FEATURES OF THE APPLICATION OF INFORMATION TECHNOLOGIES IN THE TRANSPORT FIELD

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Digital technologies in the road transport and passenger transport sectors are playing an increasingly important role in improving efficiency, safety and comfort. The main areas of their application today are:

– navigation and routing systems – GPS technology is built into car navigation systems, allowing drivers to find the best routes and avoid traffic;

– safety systems – sensors and cameras are used for automatic braking systems, road sign recognition systems, as well as blind spot detection and warning systems for dangerous situations on the road;

– remote control and autopilots – some car manufacturers are developing autopilot technologies that allow the car to drive itself on the road. This may include auto-parking, lane-keeping and automatic speed control;

– connected cars – cars can be connected to the Internet, which allows the use of various services, such as music streaming, online navigation, and monitoring of the car's technical condition;

– electric cars and energy efficiency – digital technologies are used to optimise the performance of electric motors, manage energy consumption and develop charging station infrastructure;

– smart transport management systems – using data from various sources, such as sensors on roads and in cars, to optimise the flow of traffic, reducing traffic and waiting times;

– mobile applications for passengers – smartphone applications allow passengers to quickly find and order transport, communicate with drivers, and pay for their journeys online.

Modern information technologies have significantly improved the management and operation of freight and passenger transport. In particular, I. Pishenin [1] notes that digital technologies significantly increase the efficiency of interaction between all types of transport. The interconnectedness of logistics chains deepens the feasibility of forming production and financial flows. Business ecosystems, which are the basis for the development of the IT sector, have two common characteristics that distinguish them from other management models – modularity, in which the components of the offer are

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developed independently but function as a whole, and customisation, in which ecosystem participants strive for mutual compatibility [2; 3].

Digital technologies have already revolutionised all components of the transport industry. For example, according to experts [4], by 2032, half of global sales of new passenger vehicles will be made up of electric vehicles with battery packs. The electric vehicle revolution has begun, and the next five years are likely to see the highest rate of change due to technological advances, investment, and customer demand.

It has been established [5] Ukraine's economy is underfunded in terms of its consumption of technology, the pace and scale of modernisation of economic sectors and spheres of life is much lower than in neighbouring countries. In general, the level of consumption of ICT products and services can be used to determine the level of modernisation of the country and the level of its productivity and efficiency, and thus competitiveness.

For Ukraine to reach a GDP of $1 trillion in 2030E, the level of consumption of ICT products must rise significantly in the coming years, primarily through the implementation of large-scale national digital transformation projects – from priority sectors of the economy to such areas of life as medicine, education, transport, ecology, tourism, etc.

The absence of a single digital platform for the transport industry in Ukraine is currently hindering the rapid development of the transport logistics sector. In the future, this is a convenient platform for implementing an innovative approach to the process of modelling the transport and logistics system to serve a certain range of customers on a common digital platform.

In general, modern information technologies help to improve the efficiency, safety and sustainability of freight and passenger transport. These technologies also create new business models and opportunities for innovation in the transport industry.

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