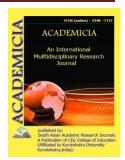




ACADEMICIA

An International Multidisciplinary Research Journal

(Double Blind Refereed & Peer Reviewed Journal)



DOI: 10.5958/2249-7137.2021.01296.9

THEORETICAL FOUNDATIONS OF DIGITAL ECONOMY

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ABSTRACT

Before embarking on our journey into the exciting and engaging digital economy, we will try to get a closer look at the information society and a number of key concepts that are inextricably linked to it. Because only then will it be possible to understand the issues, problems and concepts presented in this article.

KEYWORDS: New Digital Economy, Techno-Economy, Information Economy, Innovation, Digital Skills, Development.

INTRODUCTION

The theory of the digital economy is in its infancy, as the transition of civilization to the digital information stage began only a few decades ago. The term "digital economy" was introduced into scientific practice by Manuel Castels, a Spanish and American sociologist and leading researcher in the information society. He has published a three-volume monograph, The Information Age: Economy, Society, and Culture. To date, the theory of the digital economy has not yet been fully formed and is being studied extensively by many economists. In the scientific literature, the modern "New Digital Economy" is called by various terms. For example, "postindustrial economy" (D. Bell), "information economy" (O. Toffler), "mega economy" (V. Kuvaldin), "information and communication-based economy" (I. Niniluto), techno-economy or digital economy "(B. Gates)," knowledge-based economy "(D. Tapskott). The unifying factor of these concepts is the fact that information technology plays a key role in the globalization of economic processes. When talking about the digital economy, it is appropriate to describe the information society, most of the people who work in it are told to a society that is engaged in the production, storage, processing and sale of information, especially knowledge, which is its highest form. This stage of society and economic development is characterized by the growing importance of information, knowledge and information technology in society. Economists use a variety of technological, economic, labor, spatial, consumption and creative criteria to describe



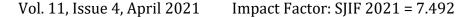
the information society in which the digital economy predominates. We will try to look at each of them in more detail below:

- 1. Technological criteria. New technologies in an informed society considered a birthmark. These include cable and satellite TV, computer networks, personal computers, new office technologies, and more. This amount of technological innovation is thought to lead to social reconstruction, as their impact on society will be very significant. In Japan, the Ministry of Communications and Telecommunications has been using sophisticated technology since 1975 to measure and record telephone conversations. The following objections to the technological criterion are raised:
- Lack of a rational unit for measuring the volume of information and communication technologies in society; the problem of not finding a valuable solution to determine the point at which the society can be called informed in the indicator of the technological level; technologies are inseparable from the social sphere, they are an integral part of society. For example, the decisions that are made in the matter of this or that research and scientific development represent social priorities, and various technologies are developed on the basis of these evaluative considerations. Technological determinism places undue importance on technology, but technology as a non-social phenomenon cannot serve as a major, social factor in the development of society.
- 2. The economic criterion is to take into account the growth of the economic value of information. The increase in the share of the information business in GDP means that the development of society is moving towards an informed society. To determine the level of development of the digital economy, scientists are proposing to introduce the indicator "Gross Digital Product". It reflects the market value of information, goods and services that are useful to the consumer, created in economic sectors using information technology or the information and intellectual component. science, law, publishing, media, and computer manufacturing. Mark Porat, on the other hand, is one of the American scholars who has made a distinction between the primary and secondary economic sectors. The primary sector can be clearly valued economically because it directly creates market value. Although the secondary sector is important to the economy, its economic evaluation is more difficult because it involves information activities within companies and state-owned enterprises.

The economic criterion for defining the information society has found its theoretical basis in the work of the American scientist, Professor Herbert Schiller. He said that "the role of the market will be decisive in any innovation related to information and communication: information must remain a commodity, that is, access to them will be only on a commercial basis." he concludes.

In this case, the information is more like any other product. According to Schiller, market principles work as fully in the field of information as in a capitalist society. According to this criterion, the quantity and quality of information produced directly depends on the availability of useful information. At the same time, it is natural to be faced with the question of what kind of information should be produced in accordance with market principles, for whom and under what conditions. The following objections are raised against this economic criterion:

- In deciding what to include in the information sector, it will be impossible to avoid covert commentary and costly judgment. As a result, the economic importance of the information sector





ISSN: 2249-7137

may be exaggerated. For example, F. Makhlup includes in his "field of knowledge" the construction of "information buildings", which is in stark contrast to the construction of similar buildings, such as universities and libraries, warehouses for food storage. implies that When M. Porat studies his "secondary information sector", he divides any field into information and non-information parts. However, in such a division as "thinking" and "doing", for example, it becomes difficult to determine in which section the work of the operator of control computer systems, which includes various tasks, should be included;

- A valuable approach to measuring the amount of information equates different types of socially significant economic activities. In this approach, for example, \$ 1 spent on advertising is equated to \$ 1 spent on publishing a scientific journal. 3. Labor criteria. It examines the employment structure and trends in this structure. When most members of an active society work in the field of information, it is understood that the society enters the digital information stage of its development. In this approach, information serves as a raw material for non-physical labor.
- The driving force of the modern digital economy is people, whose main task is to create and use information. The criterion of labor has its theoretical basis in the works of the American sociologist Daniel Bell. He proposed a series of social structures that were determined by the priorities of labor as a whole and at all stages. According to him, in pre-industrial societies agricultural labor was the main type of activity, in industrial societies the most common labor was in manufacturing, while in post-industrial society the main type of employment was in the service sector.
- Bell explains that the main reason for such changes is the increase in production efficiency. As productivity increases, so does the number of teachers, doctors, hospitals, and so on. The more goods an industrial society creates, the more types of services it provides, and the more industrial workers move into the service sector. As it is difficult to automate labor in the service sector, the number of workers in the service sector will continue to grow as industrial productivity increases. Therefore, there is no room for a sharp decline in employment, says Bell. The following objections have been made to the above criteria:
- There is no objective way to divide labor into information and non-information types. For example, railroad conductors need to have a great deal of knowledge about tracks, train schedules, and routes. Nevertheless, they are included in the workers of the industrial age;
- In the digital information society, a new class of intellectual and technical intellectuals will serve as a factor in the development of society. No matter how much the number of members of this class grows, their number will remain much smaller than the working population.

Once we have clarified the issues related to the information society above, we will begin our journey into the world of cryptocurrencies. One of the main types of fast-growing digital economy in all developed countries today is a variety of financial transactions with blockchain and cryptocurrencies, in which to know the meaning of active and knowledgeable participation in them. very important. It should be noted that the main difference between blockchain and cryptocurrencies is that their structure is decentralized.

There is no single hub or bank in the blockchain and cryptocurrency systems, and the entire network is based on a P2P (peer-to-peer) peer-to-peer architecture. That is, such a network consists of client programs with the same rights. Each blockchain and cryptocurrency client



program, in turn, consists of a self-supporting structure that connects to the global cryptocurrency network and is fully automated 24 hours a day. The issuance of cryptocurrencies is based on the principle of mining. "Mine" is the process of using the computing power of computer systems to create a chain of cryptocurrency transactions. In this case, each block must have some criteria of accuracy and level of complexity. For this, hashing algorithms are used. Thus, miners find new cryptocurrencies at the same time and perform all possible types of cryptocurrency transactions. If the miners stop working, the cryptocurrency will disappear. The resources of today's modern personal computers are not enough to mine the largest number of circulating cryptocurrencies (Bitcoin, Litecoin).

That's why miners, or "farms," use high-speed, high-performance computer stations with huge computing power. Cryptocurrencies are protected from counterfeiting by hashing algorithms, and their decryption (breach of protection) is currently practically impossible. Digital money - cryptocurrenciesWe go back to shed some light on the issue and first answer the question of what money is: Money is a currency that is accepted as a common equivalent for the purchase of goods and services by one country or several countries under an agreement. The light in today's economy in paper, metal or electronic form. One of the most important aspects of the currency is that it issues an institution issuing (issuing money) (Central Bank of Uzbekistan) and strictly adopts its value in the territories specified in the payments in accordance with the relevant legislation.

In the United States, for example, it costs only 14 cents to issue a single \$ 100 bill. If half a century ago the value of money was provided by the gold equivalent, today it is determined that they are provided by the total sum of goods and services created in the country. However, every transaction with non-cash money (money transfer practice) is carried out directly through a financial institution. There is a special control, and financial intermediaries (banks, stock exchanges, etc.) are charged a fee for security and services.

CONCLUSION

And of course, cash can be counterfeit. Given global trends and foreign policy developments, Uzbekistan faces the challenge of global competitiveness and national security, and the development of the digital economy in the country will play an important role in addressing this issue. Some elements of the digital economy are already working successfully in our country.

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