Value perception analysis of the educational product of the university in the conditions of digital transformation

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Abstract. In today’s realities, the issue of value development is of increased interest due to the transformational processes of digitalization, as well as the dynamically changing external environment, which contributes to shifts in the behavior in the educational process, changes in the perception of factors in the development of educational organizations, changing priorities, the formation of new approaches to the creation and promotion of educational products. Under these conditions, it becomes relevant to study the value perception of the university product by external and internal stakeholders to form an educational product that meets modern requirements.

1 Introduction

The development of the education system, digitalization, current changes, and transformation of the external environment form a new system of coordinates and revision of existing management practices in the system of higher education.

The university management system integrates the various departments and communications between them, as well as the business processes that ensure the development of the educational organization, connecting faculty and students with the necessary resources and support services.

Digital transformation changes the approach to the management of the educational organization, creating new opportunities for the transfer of knowledge, skills, and experience. New tools are emerging for engagement and retention to build a positive consumer experience of the educational product and long-term co-creation [14]. The choice of communication channels in the digital environment in terms of their accessibility and efficiency becomes an important aspect.

Digital transformation gives impetus to the development of educational organizations, contributing to the formation of interconnected information technology resources functioning as a whole, and thus predetermines the inevitable transition from the educational environment to complex network interactions and further to the educational ecosystem [9].

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In this regard, it is necessary to analyze the value perception of the educational product of the university, to constantly strengthen the value orientations, and carry out corrective measures.

2 Materials and methods

It is necessary to study the value orientations of stakeholders, which are the flows of value requests formed in the university itself (internal environment) and external in relation to the university (external environment) to identify the defining values of an educational organization. Then it is necessary to work out the meaning load of each value, work out the relationship between the identified values, compare with the values of contact audiences (stakeholders), as well as to compare the results with the prescribed type of activity according to the statutory documents as the values should not be an obstacle to achieving the main goal of the organization [3,7].

Within the framework of marketing research on the perception of the Faculty of Management brand values in 2020, a survey was conducted with the participation of undergraduate students and teaching staff of SFedU, representatives of the business community, and applicants. There were 138 respondents to the survey.

The questionnaire included a question to identify the value orientations of the respondents: “What, in your opinion, are the priority values of modern higher education (no more than three)?”

Among the responses, the main determining key values of university education, typical for all groups of respondents were: knowledge of the professional field, the ability to solve professional problems (89.8%), qualified teaching staff (71.4%), graduate employment opportunities (53.1%), facilities and infrastructure (42.9%), a high level of organization of student life (42.9%), the flexible organization of the educational process (40.8%) [1,2].

Further, for the identified key values, the principles that unite the groups of respondents according to the results of the study were worked out.

The following results were obtained by identifying the principles, which should be followed by the structural unit, which trains modern managers to ensure competitiveness in the global educational market: 54.1% of the respondents pointed out that the main principle is the orientation to the innovation projects. The second place is taken by the principle of continuous education (36.7 %) which point to the development of the post-graduate and doctorate courses, 34.1 % is for the principle of “information openness” [1,5].

The study results of the values of first-year students and the understanding of what values of applicants formed their request to study at the university are of particular interest. Fifty-one respondents (72% of the total number of freshmen in 2022 in the Management program at the time of the survey) participated in the survey.

As part of an ongoing survey, the question was asked, “In university life, you are most attracted to the opportunity of...”

The result showed that first-year students perceived the following as the main values of university education: gaining professional knowledge (46 responses, 90%), expanding the general outlook and erudition (36 responses, 70.6%), and making new friends (32 responses, 62.7%) [6].

The method of M. Fishbein was applied to determine the value perception of the recipients of the educational product. This method involves the initial determination of the importance of the selected criteria, then collecting subjective estimates of satisfaction for each criterion and calculating the attitude to the product as a set of value characteristics by the formula:
A_j = \sum_{i=1}^{n} B_i \cdot Y_{ij},

where $A_j$ is the attitude to the product as a set of value characteristics;
$B_i$ – the importance of the motive for the consumer;
$Y_{ij}$ is a subjective evaluation of a product as a set of value characteristics to satisfy motive $i$.

The survey was conducted in August-September 2022 in Rostov-on-Don.

The sample size among the respondents of the Faculty of Management of South Federal University was 111 people, among whom 20 were applicants, 76 were students, and 15 were graduates of the Faculty of Management. Applicants, students, and graduates of the following universities also participated in the survey:

- Southern Federal University (SFedU)
- Don State Technical University (DSTU)
- Rostov State University of Economics (RSEU)
- The South Russian Institute of Management – Branch of the Russian Presidential Academy of National Economy and Public Administration (RANEPA)
- Rostov Branch of the Russian Customs Academy (RCA)
- Rostov State Medical University (RostSMU)

The total sample size was 266 respondents.

Respondents were asked to rate the importance of the following ten criteria considered significant in choosing an institution of higher education:

- Availability of state-funded places (4.69),
- Variety of educational programs offered (4.25),
- Teachers’ qualification (availability of candidates and doctors of sciences (4.18),
- University prestige (place in the ranking of Russian universities) (4.16),
- Material base (infrastructure, condition of buildings, dormitories, scientific equipment, etc.) (4.14),
- Ability to continue in graduate school (postgraduate) without changing the university (3.82),
- The cost of tuition on a commercial basis (3.63),
- Individual approach to students (availability of individual training programs) (3.59),
- Opportunity to participate in cultural, sports, and social activities (student self-government, artistic groups, participation of the university in sports competitions, etc.) (3.57),
- Opportunities for additional education and internships abroad (3.45),
Respondents then rated the above universities on each of the proposed criteria on a scale of 1 to 5, where 1 is the minimum score and 5 is the maximum score.

According to the results of the study, the best value perceptions among SFU respondents have the following criteria:

- University prestige (average score – 4.86);
- The variety of educational programs offered (average score – 4.71);
- Ability to continue in graduate (postgraduate) studies without changing the university (average score – 4.69).

Respondents gave the lowest score to SFedU on the criterion of “the cost of tuition on a commercial basis”, the level of its acceptability by consumers estimated at 3.24.

Another weakness of SFedU was identified as its material base (infrastructure, state of the buildings, dormitories, scientific equipment, etc.). According to the results of the consumer survey, the average score of SFedU on this criterion is 3.75.

Overall, according to the criteria of value perception of the recipients of the educational product, Southern Federal University took first place among the universities of Rostov-on-Don, included in the study, scoring 16.9 points, according to the method of perception assessment by M. Fishbein.

3 Results

As a result of the study, the following were determined:

1) key values of university education for stakeholders,
2) positive dynamics of the inclusion of digital technologies in the educational process,
3) first-year students’ values and the values of applicants that formed their request to study at the university

As a result of the study the basic principles of value-based management of the educational organization were identified and it became possible to determine the relationship between the principles and values in the formation of the educational product.

The obtained results allow us to focus on the key values of the main stakeholder groups of interaction to form the value proposal of the educational product.

4 Discussion

The analysis of value perception is central to the construction of value-based management models [8,9].

Value orientation in the framework of the study is understood as a subjective assessment of a phenomenon, i.e., value orientations, and determined by the system of values prevalent in society, which in turn is based on the cultural standards (T. Parsons, 2000) [4].

In the conditions of digital transformation, there is an opportunity to analyze massive data regarding consumer behavior (potential and permanent), to influence the value attitudes, and build digital strategies of interaction.

5 Conclusion

The values defined as pivotal determine the principles of activity, norms, and standards of employee behavior and interaction [12,13]. A value proposal is formed that addresses
value attitudes depending on which values are perceived as key ones [10,11]. This success largely depends on the analysis of the value perception of the educational product of the university [15].

Under digital transformation, there are new opportunities for self-development, increasing professional competence, and increasing the level of satisfaction of employees and students, which, in general, unambiguously contribute to a qualitative change in the educational product and improve the value perception on the part of stakeholders.

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