academic publishers
INTERNATIONAL JOURNAL OF ARTIFICIAL INTELLIGENCE (ISSN: 2692-5206)
Volume 04, Issue 07, 2024
Published Date: 15-09-2024

THE IMPACT OF GLOBAL INDUSTRIAL REVOLUTIONS ON SIGNIFICANT ECONOMIC GROWTH

Tukhtasinova Dildora
Faculty of Economics Ferghana State University

Abstract: This article provides a scientific analysis of the impact of global industrial revolutions on the formation of the digital economy, including the development of technologies such as cloud computing, the Internet of Things, blockchain, e-business, digital and virtual business. It examines how these information technologies affect the digital economy and their effectiveness. The concepts of knowledge and information culture in the context of the digital economy are also explored.
Keywords: digital economy, cloud technologies, blockchain, e-business, digital business,

The formation of the digital economy is the result of technological progress, and its theory is the fruit of the theory of Information Society and information economics. [1]

The fourth feature of network goods is the presence of trap effects (lock-in effects).

American economists K. Shapiro and X. Varian gave five main reasons for such an effect:

• existing contracts (customers often "trap" themselves with the terms of the previously concluded contract, which are difficult to terminate);

• Need to study (learn) (sometimes it is difficult for the buyer to learn to work with other network goods, and for this reason he remains on the network, which is aware of everything);

• information conversion problem (switching to new software applications or tools requires conversion);

* costs associated with network connection;

• the cost of losing confidence (loyalty) (the transition to the consumption of new goods can deprive the consumer of the discounts and benefits given to him in relation to the previously consumed good).

Trap effects the process of technological development does not proceed linearly as previously thought. As a result, the possibility of the emergence and desecration of ineffective institutional traps, that is, inefficient stable norms with a self-sustaining nature, intensifies.

Using information technology, sellers actively form messages about the characteristics of economic goods and send them to potential buyers.

The consumer, as far as possible, seeks to choose widely known, well-known brands that have been on the market for a long time and have an international reputation.

First, the emergence of the innovations of the Fourth Industrial Revolution, which became the continuation of the third, brought new principles to the surface – these are characterized by the enrichment or unification of technologies by new methods, breakdown, addition and transcendence.

Secondly, the third revolution began the process of automating an industry based on electronics and information technology everywhere. The technological foundations of the digital economy are based on the discoveries of the Fourth Industrial Revolution. They include a wide range of digital technologies such as artificial intelligence, big data, item internet, blockchain, mining centers, big data and cloud storage, digital platforms, 3D and then 4D printing.

Thirdly, the Fourth Industrial Revolution is characterized by the non-linear (exponential) rate of

diffusion of innovations, the depth and scope of penetration of digital technologies, the impact force of digital complexes and systems.

Almost any decision is made on the basis of digital data - this is the main source of information and digital economy, that is, a powerful asset. The latter believe that working with information about prices will strengthen the effect and open up new opportunities, reduce market barriers and offer new principles of coordination.

As the first user of cloud technologies, Amazon began its work in 2002. Currently, its successor companies are leading in the provision of such services.

In the following years, cloud storage and computing of data is growing rapidly, especially in Chinese companies, this process can be seen, and the number of companies that want to provide storage services is also increasing in the United States and Europe. They are almost free, carried out through advertising services and are being provided as part of a set of services.

The demand for these services is also steadily growing. The volume of information produced by enterprises is doubling every year and even two months. In total, over the past two years, 90% of the available world data has been produced so far. (3 trillion GB) or 44 ZB. [2]

Amazon Web Services has become a leader in the provision of web services and Dropbox storage services. Thus, new markets are being created in the digital economy.

Internet Of Things (IoT). "Smart city". By connecting sensors to the internet, it is possible to connect various objects to each other and to the network. This is how and in what kind of razmer the society needs the goods how much they are consumed, how much is exported is easily determined. This leads to a qualitative improvement in the human ghost lifestyle. From an economic point of view, this is observed with an increase in computing power year after year and a rapid decrease in the cost of equipment.

"Smart "sensors connect anything, objects, to yohud digital devices to the entire world spider web, transforming it into a" smart " device, that is, a system with the ability to control and reconnect. On this basis, objects can exchange information among themselves, communicate with each other and with the environment through a cellular network. Now the constant communication between the physical world and the informed world is controlled through 60 billion smart sensors. In general, the Internet of items is developing in domestic and industrial forms, globally managing the environment and processes.

The introduction of IoT programs into industry gives advanced results: optimization of production and resource use, saving wages for enterprises, including costs, reducing management personnel, improving material and technical support and ensuring the day-to-day operation of enterprises, monitoring the working condition of machines and equipment, expanding and extending their working life.

In agriculture, this creates the ability to monitor (ecologically) the health of animals and ensure their location, coordinate actions related to the supply of nutrients and the regulation of nutrition.

The most important direction in the application of IoT is the human and its surrounding environment and ecological environment. This applies not only to nature and its ecology, but also to the inclusion of housing, cars and other surrounding moving and immovable objects in the human ecosystem.

By IoT principles, "connected home" and" smart city " is the creation of overpriced projects that manage problems such as materials, energy flows, logistics and traffic without traffic. Today, some elements of such a system (smart lighting, parking, garbage collection, etc.) are actively used by Singapore and Barcelona.

A large project began to be created by the Chinese government – the technical and economic development zone of Syun-an. This leads to the creation of a compact cluster of the entire Beijing-Tianjin-Hebei province based on smart city, intelligent design technology. In the center of this digital world stands a "smart space" - a person connecting universities that train all elements of the intellectual environmental environment - transport, infrastructure, architecture, banks, environmentally friendly enterprises, composite products and IT companies, as well as specialists for this zone-that is, a person.

The Fourth Industrial Revolution had the most serious and profound effect on business in the history of the economy. It was the need for digital transformation for the Fourth Industrial Revolution - the transition to more complex innovative forms based on a combination of different technologies in the simple use of digital technologies of the third industrial revolution. This, in turn, requires contemplation and the perception of new forms of doing business and their realization.

The simple practical models we know are becoming new digital models and the new forms and strategies of doing business are changing. That is, online trading, internet trading became incomparably globalized, in a word, the internet became the entire Jaxon market and laid the foundation for a new economy. This requires digital transformation.

In a narrow sense, digital transformation consists in digitizing the production of goods and services, radically changing existing business models.[2]

The digital economy prioritizes high professionalism, compliance with not only technical, but also economic, as well as ethical standards, digital business and consumer culture, as well as Information Culture, and requires general competence.

At the heart of the digital economy is the presence of both individual (B2C) and corporate (B2B) Contacts, as well as the results and expectations that the customer is waiting for. Digital technologies integrate old and new ways of working with the client (integrates e-business, digital business, virtual business, etc.), in addition to the experience of buyers, Sharlin Lee studied the issues of solving the problem of culture and etiquette in a digital company, content strategy and content culture, optimizing the company's digital ecosystem, conducting advertising with the client through social networks (branding advertising through These lead to the fact that digital transformation is the main driving forces, individualizing communication, processing individual digital data, and other such important factors are created.

Digital technology has taken communication with customers to a new level. Among them-digital content marketing for the brand movement will increase the movement of brands and popularize recognition.

Large companies (Red Bull, Nike, Apple, Yandex, Google, Alibaba) use digital content marketing not only to establish commercial relationships with a client in the digital sphere, but also to build friendly relationships with a person, cooperate, promote products and technologies, work with reviews and share experiences.

F.Kotler's quote is "a statement of the essence of traditional marketing and a statement of opinion on marketing". Thanks to this deep approach, the customer's trust in the company has strengthened, and the volume of sales has not increased several times.

In a broad sense, digital transformation is a complex, multi-conflict process that changes not only the structure and infrastructure of the economy, but also the entire socio-economic connection into a digital one.

Digital technologies are increasingly moving away and improving and becoming more integrated from the third industrial revolution with its development every year, which in fact directs global society towards the digital economy.

Single-digit banking-financial networks interconnect the world's economy and display their mutual intergasy (i.e., allowing one to scratch and blend together). Thus, on a global scale, not only financial, but also production capital remains Mobile (Mobile), since it is precisely controlled remotely using digital technologies, including artificial intelligence, cloud computing technologies.

Despite the participation of different players in the process of" digitization " or digital transformation, it is making positive changes to the economy of all countries. It is the production of products and services, the joint use of Labor, the introduction of investments in physical and human capital are gaining more and more multiplicative value. On this, the British economist Angus Medisson makes the following comments: “the world industrial revolutions I, II, III have improved human lifestyles, explaining with great joy that their real income has increased from $ 1,000 per capita to $ 14,000."The labor market is changing, the forms of expropriation of hired workers are changing, because the essence of Labor itself is gaining new meaning by its nature (now it is becoming popular to hire hired labor in a collective way, to get into the arena). It is necessary to consider the impact of digital transformation and the economy on market conjuncture and market participants, business, consumers (households), government. It is necessary to try to determine whether the market mechanism and principles of economic behavior are changing in a developing digital economy. The technological advances of the Fourth Industrial Revolution have seriously affected business entities that are integrating with industrial technologies and moving towards the use of digital technologies or completely passing through. Digitization has had the following effect:

- first of all, the methods of organizing and running a business, its marketing strategies;
- secondly, providing the business with resources;
-thirdly, in terms of production and transaction costs (organizational, management, communication,

information reception, processing and storage costs), which sharply decrease or disappear in the digital sphere;

-fourth, it will have information on the economy of the network and the scale of the network, which is developing on a global scale.

Customer relationship strategy (regardless of distance and geographic location). The use of digital technologies, including artificial intelligence and increased competition, are generating trends such as deepening relationships with the buyer, communicating with him in the digital environment and being sensitive to changing preferences.

Buyer's problems: waiting, saving road costs, implementation without tools, solving them will become a source of profit. In the digital economy, work with the client is carried out individually, dealing with its tasks and sympathy is in practice. The value of customer experience is growing, which also becomes a source of profit and, alternatively, profit (B2B) obtained in the segment of inter-enterprise relations. Digital technologies, saving transaction costs and sometimes reducing them to zero, creating new potential, and at the same time new requirements and market requirements accelerate business and production. As a result, the life span of not only the product, but also the company is reduced. Thus, in the Standard & Poor 500 ranking, the life expectancy of large corporations was reduced from 60 to 18 years. The fact is that not only new materials, but also digital processing of information about the operation and condition of the product prolongs its qualitative use. This is very important not only for business in the automotive sector, but also for aviation technology. Constant monitoring of criteria using sensors and algorithms, such as constant control of 2,000 km long natural gas pipes laid between Russia and China, will help to stop gas flows, pre-identify the causes of malfunctions and breakdowns and eliminate them. Remote forecasting (forecasting) is used not only to create remote monitoring centers, but also to create new business models. A new form of business cooperation is collaborative innovation. Their appearance is due to the rapid emergence of innovations and their disruptive effect. Some companies lack capital, knowledge of the intricacies of the business and the customer base in a specific area that an experienced firm has given them; the latter, in turn, are not able to respond to digital skills and changes in their requests when working with customers.[3] enterprises are pooling their resources and implementing innovation projects together. New forms of business based on working together, maintaining and others come from such cooperation. In the digital economy, a new organizational structure of business is developing – a blogging chain system. The power of the blockchain is a decentralized system, thanks to which payments move instantly and transparently in the global space. The blockchain allows you to create an inexpensive business structure with a small number of directly hired workers. The rest can be tens of thousands of people spread all over the world. For example, in the global IMG agency there are 60 employees and a small number of people who sell advertising, only one employee is responsible for Russia as an example, and this is enough for him. In it, the business environment is changing to a large extent thanks to the blockchain, moving to digital codes and the cloud. In addition to performing the functions of traditional financial intermediaries, the blockchain will be able to replace courts, lawyers and employment contracts in the future. This allows smart contracts to be implemented. This can be a coded employment contract if the formula" A, then B", according to which, subject to the established conditions, the employee is automatically paid a salary and an entry is entered into the state register. In conclusion, when we say that world added to the great economic leap of industrial revolutions, it directly underlies the emergence of the digital economy and the dream of a new economic transition, that is, a leap. The scientific study of the digital economy from the scientific nature of important aspects of human life and the economic and social changes of an unprecedented level as a result of it is one of the pressing issues facing US scientists.

List of used literature:

1. М. Бўтабоев, А. Ўринов, Ф. Мулайдинов, И. Тожимамтов, “Рақамли иқтисодиёт” ОТМ талабалари дарслик, Самарқанд-2021 й.
2. И.А. Хасаншин, А.А. Кудряшов, Е.В. Кузьмин, А.А. Крюкова. “Цифровая экономика”, Учебник, Москва-2019 г.
3. С.Ю.Перцева, “Платежные системы в условиях цифровой экономики”, учебное пособие, М.: МГИМО-Университет, 2019 г.

4. Gulirano, K., & Mohinur, J. (2022). Analysis of the state of organization of activities of food industry enterprises of the real sector. Asia pacific journal of marketing & management review ISSN: 2319-2836 Impact Factor: 7.603, 11(09), 37-43.
5. Nasridinovna, T. O. (2022). The role of tourism in the development of the economy and increasing its attractiveness in the republic of Uzbekistan. Asia pacific journal of marketing & management review ISSN: 2319-2836 Impact Factor: 7.603, 11(01), 14-20.
6. Teshabaeva, O., & Yulchiev, A. (2022). Innovative marketing strategy aimed at maximizing the development of the tourist industry in Uzbekistan. Asia pacific journal of marketing & management review ISSN: 2319-2836 Impact Factor: 7.603, 11(05), 1-6.
7. Тухтасинова, Д. (2023). Использование зарубежного опыта в управлении персоналом. Академические исследования в современной науке, 2(25), 179-183.
8. Tukhtasinova, D. R. (2022). Raqamli o'zgarishlar sharoitida xizmat ko'rsatish sohasini rivojlantirish muammolari. Nazariy va amaliy tadqiqotlar xalqaro jurnali, 2(3), 52-56.
9. Tokhtasinova, D. (2023). Mechanism of innovative capacity management in textile industry enterprises. Development and innovations in science, 2(11), 68-72.