

UDC 656.71

INNOVATIVE TECHNOLOGIES IN THE FIELD OF PASSENGER SERVICE AT THE AIRPORT

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Keywords: innovative technologies, passenger, airport, services, transportation.

The development of airports involves an increasing number of various innovative processes, which nowadays go far beyond the concept of technological ones. In the modern sense, innovations are new models of managing the operational, economic and commercial activities of airports, aimed at a successful transition to a commercial basis with compliance with high technical standards and flight safety. These models primarily include realizing competitive advantages, managing relationships with airlines, developing profitable routes, increasing revenues from non-aviation activities, managing labor resources and increasing social responsibility.

Limited capacity of airports, rapid growth in the volume of air transportation and increased competition between airports around the world are factors that will lead to an influx of new investments in airport infrastructure. The implementation of modern technical solutions in airports is necessary to increase operational efficiency, ensure convenience for passengers and improve the quality of service for airline clients. Airports need to rethink their role in the logistics system; they should become centers of interaction of participants in the air transport industry, and the quality of their work should meet the growing demands of passengers. Time spent at the airport while waiting for a delayed flight is not the most pleasant moment of travel. At the same time, boarding delays occur in almost all airlines in the world. Airports recognize that they must adopt new, innovative approaches in order to actively support air travel growth and be competitive. Those airports that successfully cope with this task will become "Airports of the Future" and will differ from others by three main characteristics: lower operating costs, faster and more efficient passenger flows, new sources of income through retail services and opportunities. Every year there are more and more innovations implemented by the airports of the world. Several main directions of innovative development in airports can be distinguished: digital identity cards with detailed information about the client; integrated information systems; up-to-date personal information about the passenger's location in real time; improving interaction with passengers through accessible computer networks. Flight delays remain a common problem in Europe and America. According to official statistics, in the UK only in the second quarter of last year, 11% of flights of the year were delayed, while in the USA there were only 16% of such delays for the whole of 2021.

Delays are often caused by a number of reasons, but can include: lateness of ground crews with aircraft refueling; difficulties of the airport with the passage of a large number of passengers; the need to wait for the pilots; bad weather. One strategy to address the problem is to use monitoring technology to help airports and airlines operate more efficiently. The Israeli startup "IntellAct" is one such project. The company explains that most of the departure delays are under the control of the airlines, and many of them are related to maintenance - cleaning, refueling, replenishment of aircraft supplies or unloading and loading of luggage. The results of innovative activity are innovations embodied in new and modernized products and services, created objects of intellectual property, new knowledge. In recent years, the passenger service process has been constantly changing thanks to the introduction of innovative technologies. According to SITA's forecast, in the next decade passengers will have access to unlimited possibilities of the latest technologies - from automated check-in desks, baggage drop-off, passport control to "smart" airports with their own intelligent systems. Almost all airport systems are expected to undergo major changes. Airports of the future are expected to use the services of artificial intelligence (AI) experts to assess all possible risks of illegal use of passengers' personal data. Access to this information will only be granted to States that use such automated technologies at their airports. At the same time, airlines will no longer be responsible for the processing of passenger data in order to ensure the security of state borders, according to SITA.

The speed of introduction of new technologies in airports largely depends on how quickly legislative and regulatory regulation will change in different countries, which allows for innovations from airport operators and airlines, which are the drivers of new solutions for passengers. The aviation industry makes a huge contribution to the global economy, supporting millions of jobs and transporting billions of passengers. The aviation industry has provided the basis for some of the most important technological breakthroughs in history. Despite the constant challenges facing airlines, the industry as a whole will continue to adapt and find innovative solutions in the areas of technology, environmental protection and safety.

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