

towards minimizing costs is undoubtedly necessary, but only at an optimal level of combination of costs and profitability of the main and circulating capital involved within the market strategy.

The goals of modern logistics are:

- the arrival of all materials in the appropriate quantities, quality, and assortment at the place of consumption;
- changes in material inventories in response to information about options for their rapid acquisition;
- changing the policy of selling manufactured goods to a policy of manufacturing goods that are sold;
- reducing the optimal size of the supply and processing batch to a single unit;
- high-quality fulfillment of all orders in minimum timeframes.

Achieving the set combination of goals is an ideal to strive for. And the higher the production and infrastructural potential, the easier it is to reach this ideal. The successful implementation of this logistics concept by individual firms is facilitated by their creation of an operational cargo delivery system. In Germany, for example, orders for materials and products of the corresponding assortment are fulfilled within 24 hours. Orders that take into account individual customer needs are fulfilled within 14 days.

TRANSPORT SYSTEMS AND LOGISTICS IN MODERN WORLD

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Transport systems and logistics are among the most important sectors of the modern economy. They influence industrial production, international trade, business development, and everyday life. Every product that people use - food, clothes, electronics, medicine, furniture, or construction materials - reaches consumers through transport and logistics systems. Without effective transportation and logistics, it would be impossible to maintain stable economic growth and cooperation between countries. Today, logistics is not only about moving cargo from one place to another. It also includes planning, information management, warehousing, route optimization,

inventory control, packaging, and customer service. Modern transport systems combine advanced technologies, automation, and digital communication to provide safe and efficient transportation.

The development of globalization has significantly increased the importance of logistics. Companies cooperate with suppliers and customers from different parts of the world, which requires reliable transport networks and fast delivery systems. As a result, transport systems and logistics continue to evolve and become more technologically advanced every year.

The Concept of Transport Systems A transport system is a combination of vehicles, infrastructure, technologies, and management methods used for transporting passengers and cargo. The main purpose of a transport system is to provide safe, fast, and cost-effective movement between locations. Transport systems include several key components: transport vehicles, roads and infrastructure, communication systems, logistics centers and terminals, management and control systems.

Road Transport Road transport is one of the most common and flexible types of transportation. Trucks and vans can deliver cargo directly to warehouses, shops, factories, and customers. This type of transport is especially effective for short and medium distances.

Road transport has many advantages, such as flexibility of routes, fast delivery, door-to-door transportation, accessibility for different regions. However, there are also disadvantages, including traffic congestion, fuel costs, environmental pollution, and road accidents. Despite these problems, road transportation remains extremely important for domestic and international logistics.

Railway Transport Railway transport is widely used for carrying large volumes of goods over long distances. Trains can transport coal, oil, construction materials, agricultural products, industrial equipment efficiently and safely. The main advantages of railway transport are high carrying capacity, lower fuel consumption, reduced environmental impact, and high reliability.

Rail transport is especially important in countries with developed industrial sectors. Modern railways increasingly use electric locomotives and automated traffic

control systems.

Air Transport Air transportation is the fastest method of cargo delivery. Airlines transport valuable, urgent, and perishable goods such as medical supplies, electronics, fresh products.

Advantages of air transport include very high speed, global accessibility, reliable international delivery. Disadvantages include high cost, weather dependence, and limited cargo capacity. Although air freight is expensive, it is essential for international business and emergency logistics.

Water Transport Water transport plays a major role in global trade. Ships carry millions of tons of cargo between continents every year. Most international trade operations depend on sea transportation.

Advantages of water transport include low transportation cost, ability to carry huge cargo volumes, and energy efficiency. Disadvantages include slow delivery speed, dependence on ports and weather conditions, complicated customs procedures.

Large container ships and modern seaports have significantly improved international logistics efficiency.

Pipeline Transport Pipeline systems are mainly used for transporting oil, gas, and chemical products. Pipelines provide continuous and reliable transportation over long distances. Their advantages include low operating costs, high safety, and a stable transportation process. However, construction and maintenance of pipelines require major investments.

Main Functions of Logistics Transportation is the central part of logistics. It connects manufacturers, suppliers, warehouses, and customers. Companies choose transport methods depending on cargo type, delivery time, and cost. Inventory management helps companies control stock levels. Too much inventory increases storage costs, while insufficient inventory may cause delivery delays.

Packaging protects goods during transportation and storage. Good packaging reduces product damage and improves handling efficiency. Information systems are also very important. Digital platforms allow companies to monitor shipments, analyze routes, and communicate with customers in real time.

Supply Chain Management Supply chain management is closely connected with logistics. A supply chain includes all processes related to producing and delivering goods to consumers. The supply chain usually includes suppliers, manufacturers, warehouses, distributors, retailers, customers. Efficient supply chain management improves productivity and reduces operational costs.

Global supply chains became especially important during the development of international trade. However, they also face risks such as political conflicts, economic crises, pandemics, and natural disasters. Companies must develop flexible logistics systems to respond to these challenges quickly.

Environmental Problems in Transportation Transport systems have a significant impact on the environment. Vehicles produce greenhouse gases, air pollution, and noise pollution. Road transportation is one of the main sources of carbon dioxide emissions. Because of this, many countries are introducing environmentally friendly technologies.

Problems and Challenges in Logistics Despite technological progress, transport systems and logistics still face many challenges. Main problems include traffic congestion, rising fuel prices, poor infrastructure, damaged roads, outdated ports, labor shortages, and cybersecurity risks. Large cities often suffer from heavy traffic. Congestion increases delivery time and fuel consumption. Rising fuel prices directly affect transportation costs and product prices. Poor road conditions, damaged railways, and outdated ports reduce transport efficiency. Modern logistics systems depend heavily on digital technologies, which creates risks of cyberattacks and data breaches.

The Future of Transport and Logistics The future of logistics will be strongly connected with automation, artificial intelligence, and environmental sustainability. Experts predict the development of autonomous trucks, drone delivery systems, smart warehouses, electric transport, and fully digital supply chains. Digital technologies will make logistics faster, safer, and more efficient. Companies that adapt to innovation will remain competitive in the global market. International cooperation will also continue to expand. Global trade requires reliable transport networks and professional logistics management.

Conclusion Transport systems and logistics are essential for the functioning of

modern society and the global economy. They connect countries, businesses, and consumers through complex transportation and supply chain networks. Modern logistics includes much more than cargo transportation. It combines digital technologies, information systems, automation, and strategic management. Efficient logistics allows companies to reduce costs, improve customer service, and increase competitiveness. In the future, transport and logistics will become even more innovative through artificial intelligence, automation, and sustainable development. These changes will create new opportunities for businesses and society as a whole.

WAYS TO IMPROVE THE EFFICIENCY OF TRANSPORT ORGANIZATIONS

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Transport organizations are a very important part of our world. They help move cargo from factories to shops and help people move from one place to another. If a transport company is effective, it means it works well, saves money, and makes customers happy. Effective transport organization delivers things on time, uses less fuel, and has less problems.

However, it is not always easy to be effective. There can be many problems like traffic, old vehicles, or bad planning. This report will look at four main ways to improve the efficiency of transport organizations. These methods are using new technology, planning better routes, training drivers, and taking care of vehicles. By using these ideas, transport companies can do their work better, save money, and help to save the environment. The first and one of the most important way to improve efficiency is to use modern technology. Today, we have many smart tools that can help transport organizations. Technology can help with many different jobs, from talking to drivers to watching where vehicles are.

One very useful technology is called a GPS (Global Positioning System). With GPS, the main offices can always see where their trucks or vans are on a map. This