4. Healthcare Advancements: Telemedicine and digital health management platforms provide patients with access to medical services without the need for in-person visits. This has become especially relevant during the pandemic when physical interactions were limited.

5. Environmental Sustainability: Innovative technologies contribute to addressing environmental issues. Smart grids and resource management systems promote more efficient energy use and help reduce carbon footprints.

Future Prospects

1. Inclusive Society: In the future, innovative technologies could help bridge the digital divide by ensuring internet access and digital services for all societal segments, creating equal opportunities for education and employment.

2. Smart City Development: The integration of IoT (Internet of Things) and AI (Artificial Intelligence) into urban infrastructure can enhance citizens' quality of life by optimizing traffic flows, waste management, and energy supply.

3. Personalized Healthcare: With advancements in data analytics and genomics, we can expect the emergence of personalized medical solutions, improving treatment quality and effectiveness.

4. Sustainable Development: Innovations in renewable energy sources and ecotechnologies may form the foundation for sustainable development, allowing society to minimize its environmental impact.

5. Ethics and Security: As data volumes grow, the need for ethical standards and security measures becomes paramount. The future of digital transformation will depend on how effectively we address privacy concerns and data protection.

Conclusion. Innovative technologies are a crucial driver of digital transformation in society, opening new horizons for development across all life spheres. Achievements of modernity demonstrate how technology can enhance quality of life, improve access to education and healthcare, and promote sustainable growth. At the same time, significant challenges remain, such as ensuring inclusivity and data security. The future prospects hinge on how we leverage these technologies to create a fair and sustainable society.

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THE ROLE OF AI IN DIGITAL TRANSFORMATION: PERSPECTIVES AND ETHICAL CHALLENGES

Роль искусственного интеллекта в цифровой трансформации: перспективы и этические вызовы

The digital transformation of society is being advanced by new technologies, among which (AI) occupies a special place.

The purpose of this research is to explore key perspectives on the use of AI in different industries and to identify the main ethical challenges associated with its application. Consideration of these aspects helps to better understand how AI can transform modern society and identify potential risks in its implementation

Perspectives on the use of artificial intelligence

Artificial intelligence opens more opportunities to improve the quality of life and efficiency in various fields:

1. Medicine: AI is actively used to detect diseases and predict epidemics, as well as to create new medicines. An example is image analysis using deep learning algorithms to detect the early signs of cancer and other serious diseases. Research has shown improvements in diagnostic accuracy and faster treatment through the application of artificial intelligence in medicine.

2. Education: AI-powered personalized education programs help customize the learning process to each student's needs, resulting in significantly improved learning outcomes. AI is also being used to automate knowledge assessment and analyze performance data.

3. Industry and Manufacturing: The use of AI in manufacturing processes helps to automate daily tasks, reduce costs, and reduce errors.

Therefore, the prospective results of the research show that the implementation of AI can significantly improve the quality of services and enhance user convenience. In the long term, this contributes to the development of more efficient and sustainable socio-economic systems.

Ethical problems and risks

Despite its clear benefits, AI also raises a number of ethical issues. It is important to consider these aspects for the safe and fair implementation of this technology.

1. Data privacy and security: The use of AI requires the processing of large volumes of data, including users' personal information. Issues related to data protection and preventing information leaks become highly relevant.

2. Responsibility for AI actions: Questions of responsibility become critical, especially in the case of autonomous systems such as unmanned cars or medical diagnostic systems. When AI makes decisions that affect human safety or health, it is important to determine who is responsible for potential mistakes.

3. Bias and discrimination: AI algorithms may unknowingly incorporate biases contained in the raw data from which they are trained. This can lead to discrimination based on gender, race, or other characteristics. To address this problem, it is important to create transparent and fair algorithms that account for possible biases.

The results of the study show that many ethical issues can be addressed with clear regulation and a responsible approach to AI development and deployment. Nevertheless, important questions remain that require additional participatory research to minimize risks and create a more sustainable framework for the future development of AI.