УДК 811.111

BIG DATA AND OFFICIAL STATISTICS, APPLICATIONS IN MANAGEMENT AND MARKETING

(BIG DATA ТА ОФІЦІЙНА СТАТИСТИКА, ЗАСТОСУВАННЯ У МЕНЕДЖМЕНТІ ТА МАРКЕТИНГУ)

Сабіров Н.І. - *здобувач вищої освіти групи МЕН 2/3*
Науковий керівник - Глумакова О. І., викладач кафедри іноземних мов МНАУ

У сучасному світі, зі швидким темпом життя, безперервним технічним прогресом та прагненням людства підкорити нові вершини, не залишається на місці і розвиток точних наук, зокрема статистики, що з плином часу поповнюється новими термінами.

Ключові слова: *big data, інформація, дані, статистика, менеджмент, маркетинг.*

In our days, with the rapid pace of life, continuous technological progress and the desire of mankind to conquer new heights, does not remain in place and the development of exact sciences, including statistics, which over time is replenished with new terms.

Key words: *big data, information, data, statistics, management, marketing.*

Big data is, first of all, unsystematized data on social-economic development and the environment. Today, big dates are an extremely popular term used in almost all professional data analysis conferences. This term is used in areas where it is important to work with high-quality, large amounts of information, where there is a constant increase in data flow speed. For example, in the organizational process: economics, banking, marketing and management.

Big Data is a set of technologies designed to perform three main operations:

1. Be able to work with a large amount of flow data (not just a lot of information, but each time it becomes more and more).

2. Be able to work with poorly structured and structured data at the time.

3. Process more than standard amounts of information.

The term "big data" was first used by Nature Clifford, editor of the journal Nature, in 2008, when he published an article on the development of a new science using data technology. Initially, the term was used only in science, but after the publication of other noisy articles, the press began to use the concept widely and continued to do it in the future. Over time, the popularity only grew and soon large companies such as EMC, Oracle, IBM, Microsoft became interested in this term - they were the first to use Big data in their strategy. Today, this concept is much broader and involves something much more than just a large amount of information, its analysis and processing.

For large data, in addition to their physical volume, the defining characteristics are others:

- data processing and analysis;

- physical volume;
- data growth rate;
- the need for their rapid processing.

Sources of big data can be divided as follows:

commercial or operational data sources related to transactions between two parties, such as credit card transactions and online transactions (in the same case carried out using mobile devices);

Sources of information related to the properties of the existing program, whether public or private (private), examples are: electronic medical records, information about clients of hospitals, statistical insurance documents, bank documents and others. In official statistics, data taken from state sources of information are traditionally considered administrative;

sources of information related to the operation of sensor networks, for example, information obtained from an image taken by a satellite, as well as meteorological taken from measuring instruments;

sources of information related to the expression of users' own opinion, for example, data taken from comments on social networks;

Sources of information related to usage behavior, such as Internet search data (for a product, service, or any other type of information) and web browsing data.

Census and research of information, administrative data, organizational data, business, information - today are the main sources for the production of official statistics.

Methods of data processing and analysis are:

1. B-testing (among all the data stands out the main set of elements, which begin to compare with other similar amounts in which one of the elements was changed. Conducting such tests helps to determine which fluctuations have the greatest impact on the control set. Big data allows you to conduct mass iterations, with which you can get the maximum approximation to a reliable result).

2. Crowdsourcing (this technique allows you to simultaneously obtain data from various sources of information, the number of which is almost unlimited).

3. Machine learning or artificial intelligence (based on empirical analysis of information and its subsequent processing, self-learning in the system).

4. Class methods (these methods are quite widely used, but they have one thing in common: the use of mathematical tools in their technology, along with the achievements of information systems and technology).

5. Network analysis (is the most common among others and is used to study social networks, includes the collection of statistics and its detailed analysis, perfectly shows the interaction between individual users and their communities).

6. Predictive analytics (specialists in this field of statistics plan and predict the behavior of this object under their control, trying to make the right decision in this situation).

Typically, Big data services are centered around information storage. Therefore, this technique is often used in management and in particular marketing. With the help of big data, you can easily track the demand for a product, understand the opinion of users and in general it is better to establish statistics. In particular, marketing research on the Internet is central to statistics. Big data opens up new opportunities not only in marketing, but also makes doing business much easier. Management, as a concept of management, cannot exist without tools that provide great data. Using a specific data source to generate statistics can improve performance, in terms of objective cost-benefit criteria, ie when comparing costs, you can see how profitable it is to produce a product.

Conclusions. So, Big data is a social-economic phenomenon that is directly related to technological progress, namely the development of information technology in recent years. New methods of collecting and processing information have changed the approach to marketing research, doing business, statistical calculations and management in general. Big data is a set of tools designed to meet the needs of a modern organization and to transform a huge, chaotic mass of data into usable information. Big data technologies have a high value in marketing and business, as they allow a variety of companies to set up and improve the statistical process.

УДК 811.111

TRENDS IN THE DEVELOPMENT OF THE U.S. ECONOMY
(ТЕНДЕНЦІЇ РОЗВИТКУ ЕКОНОМІКИ США)

Самбурська О.В. *– здобувач вищої освіти групи МЕН 2/1*

Науковий керівник – Орлова О.В., кандидат культурології, ст. викладач кафедри іноземних мов МНАУ

The state of the U.S. economy is analyzed. It describes the superiority of the U.S. economy over other countries. It substantiates the trends in the development of the U.S. economy.

Key words: *economy, U.S. economic trends, U.S. economic development.*

Introduction. The state of the United States economy today is the result of a long historical development. The United States is the largest producer of agricultural products. Economic superiority has a significant impact on the world economy, directly affecting the cyclicality of economic development in other countries as well as the structure of economic exchange in the world economy.