**TAConnections** 

**DIGITAL DISRUPTION SERIES** 

# Aviation Tech Report

How airlines leverage digitization to transform operations

# We have some good news for the airline industry.

It's no secret that the past few years have been tumultuous for airlines (and that may be an understatement). The COVID-19 pandemic caused massive decreases in the number of travelers around the world, with experts predicting that global revenues for airlines were 44% less in 2021 than 2019, and labor shortages caused an increase in canceled flights in Summer 2022.

**4 BILLION** AIR PASSENGERS IN 2024

We have some good news for the industry, though: according to a recent report from the BEUMER Group, global domestic airline passenger traffic is expected to reach pre-pandemic levels by late 2023, and according to the IATA over 4 billion passengers are expected to travel in 2024. In 2022, airlines spent \$37B in technology investments as a way to meet rising expectations in demand and service. For the latest on the return to profitability, read the 2023 Aviation Market Outlook.

### **Mobile and Digital Transformation**

The latest trends to increase efficiency in airlines? Mobile and digital transformation. Airlines are adding digital solutions and leveraging mobility to make day-to-day operations simpler, provide customers better service, and minimize the number of manual tasks crew members have to complete. Recent research on the state of airline digitization shows that more than 90% of airlines are seeking multiple changes to their tech stack, including revamping merchandising capabilities and employing next-generation revenue management.

Here's a look at some changes airlines are making—or may need to make—in the move toward increased digitization.

#### Mobility is on the Rise

Research suggests airlines are beginning to understand the importance of offering mobile solutions for customers. The study on the state of airline digitization also reported that 31% of airlines are undergoing diaital transformation initiatives related to mobile boarding passes, a number that increases to 51% for Tier 4 airlines. With 30% of airline passengers reporting that they have bought ancillaries via a mobile device, according to research from T2RL, it's surprising that only 32% of airlines have a mobile app.

It's not just that airlines don't have specific mobile apps, though. Many airlines still don't have a mobile-optimized site, which makes it more difficult for the many passengers who rely on their mobile devices during travel to get the information and documents they need. As passengers continue to require information about their flight, baggage, and inflight service at their fingertips, airlines will need to deliver this information to grow revenue and remain competitive.

#### **Crew Scheduling**

In the United States alone, there are approximately 45,000 flights per day, supported by an estimated 7-10,000 crew members. Clearly, there are a lot of crew members, and getting these crews planned, scheduled, and assigned is a massive, complex task.



There are also hours outside of time on the flight that airlines need to consider for their crew members. Getting crews transportation and lodging is not only important to reduce fatigue and improve employee wellbeing, but an essential part of remaining compliant with government regulations. It's expensive, though, and the management and labor costs can be as much as 10-15% of airlines' total operational costs. Digitizing and automating crew scheduling, transportation, and lodging can improve the crew experience and reduce the total workload and cost for the airline.

#### **Operations Improvement**

Adopting a digital ecosystem can also improve operations and experience for team members in the air and on the ground. As many pilots and ground-based operatives have had to adapt to remote working, a centralized system of airline applications can help them collaborate more effectively. When every employee involved in flight operations has the same view of airline information, no matter where they're located, they



have greater consistency and opportunity for communication around flight performance. Plus, having more eyes on the same data, such as smart fuel tracking, offers further potential to identify issues or areas for optimization.

Digital applications also help streamline the administrative process for cabin crews, allowing crew members to spend more time on passenger service. Capabilities in these digital application suites may include automation, like prefilling digital forms; integration, including formatting crew data to be sent seamlessly to on-ground team members; and quick access to customer information and passenger profiles.

#### **Increasing Ancillary Revenue**

The mobile transformation also brings the opportunity to increase revenue through ancillary sales completed with simplified transactions, including contactless payments. Both passengers and airlines benefit when airlines expand their range of ancillaries, according to a report from McKinsey & Company, which also said that carriers whose passengers spend at least \$20 on ancillary purchases generate, on average, 8.2% return on invested capital. Having a streamlined, simple way for passengers to make purchases can improve passenger experience and help airlines grow their overall profits.

Is your airline ready to meet the rising demand — and expectations — that will be brought to the aviation industry in 2023?

# Update your technology to transform your aviation operations.

TA Connections supports end-to-end solutions for your crew, displaced passengers, and airline operations. Designed to streamline all aspects of aviation operations, from in-airport passenger service to baggage reconciliation, we solve industry-wide challenges and help airlines soar to new heights after pandemic-related losses through our intelligent, digital and mobile applications.



#### **TA Crew Hub**

TA Crew is a complete suite of intelligent crew layover management solutions. This platform integrates seamlessly with any crew management system to fully automate crew logistics in real time, getting your hard working crews hotels, meals, and transportation.

- Simplify lodging and transportation: TA Crew gives crew members access to a selfservice scheduling platform for hotel and transportation reservations, which eliminates calls to your operations center and facilitates better communication with crews.
- Save on hotel reservations: Crew members are able to book pre-negotiated, discounted hotel rooms around the world through TA Crew's access to thousands of hotel partners.
- Smart Ticketing saves time and reduces costs: Our self-service intelligent ticketing switch connects seamlessly to GDS, NDC and other reservation systems so your crews have access to all available flight inventory to get them where they need to be within your business logic and rules.



#### TA Ramp

This fully digital and mobile platform digitizes ramp operations to improve every flight departure, so airlines can create an integrated baggage reconciliation system with real-time operational data, improve communications, and reduce mishandled bags.

- **Digital ramp operation:** TA Ramp delivers fast, digital baggage scanning that significantly improves reconciliation accuracy and reduces mishandled bags, plus provides real-time operational information critical to every turnaround, wherever your ramp agent is located. The app also provides realtime loading instructions and load sheets, reducing radio chatter and errors.
- Locate any bag, any where, any time: Our platform integrates with multiple core airline systems including DCS, Flight Operations, and Weight and Balance systems for a streamlined, paperless ramp operation that's compliant with IATA 753 regulations. The app also delivers fast offload baggage processing when passengers with checked bags fail to board the flight.



#### **TA Inflight**

TA Inflight is TA Connections' fully digital cabin that empowers crews to improve productivity, streamline inflight staff and passenger experience, and grow revenue. TA Inflight creates a truly paperless cabin, designed to improve cabin crew productivity and provide your crew with the rich passenger information they need for enhanced personal service.

- **Digital Cabin:** TA Inflight seamlessly integrates with your core PSS, DCS, loyalty, Flight operations, and other relevant systems to make your cabin 100% digital.
- Enhanced crew productivity: Every process is digital and readily available to your crew. Crews can view crew rosters and all operating crew information, access digital manuals and checklists, manage all reports and submit required forms, and manage training and performance from TA Inflight.
- **Rich passenger information:** Passenger information is at the flight crew's fingertips with TA Inflight. Real-time flight, airport, and operational information keeps crews and passengers informed.
- Inflight retail: TA Inflight includes an integrated app with automated inventory and cashless transactions for retail and duty-free sales that grow inflight revenue. Crews can easily view any pre-ordered meals or services and complete transactions quickly with multiple payment options.

## 12 A

#### **TA Disruption Hub**

TA Connections' intelligent disruption management toolkit reduces the total cost of passenger disruptions and ensures compliance with governmental regulations and customer service policies. This single workflow manages the entire disruption process reducing up to 70% of the workload on customer service staff.

- **Proactive disruption management:** The TA Disruption Hub notifies passengers of disruptions, and provides a new travel plan that includes flight reticketing, meal and transportation vouchers, and hotel accommodations if necessary.
- **Real-time inventory:** The TA Disruption Hub offers real-time availability to discounted global hotel, transportation, and flight inventory, giving the best possible customer experience while reducing disruption costs.
- **Smart notification engine:** The smart notification engine in the TA Disruption Hub manages all communication to passengers from the time of booking to after arrival.
- Smart Ticketing Swtich offers more cost effective resolutions: Our self-service ticketing switch gives disrupted passengers access to more flight inventory to create new travel plans that meet their needs and fit within your business rules.



#### TA Turn

TA Turn, our fully-integrated turnaround management system, delivers real-time transparency into aircraft turnaround tasks. This digital and mobile platform – which can be accessed via a web browser or as a stand alone app – actively monitors every step to improve on-time performance (OTP) for arrival and departure tasks.

- Intelligently track turn phases: TA Turn tracks tasks by three essential phases: arrival, departure, or turnaround, delivering updates on the key status of any turnaround phase.
- **Smart Automation:** Our technology integrates with multiple systems including airlines' PSS, DCS and Flight operations system to monitor and perform a majority of tasks automatically. TA Turn monitors tasks both above and below the wing.
- **Real-time alerts:** TA Turn pushes real-time alerts to agents when any task is delayed, so they can detect issues quicker and improve on-time performance.
- **Turn sheet options:** With TA Turn, airlines can create a turnsheet that's tailored to their operation, with domestic or international, narrow body or wide body, and country, station or airport-specific options.



#### **TA Airport**

TA Airport creates a digital and mobile airport operation to reduce airlines' reliance on airport infrastructure. This truly mobile Departure Control System (DCS) transforms customers' airport experience by facilitating digital, contactless touchpoints to grow ancillary revenue and improve passenger service.

- **Mobilize your workforce:** TA Airport seamlessly integrates with all core airline systems to become a powerful, mobile version of your DCS that allows agents to roam. TA Airport supports domestic and international check-in, boarding, passport capture via camera, digital boarding passes and mobile bag tags, and more.
- Enhanced customer service: With TA Airport, agents can manage disruption booking and missed connections, process refunds, and generate vouchers from any location. When agents can roam, customer resolution becomes effortless.
- **Increase ancillary revenue:** Grow ancillary revenue with TA Airport's multiple payment options and fast transition times, including contactless payments. Our customers have increased their ancillary revenue by one-third. Now they are no longer restrained by fixed infrastructure and legacy systems.

#### TA Connections: Your partner in transforming aviation operations.

As the world's leading travel management partner, we understand the different needs of our clients. Whether it's aiding disrupted passengers, automating aircraft operations, or managing crew layovers, it's all possible with our integrated, end-to-end solutions.

### **Contact us today**

for a customized demo on how you can meet the massive increase in global demand.

### 6

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