

## **Information environment as a base for the development of the digital economy in the Republic of Kazakhstan**

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Annotation: The information space of Kazakhstan is undergoing significant changes, both due to political events that have occurred recently in the world, and with the rapid development and widespread use of new social and media Internet technologies. Business structures in Kazakhstan began to actively use online resources to promote their products and services on the global Internet. The influence of the information environment on the business community of the country and the economy of Kazakhstan has increased and requires understanding of the trajectories of its development. The article deals with the main agents of the information environment, the level of development of subjects of the market of information and communication technologies and the main trends in the development of the Internet space in Kazakhstan. The article is of interest to researchers of the information environment and business practitioners interested in the market of Kazakhstan.

Keywords: information environment, development, Internet space, information and communication technologies.

The most important part of the new information society is its global character. The large-scale transformations taking place today all over the world are due to the rapid development of information and communication technologies. The Charter of the global information society [1] notes that «information and communication technologies are one of the most important factors influencing the formation of a twenty-first century society. Their revolutionary impact relates to people's lifestyles, education and work, as well as the organization of interaction between government and civil society. Information and communication technologies are rapidly becoming a vital driver of the global economy.»

Information has an immeasurable potential for both creative and destructive impact. It is obvious that the global information network Internet is the largest and most widespread source for the world information space. Information in the global network has become a key strategic resource of any state, and the scale and methods of using information are actively used in political processes in many countries on a par with the use of traditional resources.

Global informatization and development of KazNet, on the one hand, and the unwillingness of the state and business to do this, on the other hand, led to the fact that the country's information and communication infrastructure and national information resources were the most vulnerable objects of influence from unfriendly States, terrorist organizations, criminal groups, individual attackers and specially created compromising material. The threat of international information terrorism and information wars have become important geopolitical factors.

In modern conditions, Kazakhstan concedes its own information environment to the external influence of business companies from the countries of the Eurasian economic Union. Kazakhstan needs a set of systematic measures to improve information and cybernetic technologies, which should provide support and development of the business community in the country's information field.

The current state of the information environment and Internet space of Kazakhstan the Basis for the development of the economy of Kazakhstan is the technological revolution and the use of new technologies. There is a convergence of information and communication technologies, integration of information resources, miniaturization and integration of functions of various devices, and the development of mobile communications. There are systemic changes not only in the business community, but also in the entire country.

The information environment, the Internet space, and the business community of Kazakhstan are now influenced by several important factors: the state of the world economy; oil prices; the conflict in Ukraine; Western sanctions against Russia; state regulation measures; and the freely floating exchange rate of the national currency, the tenge [2,3].

Significant characteristics of the modern development of the information environment in Kazakhstan are:

- large growth in the number of new websites, companies and businesses in the industry;
- the emergence of digitized information resources;
- activation of traditional economic sectors in the virtual space;
- "flow" of funds from traditional trading to electronic trading;
- significant influence of the political situation in the world on the information space of Kazakhstan;
- Russian-language and Kazakh-language information spaces that often do not intersect with each other;
- lack of large retail networks and weakness of organized trade;
- small percentage of the urban population and only two millionaire cities;
- the state's focus on organized trade, non-cash payments and the development of e-Commerce;
- development of e-government and transfer of public services to the Internet;
- significant state information order;
- presence of users from Russia, Ukraine and other CIS countries in Kazakhstan's information environment;
- the prevalence of international cards such as Visa, Mastercard, and others that allow you to make purchases in online stores;
- weak content production, as can be seen from the number of books published.

One of the key factors for improving the country's competitiveness and accelerating economic diversification is a favorable business climate.

The main content of state participation in this field is reduced to providing legal, legislative, financial, scientific and technical, production and technological, and organizational and economic conditions for the creation and application of information technologies in the global Internet. In Kazakhstan, the formation of the basic foundations of the information society has been completed. The program "Reducing information inequality" has been completed, and the legal basis for informatization has been laid. E-government and national information and communication infrastructure are successfully developing to provide public and private services based on broadband access technologies.

Over the past few years, a whole set of laws has been developed and is being considered in the field of informatization of the environment, electronic Commerce, compliance with intellectual property rights, development and improvement of modern payment systems, and regulatory and legal activities of the media.

The current stage of development of the information society in Kazakhstan is characterized by an increasing and dominant role of the information environment, which is the most important factor in the economic development of the country.

In Central Asia, Kazakhstan's ICT industry is developing most dynamically and progressively. At the same time, there is a huge "digital divide" that represents differences between countries in the level of access to and use of information and communication technologies (ICTs). The "digital divide" in the technical capacity and quality of broadband, in turn, leads to a gap between mentality and civil society. In the center of the Eurasian space, Kazakhstan has a very close relationship with such powerful cultural influences as Russian, Chinese, and Arab-Islamic.

The fundamental principle of the formation of the information environment of the Republic of Kazakhstan is understood as the state of protection of the business community and national interests in the information environment, determined by the combination of balanced interests of business, society and the state. The state does not realize its essence and is not a trusted means of communication with business. In addition, the connection with the public opinion of business as a means of feedback and public administration in the Kazakh information sphere has been lost. The only representative of the country's business community in state authorities is the national chamber of entrepreneurs of the Republic of Kazakhstan "Atameken", which represents several industry associations and organizations of the information and ICT industries in the country.

E-Commerce is becoming increasingly important. In General, the electronic economy (the term "digital economy" is also used in everyday life) is an environment that exists exclusively thanks to digital telecommunications networks, in which entities can carry out any economic activity. The e-economy is also considered an economy that operates on electronic goods and services produced by e-business and e-Commerce. Payments for services and goods of the electronic economy are made with electronic money [4,5]. There is another definition of the e-economy that describes it as a global network of economic and social activities that is accessible through platforms such as the Internet, mobile and touch networks.

Virtual goods and e-money are a unique feature of the e-economy, since they cannot exist in the real economy. They can only appear within the virtual economic activity, thus creating a new stage for the

development of the information economy, within which there is a global transition from the "movement of atoms" to the movement of bits. Confirming the idea of Nicholas Negroponte, it should be noted that a complete transition from the "movement of atoms" to the movement of bits is hardly completely possible. The physical dependence of the virtual world on computer technology and telecommunications can serve as a limitation, since they ensure the smooth operation of the virtual world and the electronic economy.

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### **Доступность информационно-коммуникационных технологий как предпосылка развития электронной торговли в Казахстане**

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Аннотация: В статье рассмотрены основные показатели развития отрасли ИКТ и исследованы направления использования Интернета населением Казахстана, выявлены лидеры электронных продаж в экономике страны и технологии, обеспечившие их успех на данном сегменте рынка.

Ключевые слова: цифровая экономика, информационно-коммуникационные технологии, сеть Интернет, электронная торговля.

Цифровая экономика определяется как экономика, которая фокусируется на цифровых и вычислительных технологиях. Она по существу охватывает все деловые, экономические, социальные, культурные и другие действия, которые поддерживаются сетью и другими технологиями цифровой связи. На сегодняшний день цифровая экономика продолжает стремительно развиваться с большой скоростью благодаря возможности собирать, анализировать и использовать огромные объемы цифровых данных практически обо всем. Эти цифровые данные являются результатом цифровых следов деловой, социальной и личной активности людей, происходящей на различных цифровых платформах.

Цифровая экономика и информационно-коммуникационные технологии всё больше и больше затрагивают сферы общественной жизни населения. Рабочее, а также личное время любого человека не обходится без ежедневного использования наиболее распространенных средства ИКТ, а именно, компьютерной техники и сети Интернет. Так, согласно отчету Всемирного банка, развитие и широкое использование интернета способствует расширению масштабов торговли, более эффективному использованию капитала, усилению конкуренции, созданию новых рабочих мест и, в конечном итоге, повышению производительности труда [1].

В 2017 году была утверждена важная комплексная государственная программа «Цифровой Казахстан», которая нацелена на повышение уровня жизни каждого жителя страны за счет использования цифровых технологий. Основными целями программы стали ускорение темпов развития экономики Республики Казахстан и улучшение качества жизни населения, а также создание