



AI/Artificial Intelligent in Aviation Beyond Covid 19

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The aviation industry faces a growing challenge, AI will help in reducing the challenge, we already passed the four waves of AI: The four waves of artificial intelligence from the internet, business, then perception from the digital physical world, and finally the autonomous.

The size of World AI market will reach 15.7 Trillion dollar by 2030.

Artificial intelligence in aviation market will grow 2017 - 2024 with an expected CAGR of 47%. In MRO/maintenance, repair and operations. In aircraft maintenance AI reduce error by 50 and increase efficiency by 30% and reducing turnaround time which is 20% of all time delay.

Airlines after the Corona pandemic to improve revenues and reduce operating costs and expenses as a whole by applying artificial intelligence in pricing, improving airline ticket prices and dynamic pricing, thus improving sales revenues in the long term and adjusting flight schedules by reducing and predicting delays, taking into account weather conditions at other airports and relying on artificial intelligence. In analyzing big data in real time to predict delays before their occurrence and re-booking of passengers and consequently the economic benefit and the commercial reputation.

The uses of artificial intelligence in aviation to respond to customer inquiries and voice commands for flight information and tickets and their availability in the required language and face recognition to verify the identity of customers and match passengers

and luggage and smart logistics services such as machine learning on data to help automate flight operations, in aircraft activity tracking and equipment planning, resource management.

For example, flexibility and transformation is to change the activity from transporting passengers to transporting Goods, Artificial intelligence in forecasting the exact time to ship a product, the best methods of shipping, identifying accidents and avoiding them in a timely manner.

It is used to improve passenger service, customer engagement strategies, passenger engagement and the overall travel experience.

In this article, we'll explore the AI applications of each airline individually. We will begin with American Airlines, the #1 ranking U.S. commercial airlines based on revenue:

- American airlines: In the field of artificial intelligence by conducting an annual competition in which more than 700 designers and specialists participated to create a new and useful idea for customers and employees and the first winner offered the possibility of an application that allows customers to prepay any possible expenses for luggage before moving to the portal.
- Delta air lines: Established four automated kiosks for checking bags, facial recognition technology, matching customers 'faces with passport photos, and airlines' interest in self-service and automation in their operations.
- Southwest airlines: Time series analysis and pattern recognition, thus being able to identify flight defects in existing.

- United airlines: Using Alexa artificial intelligence to answer questions about flight status, times, and amenities.

The possibility of using artificial intelligence in aviation to combat Corona virus 19 to check the temperatures of travelers and workers in crowded areas at airports and otherwise without contact. Once suspected, the identity and tracking of the infected person can be determined and the system automatically takes care of the workers and sends them to many.

The use of artificial intelligence by means of robots in passenger inquiries at airports, securing airports, checking airplanes, to measure fever, temperature, and to the extent of wearing the muzzle and to warn people, finding and identifying infected cases, writing a report on the situation, delivering food and medicine to patients to prevent contact and communication and preventing the spread of the virus, COVID 19, as well as in the sterilization of airports and the delivery of medicines and foodstuffs to avoid infection.

Another use of AI and Robots, in auto pilot VIS human: in landing condition: Norma, Stormy or Terrain mountains, etc). Human is better than auto land/autopilot but in case foggy auto land/autopilot is better than human.

The goal to make flying more autonomous without changing the software of the airplane and aviation will soon move into the age of I phone.

AI also could spot terror suspects in airports, lie detecting kiosks in the airport and for safer flights by detecting ford/foreign object debris in the Ramp, in airport editing and AI traffic modification. In real time event detection for video surveillance applications, in improving airport customer experience, forecasting airline passengers using machine/deep learning, in design techniques in saving money and time, airline maintenance using Watson, in intelligent aircraft maintenance using smart glasses, airport TSA waiting time management, airplane turn management/task tracking, accident prevention, air traffic management, energy management, trolley and wheelchair availability and management, smart maintenance, context awareness, ground fleet management and in safer flights by telling what a guilty passenger look like.

For the success of artificial intelligence applications, huge and accurate data, a single scope, high mathematical capabilities, and experts specializing in artificial intelligence are required.

So, in making the decision to introduce artificial intelligence in aviation, determine the area required to improve it, whether in customer service, procedures for operating and securing the flight, and preventive measures for COVID 19 after making sure that it is the best solution for that and do you have the necessary data for that or need to prepare them and the AI experts required for that.

Conclusion

- Developing aviation and airports, modernizing the infrastructure and stopping the spread of the COVID 19, is imperative in the coming years, and the trend is to use artificial intelligence applications to return aviation to optimal operation and improvement.
- The speed of application of artificial intelligence in aviation must be made, as it is the best choice for transporting aviation to the next level.
- The goal to make flying more autonomous without changing the software of the airplane itself airplane and aviation will soon move into the age of I phone.
- Aviation must recognizes, appreciate and get benefit of the technological gift of the 21st century in AI.
- And to all Clout Tech. INC AI, Block chain, digital currency, cloud, cloud of things, tactile internet, IOT, AR, VR, MR, U commerce, data and robotics and cloud of everything.

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