The emphasis is being puts on partnerships with famous persons and with well known organizations and enterprises. It is traditionally considered necessary in advertising, especially in branding (Kleshchevskii, 1998). In recent years it has also become «fashionable» to mention contacts with international universities.

6. Facts of the university history, some «legend» (Saginova, 1999). Marketing experts believe that such information is very important for branding, especially for advertising a university, because it emphasizes such features as the adherence of the university to national cultural and scientific traditions and its stable development and thus also helps to increase the trust of applicants.

7. The description of the material base of education in the university and the offered services. It is commonly accepted that the availability of auditoria equipped with teaching facilities in a university is attractive for potential applicants (note that there are universities in Russia, especially newly established ones, who have no owned premises, but only rented ones). The same is true for the availability of libraries, dining rooms, gyms, and medical centers (Senashenko, 2000). Evidently, the more complete and more clear is the description of this structure in the advertisement, the more competitive is the university.

8. Pictures of student life. It is assumed that when choosing a university, an applicant not only gets the possibility to obtain a higher education, but also adheres to a certain lifestyle for several coming years (Kleshchevsky, 1998). Therefore it is desirable to give applicants the information on the availability of clubs, student theaters, or creative studios in a university, on the possibility to spend holiday vacation, the information on university newspapers and on other university media. This would be helpful in forming an attractive image of the university in eyes of potential applicants.

9. The information on the assistance in further employment. This information is often indicated in advertising materials, because it is assumed that the help in the employment of university alumni reveals one more aspect of the concern for graduates and thus increases the attractiveness of the university. The advertisement usually also contains information on most successful university alumni (Senashenko, 2000).
10. It makes sense to demonstrate the possibility of practical training of university students. The practical training is a very important mean for consolidating the acquired knowledge and for turning them into competencies and skills. Therefore it is traditionally considered that the information on possibilities of practical training provided by a university would strengthen the trust of applicants in the high quality and demand of the chosen education (Shchetinin, 1997).

11. The ways to save some money from paying the tuition. It is desirable to indicate ways in which students can save some money from paying the tuition such as scholarships, the reduction of fees for most successful and/or senior students, various benefits and so on (Shchetinin, 1997). The demonstration of benefits (in any form it takes) definitely is a winning advertising strategy. Since the sum of the tuition fee paid during the course of study is usually rather large, it is believed that the information on the possibility to reduce it given in advertising materials of a university can raise the interest to the latter in eyes of potential applicants.

12. The university logo, slogan, and motto (if any). It is assumed that the mentioned elements are also very important in advertising a university, because they play the integrating role, express the concept of the university, and structurally unify all advertising materials. Together with the university name, these elements increase the recognition of the university, help to distinguish it among competitors, and give it a uniqueness (Stiglitz, 1997). Slogans and mottos also represent factors of the corporate culture.

Thus, it is necessary to give potential university applicants the information about the prestige of the university, the availability of budget places, the availability of academic programs, the information on the qualification of faculties, and that on the material base and teaching facilities of the university.

According to results obtained by the application of mathematical methods to the questioning data, all established motivation factors are strongly correlated with each other. This means that the motive for the application to a certain university does not play a decisive role, but the strength of the motive is very important. It is necessary that at least one of motives is dominating. Teachers and parents should inform a pupil, i.e., a future student, of perspectives that are opened for him by the university education.

The information about specialities demanded by enrollees as additional is also of interest. Thus, applicants to the Institute of Mathematics and Mechanics have indicated that they would like to get an additional degree in foreign languages (33%), psychology and pedagogy (20%), economics (17%), engineering (11%), and law (9%). These demands can be satisfied by the university. The availability of additional education programs on request of the university students is one of important factors of increasing the competitiveness of the university.

As for distant plans, as appeared, 37% of respondents were apt to research, 20% of them were going to work in industry (after graduating from the university), 13% planned to become state employees, and 3% were interested in business.

Certainly, the trends that were revealed in distant plans of enrollees are not bad. The leading universities of Russia should orient their students to further
research activity. Many heads of industrial enterprises and state employees have diploma of KSU (later reorganized to KFU).

At the same time, according to results of the performed correlation analysis, there exist certain specific features. Thus, for enrollees who had planned to be involved in the research activity or to work in industry the choice of the Law as an additional education program is correlated with the choice of a prestigious university independently of the tuition fee.

The obtained correlations mean that enrollees with a high level of self-esteem usually choose prestigious universities known for highly qualified faculties; they choose an academic program independently of the tuition fee and often decide to deal with the business after graduating from a university.

As appeared, there exists a significant negative correlation between enrollees’ plans for being engaged in business and scientific research, i.e., students who are interested in business are not going to be involved in the research activity and vice versa.

For attracting applicants within the implementation of education marketing strategies and for increasing the competitiveness of a university, it is necessary to take into account the established dependences and preferences of future graduates.

**Conclusions**

1. The obtained results have allowed us to propose the following model of a KFU applicant:

   - KFU applicants involved in the questioning were young people; they were successful in their studies and research, they participated in various competitions and Olympiads, many of them were winners of competitions and Olympiads, some of them had scientific publications, many of respondents were awarded medals for their studies at high school and had got high Unified State Exam (USE) scores;

   - many applicants had some additional education (most often in mathematics), along with the general education; usually the additional training was provided by tutors or school teachers in extra lessons;

   - the professional self-determination of pupils usually begins in the 8th-9th-10th forms, however the half of pupils makes a final decision on the choice of an academic program only in the 11th form;

   - among motives for choosing a university we should mention the prestige, the availability of budget places, the availability of a certain academic program, and a high qualification of faculties.

   - however the final decision on the application to a certain university depends on the possibility to study on a budget-financed basis or to study for a low tuition fee.

2. Results of our research demonstrate the necessity in increasing the prestige of engineering specialties among schoolchildren and the necessity of the career guidance activity among pupils and their parents.
3. Additional academic programs mostly demanded by enrollees are foreign languages, engineering, psychology and pedagogy, and law. It is necessary to provide optimal conditions in a university for the implementation of most demanded additional academic programs.

4. Plans for the employment after graduating from the university include working in industry, scientific activity, civil service, and business.

5. Further research will include the study of changes in characteristics of enrollees and those in the dynamics of factors impacting the choice of a university. We also intend to study changes that take place among university students during their study and to describe factors impacting the learning success of students. The identification of specific mechanisms and dependences would allow one to increase the competitiveness of the university.

**Recommendations**

The education marketing is important for increasing the competitiveness of universities; namely, the information on the prestige of a university, on the availability of budget places, on the availability of certain academic programs, on the qualification of faculties, on the availability of additional education programs (it is desirable to provide discounts on tuition fees for these programs), and on possibilities of the further career growth.

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No potential conflict of interest was reported by the authors.

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