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## Digital corporate culture as an element of the transformation of the organization in the context of digitalization

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**Abstract:** Transformational processes in modern organizations related to the digitalization of business systems require a deeper study of the digitalization process, taking into account organizational specifics. Often, the attempts to carry out a digital transformation of an organization are faced with serious problems, which are caused by the lack of understanding of the transformational process system by the management, and by the fact that it should affect and change not only the material, but also the organizational, and the human capital of the business system. The existing confusion between "digital strategy" and "digital transformation strategy" categories leads to wrong management decisions, which entail an avalanche of risks and losses when trying to transform organizational system digitally. Modern studies of Russian organizations show that the misunderstanding of the "digital transformation" category by management leads to the inhibition of digital processes, and the unwillingness of the organization staff to change their working methods and increase of digital competencies in accordance with the digital transformation strategy reduces almost to zero all attempts to transform the organization in accordance with the requirements of the digital economy by senior management.

The study revealed that in order to get the greatest effect from the digital transformation of an organization, it is necessary to develop clearly a strategy for the digital transformation of the company, increase the digital competencies of staff, change the organizational culture towards the digital type of organizational culture, create a team of digitalization leaders in the organization, attract and retain talents. Digitalization changes the process of information exchange between people and organizations, and also forms a system of digital organizational culture that contributes to the implementation of transformational digital processes. The success of transformational digital processes can be assessed using the organization digital maturity model, as well as a special electronic readiness index (E - Readiness index). The analysis and synthesis of special literature on the issues under consideration suggests the need to take a fresh look and evaluate the problems of digital transformation of business systems during the transition to a digital economy.

**Keywords:** digitalization, organizational culture, digital competencies, intellectual capital, information and communication technologies, information society.

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## **INTRODUCTION**

In recent years, there has been an intensification of transformation processes in modern organizations associated with the digitalization of business systems. It should be noted that the transition to doing business in a fully digital format is only gaining momentum, and these processes are based on rather optimistic results obtained by a number of the world largest companies. Of course, the digitalization of organizational systems can give any business an undeniable competitive advantage if it was carried out taking into account all the necessary requirements.

It should be noted that some leaders perceive the digitalization of business systems as the transition to "new hardware", but this approach is not correct, in our opinion. It is possible to increase the number of computers in an organization, but still you don't the desired economic effect. It should be borne in mind that the desired competitive advantages can be "grown" only in the case of a profound transformation of the organizational system, which should affect and change not only material, but also organizational, and human capital. In turn, it must be remembered that human capital is initially generated in the education system of different levels, therefore, it is simply impossible to do without the systematic development of digital competencies among future or current employees of companies. Consequently, digital transformation processes affect not only business systems, but the entire society as a whole, and this, in turn, justifies the need to include larger players in the game represented by transnational corporations and states.

As for the former, they have been engaged in the digital transformation of their business for quite a long time and even successfully, the governments of states also realized quickly the need for systematic management of digital processes, which was reflected in the creation of various national programs for digital economy development [3].

Therefore, we can conclude that businessmen are faced with the tasks related not only to the use of new digital technologies, building up competitive advantages of business with their help, but also the task of finding new management tools that are most suitable for the new digital reality. Obsessing with the old methods of organization management can lead to the business system collapse, so the issues of digital transformation of organizations are becoming more and more urgent in modern conditions.

In the course of our research, we studied the scientific works by Denning S., Parker J., Alstin M., Chaudary S., Zaki M. and others, who consider the revolutionary changes in economic systems arising from digital technologies; the works by Wade M., Ismagilova L.A., Gileva TA, Westerman G., Bonnet D. and others, in which the patterns of society digitalization development were studied, as well as the works of Russian scholars (Loshkova I.V., Korolev G.V. and others) on the problems of technology platforms "Industry 4.0" implementation in Russia.

All of the above prompted us to solve the problem under consideration.

## **RESEARCH METHODOLOGY**

The theoretical and methodological basis of our research was formed by the provisions of virtual and network economy theory in relation to flexible economic systems.

In the process of writing the article, the following general scientific and specific methods of cognition were used: deduction and induction, synthesis and analysis, typology, comparison, and generalization.

## **STUDY RESULTS**

The importance of transformational processes in an organization associated with digitalization presupposes the presence of a specially developed digital transformation strategy, as indicated by recent studies [1, 4-7, 9-16]. The strategy is called upon to become the basis that gives a "hard frame" to all the digital transformations that modern organizations must undergo if they want to survive in the conditions of turbulence. The digital transformation strategy should be holistic, systemic in nature, representing consistently achieved milestones on the path of the business system changes.

As V.I. Ananyin notes in his work [7] initially it is necessary to study carefully the entire value chain of the organization and the digital technologies currently used in the organization. Next, the level of digital maturity of the business system is assessed, which will make it possible to understand where the company actually is now and where it should move to achieve the desired goals of digital transformation.

After identifying the "gaps" and "bottlenecks" of an organization digitalization, the company management needs to develop a special roadmap for digital transformation in order to use it to balance technological and organizational innovations within the framework of the transformation process we consider.

The analysis of literary sources revealed that at the moment the economic literature has no a unified understanding of an organization digital strategy concept.

As M. Zaki shows in his work [15], there is often confusion between the categories "digital strategy" and "digital transformation strategy". We believe that a distinction should be made between these two definitions, since in our opinion, a digital strategy presupposes the actions of an organization in a digital external environment, and a

digital transformation strategy presupposes certain actions by the management to transform an existing business system from a traditional to a digital one.

Further we will talk about the strategy of an organization digital transformation, which, in our opinion, should meet certain requirements:

- continuous monitoring of the environment external to the organization;
- continuous inventory of the existing competencies of the organization as a business system, taking into account its focus on digital maturity;
- generation of the organization future vision, taking into account certain key performance indicators.

Earlier, we have already noted the substitution in the understanding of digital transformation concept by modern organization leadership in the direction of building up "hardware", and not on intangible assets of the company. This situation leads to the fact that when they develop a digital transformation strategy, neither the processes of changing the organizational culture, nor the change in the personnel are considered, taking into account the digitalization challenges faced by companies.

As was shown by the data of a sociological survey conducted in 2016 by CGI Group of companies [13], the main barrier standing in the way of digital transformation is changing culture and overcoming resistance from company employees (72% of respondents indicated this reason as the main one).

If we consider the processes of digital transformation of Russian organizations, then we can outline a wider list of such barriers according to the data of the KMDA survey conducted in 2018 [8]:

- insufficient competencies and knowledge (64.1%);
- lack of qualified personnel (60.9%);
- lack of a strategy (53.2%);
- fear of changes (45.3%);
- insufficient funding (39.1%);
- leadership position (31.3%).

As the results of domestic organization study have shown, the lack of understanding of "digital transformation" category on the part of the management leads to the inhibition of digital processes. The second place is taken by the employees of organizations who do not want to build up digital competencies and do not want to change in accordance with the digital transformation strategy.

This allowed us to draw the following conclusions - the underdevelopment of the digital organizational culture leads to low motivation of domestic company personnel, unwillingness to master digital competencies, and, thus, to participate in the process of the organization digital transformation.

Considering any economic process, especially those related to the transformation of organizational systems, it is necessary to assess carefully the possible risks and losses that companies may face on the chosen path of development.

The analysis of literary sources [4, 5, 9, 11] allowed us to systematize the possible losses that organizations can incur during the implementation of business system digital transformation:

- insufficient information about the digitalization of business systems, its inaccuracy or misinterpretation, leading to confidence level reduction in digital changes and inadequate management decisions;
- an avalanche-like inflow of information, leading to the cost of its processing increase;
- negative perception of the ongoing changes, leading to active resistance of the organization personnel and low employee motivation in the implementation of the digital transformation strategy;
- fragmentation of digital changes arising from the lack of a systematic perception of the digital transformation strategy, leading to the build-up of digital competencies among a narrow group of employees of the organization, which entails a failure in the process of a digital value chain development within the business system;
- forecasting errors arising from the lack of understanding concerning the consistency of digital transformations in the organization;
- technical failures and the failures of technologies and equipment caused by an insufficient technical level for digitalization implementation.

The listed losses occur in Russian organizations due to the specifics of the domestic management system, as was indicated by a number of scholars [6, 7, 8]:

- the digital transformation strategy is basically absent as such, the attempts to carry out a digital transition to new types of business systems are of a point nature and presented in the form of projects that are not integrated into a single digital transformation strategy;
- orientation of the organization management to their managerial intuition when implementing a digital transformation strategy or to a set of standard management decisions without taking into account the specifics of a peculiar business system;

The system of possible risks has not been worked out in the implementation of the digital transformation strategy, which, together with the absence of a test system of digital economy tools, leads to an avalanche accumulation of losses in the process of digital transition from traditional business systems to digital ones.

All this leads to high costs for the introduction of digital innovations in industry at the initial stage, and then to even higher costs of mistake correction made at the stage of technology implementation [14, 16].

The experts in the field of digital transformation recommend starting the "digitization" of business systems with a clear study of the company digital transformation strategy [5, 11], building up digital competencies of personnel [12], changing the organizational culture from traditional to digital one [13], initiating a team of digitalization leaders in organizing, attracting and retaining talents [16].

Such changes cannot be carried out without the transformation of such a main element of the organization as the digital organizational culture. It should be borne in mind that the elements of a digital corporate culture are present in any organization to one degree or another. However, digital organizational culture is rather an additional type of organizational culture in most companies, although it can be considered as a separate type of culture.

Let's try to highlight the specific features of digital organizational culture, based on the work of scholars in the field of digitalization [1, 2, 6, 7]:

1. The possibility of joint work of both the company personnel and the organization clients, as well as the rapid exchange of information in the process of such economic interaction.
2. The ability to process quickly large amounts of digital information in short periods of time, which makes it easier to delegate authority and reduce the degree of bureaucracy in a company.
3. Orientation to short-term planning and operational activities of the organization by reducing the time for information processing and management work complexity.
4. Focus on overcoming the fear of risky activity conduct by supporting staff activities related to digital innovation.

Therefore, we can conclude that digitalization changes the process of information exchange between people and organizations, and also forms a system of digital organizational culture that contributes to the implementation of transformational digital processes.

If we consider the type of information carrier that prevails in the organizations that have undergone digital transformation, then it is electronic one, transmitted via digital technologies. Digital communications allow for fast processing of incoming and outgoing information, as well as for fast feedback, which affects the quality and efficiency of management decisions. This, in turn, requires a special culture of the organization. In the context of digital communication, the experts from different services do not need to meet for discussion, they do not need to transfer the paper text of a document from one service to another [9, 10].

We agree with the opinion by I.V. Loshkova and G.V. Korolev that "the fundamental difference between digital corporate culture is the technical and technological conditions of activity, which fundamentally change the organizational, economic, intrafirm and interfirm relationships of employees" [4]. At the same time, new technical and technological conditions create a favorable opportunity for the delegation of authority and responsibility, as well as initiate the need to abandon the "old habits" of professional activity.

Thus, the transition to the digital economy is not just a change in the technological order or another technological revolution, it is a change in the paradigm of an enterprise economic development.

### **Conclusions and offers**

1. The change in the economic development paradigm is accompanied by the content of labor and the nature of labor division change, the change in the leading way of interaction between business entities. The new way of labor division is expressed in the separation of intellectual and organizational activity from production and service. The digitalization of production management begins with a person, with his attitude to work, to the results of his labor.
2. It was revealed that digital corporate culture is an important element of an organization transformation in the context of digitalization. It has been determined that successful business systems that operate effectively in the digital economy must have strong competencies in the digital organizational culture.
3. The development of a digital organizational culture is possible only if the company management develops a new model of business operations. Digitalization should be implemented in every area of the organizational context: vision and values, organizational structure, performance management, the development of employee competence, informal interactions, etc. At the same time, it is necessary to make certain changes that stimulate the correct behavior of employees and prevent their undesirable behavior.

### **Conflict of interest**

The authors declare no conflicts of interest.

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