

**FORMATION OF DIGITAL COMMUNICATION IN THE  
ORGANIZATIONAL AND PEDAGOGICAL ACTIVITY OF THE  
UNIVERSITY**

**FORMAÇÃO DA COMUNICAÇÃO DIGITAL NA ATIVIDADE  
ORGANIZACIONAL E PEDAGÓGICA DA UNIVERSIDADE**

**FORMACIÓN DE LA COMUNICACIÓN DIGITAL EN LA ACTIVIDAD  
ORGANIZATIVA Y PEDAGÓGICA DE LA UNIVERSIDAD**

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**ABSTRACT:** Authors conducted a sociological study with further analysis of the opportunities and threats associated with the introduction of the digital environment. The proposed criteria for modeling digitalization are focused on activating the innovative and creative potential of students, scientific and project activity of the teaching staff, as well as on improving professional level of training of personnel and employees of the university, including contributing to personal development and improving labor efficiency. These criteria allow the university brand to take a stable position in a competitive environment and expand the target audience. The introduction of a digital information and communication environment makes the economic development of the university stable, and, as a result, expands the options for partnerships, large-scale scientific and educational projects that give the right to enter the modern socio-cultural space of the country and the world.

**KEYWORDS:** Digital communication. University digital environment. Educational resources. Digitalization.

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**RESUMO:** Os autores realizaram um estudo sociológico com análise mais aprofundada das oportunidades e ameaças associadas à introdução do ambiente digital. Os critérios propostos para a digitalização da modelagem estão focados em ativar o potencial inovador e criativo dos alunos, atividade científica e de projeto do corpo docente, bem como na melhoria do nível profissional de formação de pessoal e funcionários da universidade, inclusive contribuindo para o desenvolvimento pessoal e melhorando a eficiência do trabalho. Esses critérios permitem que a marca universitária assuma uma posição estável em um ambiente competitivo e amplie o público-alvo. A introdução de um ambiente digital de informação e comunicação torna estável o desenvolvimento econômico da universidade e, como resultado, amplia as opções de parcerias, projetos científicos e educacionais de grande envergadura que dão o direito de entrar no espaço sociocultural moderno de o país e o mundo.

**PALAVRAS-CHAVE:** Comunicação digital. Ambiente digital universitário. Recursos educacionais. Digitalização.

**RESUMEN:** Los autores realizaron un estudio sociológico con un mayor análisis de las oportunidades y amenazas asociadas con la introducción del entorno digital en el. Los criterios propuestos para la modelización de la digitalización se centran en activar el potencial innovador y creativo de los estudiantes, la actividad científica y proyectual del profesorado, así como en mejorar el nivel profesional de formación del personal y los empleados de la universidad, incluyendo la contribución al desarrollo personal y mejorar la eficiencia laboral. Estos criterios permiten que la marca universitaria tome una posición estable en un entorno competitivo y amplíe el público objetivo. La introducción de un entorno digital de información y comunicación estabiliza el desarrollo económico de la universidad y, como resultado, amplía las opciones de asociaciones, proyectos científicos y educativos de gran escala que dan derecho a ingresar al espacio sociocultural moderno de el país y el mundo.

**PALABRAS CLAVE:** Comunicación digital. Entorno digital universitario. Recursos educativos. Digitalización.

## Introduction

In the new information society, communication is one of the key activities, being both independent and "serving" other spheres of life (VDOVINA *et al.*, 2021). The variety of information transmission channels and the ability to plan and implement communication strategies using various tools form a new information environment not only in society, but also in a single organization (DUDIN *et al.*, 2020; SLEPOV *et al.*, 2021 2e).

For example, the university environment has been actively developing over the past five years in the direction of digitalization (EVSIKOVA *et al.*, 2022), distance

learning formats, Internet communication with the student audience and applicants (ZHAROV *et al.*, 2022), as well as in the direction of automation and computer technologies that can ensure effective management of the university and organize a promising innovative pedagogical environment (GONCHAROVA; GONCHAROVA, 2019; USACHEVA; CHERNYAKOV, 2020; VANYUSHKINA, 2019).

Digitalization is becoming one of the dominant conditions for the formation of the university's publicity capital, its status in Russian and international ratings (KLIMOV *et al.*, 2019, KUZ'MIN, 2019; VAN HEERDEN; GOOSEN, 2020). Based on this, in our article we make an attempt to imagine what an effective information and communication model of organizational and pedagogical activity of the university, focused on employees and teachers, students and applicants, can look like.

## Materials and Methods

There is no doubt that it is possible to ensure the transition to digital educational technologies only through a general transition to the digital communication space of the entire university (HERNÁNDEZ DE VELAZCO *et al.*, 2020). To implement such a transition, we decided to test the attitude and readiness of students and university staff for such a transformation. We conducted a pilot sociological study (RETS *et al.*, 2022) on the topic: "Research of the attitude of the teaching staff and students to the formation of the digital environment of the university". This pilot study involved 150 respondents, including students and teachers of Moscow universities (public and private). Age and gender, as well as the areas of training and professional sphere of teachers have been chosen randomly, because in this case it was important for us to get a cross-section in relation to digitalization.

## Results

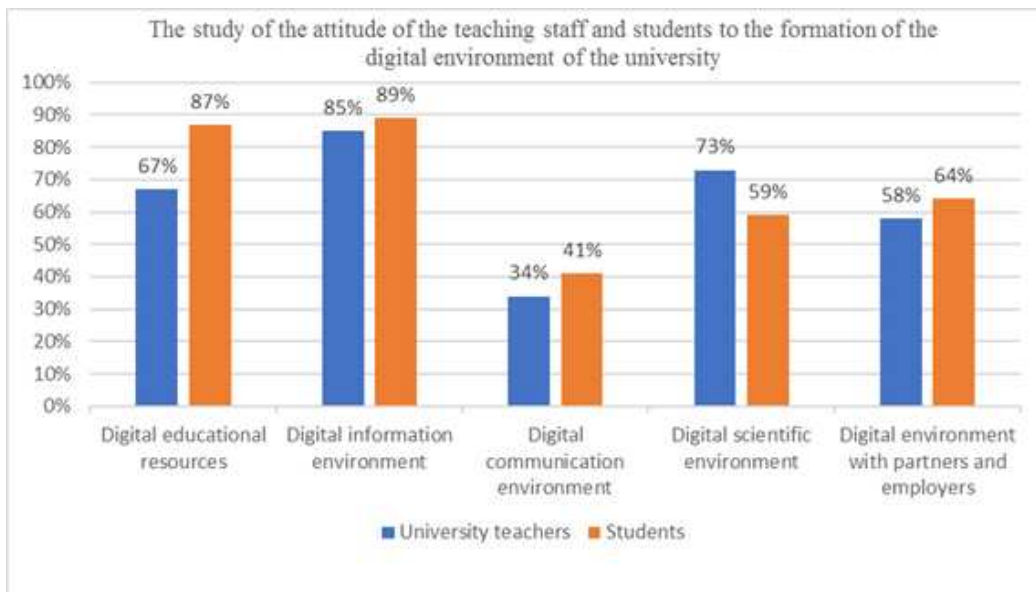
Based on the provisions formulated by us, we conducted a sociological study in order to clarify the attitude of teachers and students to the problem of forming the digital environment of the university in several directions:

1. educational resources;
2. information environment;
3. communication environment;

4. scientific environment;
5. interaction with partners and potential employers.

The results are presented in the diagram: see Figure 1 (diagram).

**Figure 1** – The attitude of teaching staff and students to the formation of the digital environment of the university



Source: Prepared by the authors

It should be noted that the data presented in the diagram indicate a number of features and problem points associated with the process of digitizing the university environment. We will analyze the highest and lowest response to the formation of the digital communication field in the organizational and pedagogical activities of universities.

The greatest response was caused by the digital information environment, since both teachers and students are interested in obtaining information within the framework of one information Internet service, and not through announcements, oral messages of employees/management, messengers, etc.

The least response was caused by the digital communication environment, since teachers and students are focused on direct communication, interpersonal communication, physical presence in the team is important to many, and they are not sure that network communication will be identical. However, from the point of view of solving various work issues, some respondents consider this type of communication effective, especially when it is necessary to resolve problematic or conflict situations, when it is

possible to provide correspondence or an electronic document. It should be noted that we also did not evaluate this criterion as completely replacing offline communication, but only as an additional channel.

The percentage indicators for the remaining criteria confirm the need to introduce a digital environment into the work of the university, but they cannot completely replace the traditional areas of professional and educational activities.

The system-forming directions of digitalization of the university include the organization of e-learning, distance education, automation of work, economic and legal processes, management of education and science, the creation of EER (electronic educational resources: programs educational literature, cases, video content, etc.), scientific and technological Internet platforms for the implementation of project activities. This approach is able to actively participate in the formation of the knowledge economy, new pedagogical techniques, new communication tools with students and applicants, as well as within the organization among the teaching staff and employees of different departments. Let's look at it in more detail in the table.

**Table 1 – Digital information and communication space of the university**

<b>Information and communication space of the university for EMPLOYEES / TEACHERS</b>	<b>Information and communication space of the university for STUDENTS</b>
Formation of information educational resources of the university.	Formation of information educational resources of the university.
Formation of an information and communication digital environment focused on organizational and pedagogical activities.	Formation of an information and communication digital environment focused on the development and maintenance of students' competencies.
Formation of a database of information and educational resources and web 2.0 services from third-party sources.	Formation of a database of information and educational resources and web 2.0 services from third-party sources.
Organization of an effective communication and feedback channel (teacher-teacher / / teacher-employee / / employee-employee/ / teacher and employee-manager // manager-manager).	Organization of an effective communication and feedback channel (teacher-student / / employee-student).
Formation of the environment of professional development and self-realization of the employee.	Formation of critical thinking in the process of working with information sources.

Formation of a scientific and practical digital space for educational activities, participation in grants and other programs/events/competitions).	Formation of students' portfolios.
Forming partnerships with potential partners and employers, etc.	Formation of a scientific and practical worldview, etc.
<b>Threats</b>	
<ol style="list-style-type: none"> <li>1. A large array of information and uncontrolled information flows;</li> <li>2. Intersection of virtual and real environments;</li> <li>3. Technical noises;</li> <li>4. Erroneous semantics of information interpretation;</li> <li>5. Distrust of an external source of information;</li> <li>6. Individual psycholinguistic features of information perception and further work with it;</li> <li>7. Communication failures, etc.</li> </ol>	

Source: Prepared by the authors

In the presented table, the following factors are the most effective: digitalization of educational materials, the development of a digital educational environment and web communication, the use of web social network services 2.0, activation of the creative and innovative potential of students, as well as the formation of critical thinking based on modern information and communication technologies, the development of digital literacy and culture. In addition, a single digital space makes it possible to effectively and quickly interact with the entire structure of the university, quickly solve tasks, form their own unique organizational and pedagogical environment, taking into account new trends and requirements of the educational services market, as well as constantly increase the intellectual potential of the teaching staff, personal and career growth.

The listed possible threats and "noises" (technical, informational, communicative) are not only a statement of the fact that such problem points exist in the activities of universities, but also a signal that forecasting and knowledge of these threats can avoid them in advance, or minimize them in the process of designing such models of the digital communicative environment (SANCHEZ; ALEMAN, 2011).

Thus, according to the results of our research, the digitalization of the information and communication environment of the university should include the following systems:

1. *Digital educational platform (opportunities):* popularization of scientific and innovative activities among students; creation of database of educational content; integration of science and the market sector of services; development and application of

electronic learning formats; development of distance education; formation of digital culture and literacy, as well as professional competencies; development of project-based learning within the university and together with partners).

2. *The electronic library system of the university* (**opportunities**: competent and affordable provision of the educational process; availability of information necessary for obtaining knowledge; creation of an electronic / digital archive of students' works (projects, diploma and master's works, etc.).

3. *Digital communication internal and external* (**opportunities**: a web platform for the exchange of information within the university, and not only corporate mail, digitalization of document management, virtual information boards, forums and chats; creation of informal communication channels (student clubs, etc.); external communications using image design will allow you to manage the reputation of the university and implement the organization's positioning strategy, broadcast the necessary content to the target audience and the media, form a positive brand of the university, build PR communication with society and government representatives, interact with the public sector, etc.).

## Conclusion

Thus, building a model of university development, we are based on the advanced trends of the world community, which today is interpreted as a knowledge society. The modern information model of development consists not only of the use of new channels of mass communication, the availability of information and information and communication technologies, digital resources, but is also represented by a new type of society, in which one of the main resources is knowledge.

The characteristic features inherent in the knowledge society in the field of development and application of digital communication are the following:

- knowledge and availability of information are necessary conditions for the development of society;
- digital information and communication space is the basis of a new economic formation;
- the active development of technologies is the basis for the effective functioning of society;

- the formation of the concept of "elite" consciousness, based on educational activity and the acquisition of new knowledge and competencies throughout life, is the essence of modern society;

- the quality of an individual's life directly depends on the level of his digital literacy and culture, the ability to use IR technologies in professional and personal activities.

Based on these criteria, we can assume that the formation of digital communication in the organizational and pedagogical activities of the university directly meets the requirements of the knowledge society, therefore, such a strategy will allow the university to take a stable position in the market by introducing a unified digital environment with professional personnel, as well as representing competitive graduates.

The knowledge Society in relation to the activities of the university demonstrates the development of various processes that are important in today's conditions. From the point of view of strategic modeling, the information and communication policy of the university should meet a number of criteria:

- 1) knowledge as the basis of success in any field of activity;
- 2) representatives of the elite consciousness are constantly focused on obtaining new applied knowledge;
- 3) the market of educational services is very dynamic, there is always a high demand for high-quality education;
- 4) digitalization of the educational, scientific and industrial environment is one of the most important conditions of the new time.

Since the largest percentage of the target audience in the field of education is young people, communication should also be built according to the requirements of generations Z and Alpha, which are digital generations. It is they who become the professional domestic elite, capable of promoting scientific, technical, socio-cultural, etc. progress. The formation of elite consciousness begins at school and should reach its highest point at the university when obtaining professional competencies. In this case properly structured communication plays an important role not only in the teacher-student relationship, but also in all university structures, since communication built only in one organizational structure cannot be effective, it must be common.



The absence of a competent communication policy reduces the effectiveness of the university as a whole, negatively affects the quality of education and training of qualified personnel and can lead to various threats and consequences (SWOT-analysis).

The application of such a process of modeling an effective digital environment in the management of information and communication activities of the university is focused on a serious "redevelopment" of the structure of the university, its departments and personnel capable of implementing such a model in action. There is also a need for a transition in the field of management to methods that operate in modern business processes, the transformation of organizational corporate culture, the formation of an entrepreneurial environment at the university, a culture of consumption of digital services and the development of information literacy at all levels.

The presented material can be used as an introductory one in the process of developing the university's communication strategy, the digital educational environment, the Internet platform of information and communication orientation, digitalization of the university's activities at all levels, etc. The article is focused not only on state universities, but also on commercial, as well as organizations providing educational services, individual entrepreneurs, non-profit youth organizations, etc.

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