

BIG DATA IN LOGISTICS

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Big Data is a group of methods, tools and approaches of analysis of structured and unstructured data of very high volume for getting results, which can be understood by people. In the same time, Big Data is more volumetric, complicated information sets for management which it is not enough traditional software.

In most cases Big Data is used in such areas as customer behavior, marketing, market analysis, stock exchange, clinical research, modeling or simulating, intelligence department, operational excellence.

Big Data in Logistics is applied in:

- Marketing – analysis of information about clients for proposition of new products and services;
- Predicted logistics – using information of customer behavior for short-term forecasting of demand and relevant separation of production;
- Operational panning – short-term and medium-term optimization of resources and skilled workers;
- Strategy planning – long-term planning of the logistics network's development;
- Routing – optimization of routing in real-time mode on the ground of current road conditions and accessible delivery terminals;
- Crowdsourcing – using of the “chance” passing resources for delivery organization;
- Risk management – analysis and forecasting of events, that influence on stability of logistics systems and processes.

During work with Big Data people apply manipulation of knowledge methods: different methods of theory of recognition and classification, methods of intelligence analysis and integration of information, intelligent approaches in the form of genetic algorithms, neural networks and another branches of machine intelligence.