УДК 33

THE ROLE OF BIG DATA IN THE DIGITAL ECONOMY

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Abstract: The article gives the essence and features of big data. The role of big data in the digital economy is determined. Features of the application of big data technology in the main sectors of business and the state are given.
Keywords: big data, digital economy, public sector, innovative technologies.

In our daily life and in all industries, we are surrounded by all sorts of data. Data is seen as the new driving force for the economy, and big data for the digital economy. Their value increases with each use and leads to a paradigm shift. Big Data is a more general term for datasets so large and complex. So, it often happens that traditional data processing applications cannot read them. Over the past two years, nearly 90% of the world's data has been received. Moreover, about 90% of them are not structured [2].

The digital economy accumulates large datasets. Moreover, a significant part of them have never been analyzed, but the results of their processing and analytical analysis can be very valuable for the government: important information about citizens, clear trends, more accurate identification, more effective social and financial forecasting [3].

The concept of big data, associated with the collection and processing of very large amounts of data, which is often poorly structured and processed in real time. It gives great opportunities for various types of organizations, but at the same time, serious challenges are observed too.

There is no area that is not affected by the big data trend. Financial institutions, industry, healthcare and e-commerce are the largest recipients and users of big data. Small and medium enterprises are also increasingly using this technology. This allows, among other things, to better consider the proposal and increase the effectiveness of marketing and communication with the market.

On the one hand, there are many magazine article reviews that suggest ways to use big data to help them overcome government challenges and improve the lives of their citizens. On the other hand, there is some skepticism and doubts about the overestimated results and effects from the implementation of big data solutions in the public sector, as well as identify and assess the factors that influence on the development of big data in the public sector.

The first recipients of the big data market were large data centers and institutions dealing with statistics, market research and finance. Electronic technologies are also used in medicine. The collected data represent research material in many areas of science. Big data management systems use data collected in real time from monitoring, metering, device control and other sources of text and audio-visual data in their business operations.

The data is used by companies not only to strengthen their positions in the market, but also to generate profits. Data monetization will be a key issue in the coming years. Analysts estimate that about 30% of the data is actually used by companies. In addition to internal company data, external sources are becoming more and more important.

Research shows that this year about 30% of data in enterprises will come from external big data storage. The market situation is particularly fueled by two key target groups for this sector: banks and industrial companies. About 86% of the largest world financial institutions say that in the coming years, their priority will be customer-orientation (so-called customer focus), including, above all, tailoring the offer to individuals. Big data leveraging is the key to being successful in such activities. Below is a ranking of IT budgets of different countries (see Fig. 1). This chart shows the ranking of the country based on estimated spending on information and communications technologies per capita in 2019 [1]. The Russian Federation ranks

9th with $ 557 million in ICT funding, which is 6 times less than the same one in the US.

The US government spends a lot on big data research. There are many reports on various aspects of big data, they appear regularly on the White House's official website.

• Big data and differentiated pricing (Feb 2019)

• Big data: seizing opportunities , preservation of values (Feb 2019)

• Big data and privacy: a technology perspective (report to the president, May 2019)

And furthermore, the US is the leader in the number of public sector big data project deployments ranging from initial data collection and consolidation projects to advanced predictable analytics.

To summarize this information, we can say that the big data market is an important industry in the development of modern economy. We can see dynamics of the growth in the number of people using the Internet and the range of online tools possibilities. This means the following - an increase in the volume of generated data, and therefore, aggregated and processed by enterprises every day. Public sector organizations also recognize the potential for leveraging big data, which in turn can provide an opportunity for increasing economic growth.

Thus, big data also provides an opportunity to develop new or significantly modify existing business models, according to which they will be available to use the potential inherent in data. In particular, new services will be provided based on massive data analysis. Thereby, it can be concluded that big data methods allow and at the same time provide four main types innovations: product, process, organization and management.

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