

INFORMATION AND MODERN TECHNOLOGIES

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ANNOTATION:

This article discusses the implementation of a unified interactive portal in the management systems of organizations, enterprises, and institutions using modern information and communication technologies (ICT). Modern ICTs have revolutionized how we communicate, work, and access information. However, they also bring new challenges. The article analyzes the problems and solutions of modern ICTs, focusing on their impact on various aspects of society such as privacy, security, employment, education, and social interactions. The main issues related to modern ICTs are identified, and potential solutions are proposed.

Keywords: Information and communication, digital technology, project, digitalization, information technology, data security, informatization.

АННОТАЦИЯ:

В данной статье рассматривается внедрение единого интерактивного портала в системы управления организаций, предприятий и учреждений с использованием современных информационно-коммуникационных технологий (ИКТ). Современные ИКТ революционизировали способы нашего общения, работы и доступа к информации. Однако они также приносят новые вызовы. В статье анализируются проблемы и решения, связанные с современными ИКТ, с акцентом на их влияние на различные аспекты общества, такие как конфиденциальность, безопасность, занятость, образование и социальные взаимодействия. Выявлены основные проблемы, связанные с современными ИКТ, и предложены возможные решения.

Ключевые слова: Информация и коммуникация, цифровые технологии, проект, цифровизация, информационные технологии, защита данных, информатизация.

Annotatsiya:

Mazkur maqolada zamonaviy axborot-kommunikatsiya texnologiyalaridan foydalangan holda tashkilot, korxon va muassasalar uchun boshqaruv tizimida qulaylik yaratuvchi yagona interaktiv portal joriy qilish jarayonlari ko'rib chiqilgan.

Zamonaviy axborot-kommunikatsiya texnologiyalari (AKT) biz bilan muloqot qilish, ishlash va axborotdan foydalanish usullarini inqilob qildi. Biroq, ular yangi muammolar va qiyinchiliklarni ham keltirib chiqaradi. Ushbu maqola zamonaviy AKT muammolari va yechimlarini ularning shaxsiy hayot, xavfsizlik, bandlik, ta'lim va ijtimoiy o'zaro munosabatlar kabi jamiyatning turli jabhalariga ta'sirini tahlil qilish orqali o'rganishga qaratilgan. Maqolada zamonaviy AKT bilan bog'liq asosiy muammolar aniqlangan va ularni hal qilish uchun potentsial echimlar taklif etilgan.

Kalit soʻzlar: Axborot-kommunikatsiya, raqamli texnologiya, loyiha, raqamlashtirish, axborot texnologiyalari, ma'lumotlarning xavfsizligi, axborotlashtirish.

INTRODUCTION:

In today's world, information and communication technologies (ICT) have become an integral part of our daily lives. They have transformed how we communicate, work, learn, and even entertain ourselves. The development of technology has enabled us to access and share information at lightning speed. With the emergence of ICT, we now live in a more interconnected world than ever before. Thanks to smartphones, laptops, and social networks, we can connect with people around the globe, exchange information in real-time, and access an unlimited stream of knowledge. However, these advancements bring about numerous challenges that require solutions.

President of the Republic of Uzbekistan, Shavkat Mirziyoyev, stated: *"If we do not transition to a digital economy, we risk falling behind. We must develop a national concept for the digital economy, aimed at modernizing all sectors of the economy based on digital technologies. On this foundation, we must implement the 'Digital Uzbekistan 2030' program."* [1]

This resolution includes research regarding the accessibility of the global network for the population of Uzbekistan. Specifically, plans for this year include establishing at least 800,000 broadband internet ports and constructing 12,000 kilometers of fiber-optic communication lines. Approximately 340,000 subscriber telecommunications devices have been acquired to expand broadband networks. These devices have been distributed across regions and installed by specialists, with 281,000 port devices already operational.

From 2017 to 2021, as part of the "Year of Science, Education, and Digital Economy Development" initiative within Uzbekistan's Five Priority Areas of Development Strategy, a Presidential Decree dated April 28, 2020, introduced

measures for the broad implementation of a digital economy and e-government.[2] To date, 1,148 new base stations have been installed across the country, and broadband internet services have been enabled in 1,483 facilities through the modernization of base stations. As part of telecommunications development projects, 6,500 kilometers of fiber-optic communication lines have been laid, with work ongoing, according to the Ministry of Development of Information Technologies and Communications.[3] Further Developments in ICT Sector: The ICT sector holds a significant place in the development of our country. Over the past years, the government of the Republic of Uzbekistan has implemented policies for the widespread introduction and development of information technologies, which have now shown clear results. In 2019, key indicators in the field of information and communication technologies have shown positive results. The total volume of services provided in the ICT sector reached 10.6 trillion soums, demonstrating a 104% growth. Services in communications and informatization grew to 176 million dollars, showing a 130% increase.[4]

2019 йилда ахборот-коммуникация технологиялари соҳасининг асосий иқтисодий кўрсаткичлари

1



10,6 трлн. сўм

▲ 104%

АКТ соҳасида кўрсатилган жами хизматлар

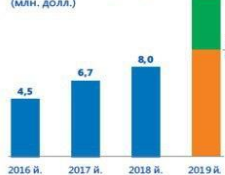


\$ 176,0 млн.

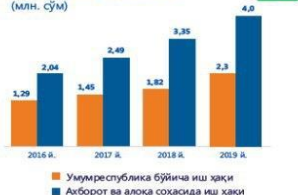
▲ 130%

Алоқа ва ахборотлаштириш хизматлари экспорти

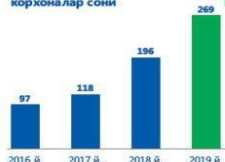
Дастурий маҳсулотлар ва хизматлар экспорти ҳажми (млн. долл.)



Ахборот ва алоқа соҳасида иш ҳақи ўсиш динамикаси (млн. сўм)



АКТ соҳасида хорижий капитал иштирокидаги корхоналар сони



Компьютер ва дастурлаш хизматлари ҳажми (млрд. сўм)



2019 йилги Инвестиция дастурига киритилган лойиҳалар (млн. долл.)



Other key indicators include:

- The volume of computer and programming services grew by 119% in 2019, reaching 1.078 billion soums (compared to a planned 920 million soums).

- The export of software products and services increased to 15.8 million dollars, showing a growth rate of 158% (compared to the planned 10 million dollars).
- The wage growth in the information and communication sector also showed a 119% increase. The average salary in this sector is currently 4 million soums (compared to the national average wage of 2.3 million soums).
- The number of foreign-invested enterprises in the ICT sector continues to grow year by year: in 2019, the number reached 269, an increase of 73 compared to the previous year.

In 2019, the Ministry implemented nine projects under the Investment Program, with a total value of 177.5 million dollars, showing a 102% growth compared to the planned 174.02 million dollars. Specifically:

- Projects funded by direct foreign investment amounted to 97.14 million dollars (compared to the planned 94.5 million dollars, with a growth rate of 103%).
- Projects funded by foreign loans under government guarantees totaled 53.38 million dollars (compared to the planned 43.56 million dollars, with a growth rate of 123%).
- Projects financed by the enterprises' own funds reached 26.93 million dollars (compared to the planned 35.96 million dollars, with a completion rate of 75%).

Information and Modern Technologies in Society:

Today, information and modern technologies play a crucial role in various sectors of society. Information technologies (IT) enhance the collection, processing, storage, and dissemination of data while enabling the development of global and rapid communication networks. These technologies are widely applied in healthcare, education, business, agriculture, and even government administration, simplifying everyday life and increasing efficiency.

Modern information technologies include the following:

1. **Cloud Technologies** – These provide the ability to store and access data remotely, which is particularly beneficial for managing corporate systems and large volumes of information.
2. **Artificial Intelligence (AI) and Machine Learning** – These technologies allow programs and systems to learn independently from data, adapt to user needs, and automate analytical and predictive processes.
3. **The Advancement of Internet Networks and IoT (Internet of Things)** – This enables devices and equipment to connect via the internet, retrieve data, and be controlled remotely. Examples include smart homes, cities, and production systems.

4. **Blockchain Technologies** – Blockchain ensures data security and transparency, enabling reliable transactions. It is widely used, especially in finance and banking.[8]

These technologies not only increase the speed of information exchange but also contribute positively to various fields, including economic development, creating new medical treatments, improving educational processes, and enhancing security. Over the past decade, the widespread use of computer technologies in education has significantly increased interest in the field of pedagogy. Russian and international scholars have made substantial contributions to addressing the challenges of integrating computer technologies into education. Among these contributors are G.R. Gromov, V.I. Gritsenko, V.F. Sholoxovich, O.I. Agapova, O.A. Krivosheev, S. Papert, G. Kleyman, B. Sendov, B. Hunter, and others.[6] These researchers have conducted extensive work on the informatization of the educational process. Currently, significant attention is being given to digital technologies, and all sectors are gradually transitioning to digitization. Numerous studies, ideas, and proposals for the digitization of education are being implemented.[7] For instance, Leonov S.A. explores the integration of healthcare, education, and information communication technologies within the framework of digitizing domestic medicine in his article, *Integration of Healthcare, Education, and Information Communication Technologies in the Context of the Digitalization of Domestic Medicine*. The article is published in *Current Problems of Economics and Management* highlighting the application of modern information communication technologies in the digitization of healthcare. [5]

CONCLUSION

This article examines the implementation of a unified interactive portal within the management systems of organizations, enterprises, and institutions by leveraging modern information and communication technologies (ICT). ICT has profoundly transformed societal functions, revolutionizing communication, data exchange, and work processes. However, alongside its benefits, ICT introduces significant challenges, including threats to privacy, security concerns, employment implications, impacts on education quality, and complexities in social interactions. The study delves into these issues and proposes practical solutions to address them. Additionally, it highlights the potential of ICT to positively influence various societal domains. In conclusion, the successful integration and effective utilization of modern technologies require systematic problem-solving approaches. Furthermore,

promoting the broad adoption of ICT is essential for maximizing its benefits across diverse sectors of society.

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