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VIRTUAL REALITY AND ITS SOCIAL ASPECTS

Виртуальная реальность и ее социальные аспекты

Relevance: the rapid development of virtual reality (VR) technologies and their penetration intro the social sphere requires a comprehensive understanding of the consequence. The formation of new social practices in immersive environments is accompanied by both the expansion of communication opportunities and the emergence of new social and psychological risks.

The purpose of the study: to analyze the impact of virtual reality technologies on social interactions, institutions and personality, identifying key positive and negative social aspects.

Materials and methods: a set of methods was used during the study: systematic analysis of scientific literature on sociology, psychology and digital humanities; comparative analysis of popular social VR platforms (VRChat, AltspaceVR, Horizon Workrooms); generalisation of data from sociological surveys on user experience.

Results and their discussion:

1. The key social opportunities of VR have been identified:

1) Overcoming spatial barriers: VR creates a «co-presence» effect, allowing users from different geographical points to interact in a single immersive space, which distinguishes it from traditional means of communication.

2) Formation of new communities: in VR, stable social groups (communities) are formed on the basis of interests, where interaction is mediated by digital avatars, which reduces the significance of a person's physical characteristics.

3) Development of an inclusive environment: technology opens up new channels for socialization and professional realization for people with disabilities.

4) Transformation of education and professional activity: immersive simulations and virtual collaboration spaces increase the effectiveness of learning and remote work.

2. Significant social risks and challenges are identified:

1) The threat of cyberspace: intensive immersion in an idealized virtual environment can provoke voluntary social isolation in the physical word and lead to the weakening of real social ties.

2) Problems of digital identity: the freedom of avatar construction leads to the phenomenon of «Proteus Effect», when the user's behavior in real life begins to change unconsciously under the influence of his virtual embodiment. Anonymity contributes to the growth of toxicity and cyberbullying.

3) Deepening digital inequality: the high cost of VR equipment creates a new social barrier that potentially leads to the emergence of a «digital elite».

4) Ethical and legal conflicts: there are no established legal norms governing virtual property protection of personal data.

Conclusion:

1. Virtual reality technologies have significant positive potential for expanding social communications, developing inclusion and transforming education and the economy.

2. To minimize the negative consequences, it is necessary to develop codes of ethics for developers of VR environments, develop digital and media literacy among users, as well as initiate a social and professional dialogue on the creation of an adaptive legal framework.

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DIGITAL TECHNOLOGIES PROBLEMS AND DEVELOPMENT PROSPECTS

Цифровые технологии: проблемы и перспективы развития

In today's increasingly competitive society, every manufacturer, seeking to improve their efficiency, employs innovative tools and modern approaches. One promising approach to addressing this issue could be the use of digital technologies. In recent years, digital technologies have become widespread, expanding opportunities for rapid access to information sources and facilitating human work in both production and everyday life. This determined the purpose of the study, which is to examine the possibilities, problems and prospects for the development of digital technologies to improve the efficiency of production processes.

The process of informatization began to emerge in the 1990s. Back then, the first programs capable of automating labor-intensive operations appeared, primarily in banking. Personal computers and mobile phones emerged a little later. Growing competition dictated the need for digitalization in resource management, procurement and sales, production and logistics operations. Digitalization subsequently affected the social sphere, and the foundations of smart home technologies emerged. And at the beginning of the 21st century, there was an upsurge of the Internet of Things (IoT), machine learning, quantum computing and blockchain technologies. Digital technologies are currently being successfully applied by enterprises for forecasting, strategic decision-making, big data analysis, labor market monitoring, education, healthcare and performance management. Their role has grown so much that digital transformation has become a key mainstream aspect of societal development.