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INFLUENCE OF INFORMATION TECHNOLOGIES ON ORGANIZATIONAL CULTURE

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Abstract — **Modern information technologies (IT) development make great influence not only on business processes in general, but also on enterprises' formation and so this can lead to real behavioral changes and impact on future decision making process. Moreover, connection between IT and organizational culture defends through today's possibility of fast information exchange between personnel and their reaction on this.**

Key Terms — **Adaptation, development, enterprise, information technologies, organizational culture.**

In terms of high external environmental dynamics, each enterprise seeks to maintain stability. Having lost it, the company seeks to establish a new equilibrium point. And for the enterprise, as for other systems interacting with the external environment, unstable states are most characteristic, and stable states can only be purchased for short periods of time. The task of managers is to ensure the dynamic equilibrium of the enterprise and its elements in the external environment, which will increase its stability.

Despite the fact that this question is rather important and have huge impact on enterprise development – not a lot of scientists consider this topic and propose some actual information for further discussion. Among researches, who considers influence of IT on organizational culture can be mentioned E. Erdurmazh [1], Doctor of Business Administration at Gendarmerie and Coast Guard Academy. He wrote that "information technologies can have direct and indirect effects on organizational cultures based on the information technologies' influences on organizational structures and the processes, activities, and human relations within these structures" [1]. So, the main idea is that information technologies influences on organizational culture through organizational structure, differentiation (through reducing tendency in increasing the number of subunits and making it harder to understand the larger structure that people contribute to with their skills and expertise), centralization (through providing by information technologies more data about market trends, opportunities and customers; creating of synergies between different relating institutions), standardization/formalization (with help of IT development it became much easier to avoid negative effect on enterprises' procedures through reduction of formalization which leads to productivity increasing).

Furthermore, can not be ruled out those fact, that technologies have huge influence on cultural values, norms and rules.

In article of J. Sehanovic and D. Etinger [2] it is described that information technologies and information systems (IS) have impact on such organization values, as: system of messages to a customer, competition's activities, available potentials, change of environment, dynamic test of strength and weakness and critical analysis of achieved effects.

Besides, such element of organization climate being influenced: motivation, productivity, creativity and innovativeness. Should be allocated influence of IT on such deep elements as ceremonies, rituals, myth, legends, standards, attitude, beliefs, communications, symbols. All of them are presented in tab. 1, these results were also proposed by J. Sehanovic and D. Etinger [2].

Table 1

IT/IS' effects on other elements of organizational culture [2, p. 339]

Elements of organizational culture	Effects of IT/IS
1. Ceremonies, rituals 2. Narrators, preachers, informers, gossipers, spies	1. Updating of procedures, upgrading. 2. Accurate planning and pursuance of Realization. 3. Multi-media implementation. 4. Engagement of a large number of participants. 5. Filing. 6. Heightened positive and negative effects. 7. Direct communication with target groups. and individuals. 8. Improved performance. 9. Development of sophisticated activity systems.
1. Heroes, myths, legends 2. Standards, attitudes and beliefs 3. Language, communication, symbols	1. Efficient development and presentation. 2. Up-grading. 3. Filing. 4. Formalization. 5. Close observation of implementation. 6. Accurate measurements and reporting. 7. Sustenance of trends. 8. Efficient realization. 9. Bringing up to date. 10. Simple distribution.

So because of influence on such elements, information technologies significantly improves the quality of management activities. They allow planning and control processes and make timely adjustments to activities of the organization, provide quick access to the necessary internal and external information, support decision-making.

Such researches, as D. Zornic, S. Plojovic and L. Ribic [3] in their article suggested that information and communication technologies (ICT) can be used as elements of impact on such options as: transactions, geography, automation, analytics, information, sequential, knowledge and management, monitoring tasks and exchange. Detailed information is presented in tab. 2.

Table 2

Possibilities of ICT and the consequences of the organization [3]

Options	Use the organization of ICT
Transactions	Transforming unstructured process routine transactions.
Geography	Communicating quickly and easily at long distances.
Automation	Reduce or replace human labor in the process.
Analytics	Providing a complex analytical process.
Information	Getting large amounts of information.
Sequential	Allowing simultaneous operation of multiple processes.
Knowledge and management	It enables the exchange of knowledge and experts tracking.
Monitoring tasks	Statistics, inputs and outputs.
Exchange	Communicate directly.

Thus, in the modern economy, information technology is an important organizational element that provides competitive advantages and sustainable development of an enterprise, which largely depends on interaction with organizational culture.

References

1. Erdurmazh E. Effects of Information Technologies on Organizational Culture: A Discussion Based on the Key Role of Organizational Structure / E. Erdurmazh. [Electronic resource] – Access mode: https://www.researchgate.net/publication/342336820_Effects_of_Information_Technologies_on_Organizational_Culture_A_Discussion_Based_on_the_Key_Role_of_Organizational_Structure

2. Sehanovic J. Impact of information technologies on elements of organizational culture / J. Sehanovic, D. Etinger. [Electronic resource] – Access mode: https://bib.irb.hr/datoteka/698491.118949-Jus-Eting-engleski.pdf

3. Zornic D. Impact of information technology on organizational culture / D. Zornic, S. Plojovic, E. Ujkanovic, L. Ribic. [Electronic resource] – Access mode: https://www.researchgate.net/publication/266970158_Impact_of_information_technology_on_organizational_culture

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