



New Information Technologies



Going paperless from the curbside to the gate

- Electronic boarding pass
- Self-service check-in
- Apps are the most popular media for flight status updates

Experiencing a personalized journey at the airport

- Georeferenced information to facilitate the journey.
- Personalized commercials & special offers on airport apps.
- Enhanced wayfinding for passengers with special needs.
- Provide electronic wayfinding in various languages.



Enhancing the Passenger Experience



Emerging Intelligence Technologies

Last miles to the final destination

- Autonomous and connected vehicles (AV/CV) will provide new mobility by 2040.
- Urban Air Mobility (UAM) can reduce trip duration and address some of the urban congestion.



Biometric ID will make the passenger process straightforward

- Use of biometrics only.
- Facial recognition and fingerprints used from the check-in to the gate.
- Reduced queuing and waiting times.



Airports connected to the field and the world

Airport Collaborative Decision Making (A-CDM):

- Minimize the impact of adverse conditions on flight operations by sharing information between the stakeholders with support from "one-roof" Airport Operations Centers (APOC).

System Wide Information Management (SWIM):

- Unified platform and standards for information-sharing to provide an information-centric system for ATFM and beyond.

Increased safety and resilience:

- Radars and cameras capable of detecting Foreign Object Debris (FOD) on runways.
- Remote Tower Centers (RTC).

Enhancing Airport Operations



A second IT revolution is coming

Artificial Intelligence (AI), Artificial Neural Networks (ANN) and deep automation might:

- Assist, supplement, and even replace human analysis and decision-making in domains such as operational resource management and asset management.
- Provide analytics and direct assistance to decision-making with "what-if" scenarios – evolution from a reactive management to a proactive organization basing decisions on indicators providing a broader vision of the field.

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