



big Bits In Glass
Unlock Your Potential

CASE STUDY

**MAJOR AIRLINE SAVES \$100 MILLION
ANNUALLY WITH API-LED INTEGRATION**

BACKGROUND

about the client

The client is a major domestic and international airline serving hundreds of airports across six continents around the world.

As an industry leader and popular choice for travelers, it's among the 20 largest airlines globally and employs people worldwide.

In 2019, the company carried over 50 million passengers to international destinations, offering over 1,500 flights daily to 200+ countries!



“Working with Bits In Glass to modernize our Passenger Service System was a wonderful experience.

We’re saving millions of dollars every year, thanks largely in part to the hard work of Bits In Glass.”

RESULTS



\$100 MILLION EVERY YEAR

COST SAVINGS

In modernizing its PSS, the company will see **upwards of \$100 million every year** in future cost savings and new revenue.



IMPROVED SYSTEM-TO-SYSTEM INTEGRATION

BETTER COLLABORATION

The company is now able to **better work with other airlines and travel agencies** with improved system-to-system integration and communication.



2,000 TRANSACTIONS PER SECOND

IMPROVED EFFICIENCY

Launching the new Altea PSS was the **fastest, smoothest, and most successful technical go-live** the company's had in their 80-year history. The new integration layer easily handles **over 2,000 transactions per second** more efficiently.



NEW REVENUE AND PARTNERS

ENABLED GROWTH

Overall, the company can now expand into new markets, **realize new revenue**, gain new partnerships, and **see reduced operating costs** by decommissioning the old, expensive system.

CHALLENGES

COMPLEX LEGACY SYSTEM

The airline's legacy Passenger Service System (PSS) was originally built in the 1970s, and had two main aspects:

1. Airline Reservation System

The system that customers and partners use via the website and/or mobile applications to book flights and vacation packages

2. Departure Control System (DCS)

The system that manages all flight-related tasks like passenger check-in, baggage, boarding, flight weight, flight tracking, catering, connections, etc.

As with legacy systems, the PSS didn't have a modern user interface and was struggling to keep up. Over the years, it cost the company a large amount of time and money to add capabilities like seat selection, website and mobile app connections, and regulatory requirements.

Every update to the system added more code and an unnecessary amount of user interfaces, making the system complex and difficult to use.

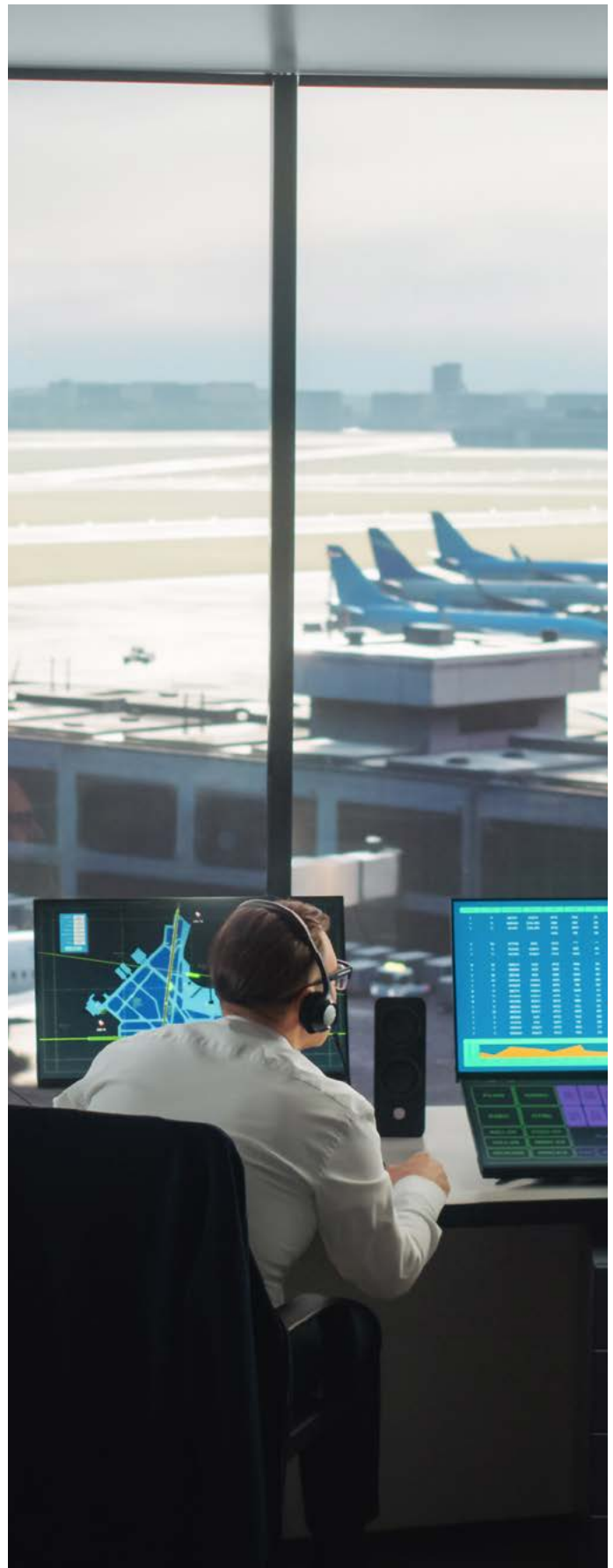
The DCS portion of the PSS struggled with its communication on passenger baggage, flight connections, in-flight catering, and more.

Unlike the airline reservation system, which involves human interaction, DCS is primarily system-to-system interaction. Because of the age of the system, it was lacking the ability to effectively and efficiently handle this.

The company was looking to grow its brand beyond Canadian borders to be recognized as an international airline of choice for travelers all around the world.

To achieve international recognition, they needed to modernize their systems and operations to become more flexible and deliver a more personalized travel experience with improved customer service across all touchpoints.

Additionally, they needed to improve how they sell, distribute, and deliver products and services with a shorter time to market. This would help them realize new revenue and differentiate their company to become one of the top ten leading worldwide airlines.



SOLUTIONS

INTEGRATED PASSENGER SERVICE

The company decided to upgrade to Altea, a popular Passenger Service System (PSS). They also assembled a team of vendors to complete the PSS upgrade.

With the large number of systems Altea needed to connect to, the client created a team to deliver an API-led integration project approach. MuleSoft was selected as the platform of choice for the project and we completed the integration portion of the upgrade, with two solutions:

1. Integrated the new Passenger Service System (PSS) with key applications

PSS is the hub of everything for the airline, with over 80 different subsystems and 200 connecting applications. Upon starting the project, we needed to evaluate all systems to identify whether they were changing, updating, or being decommissioned. We also needed to collaborate with 25+ partners to determine the 150+ system interfaces that needed to connect to Altea.

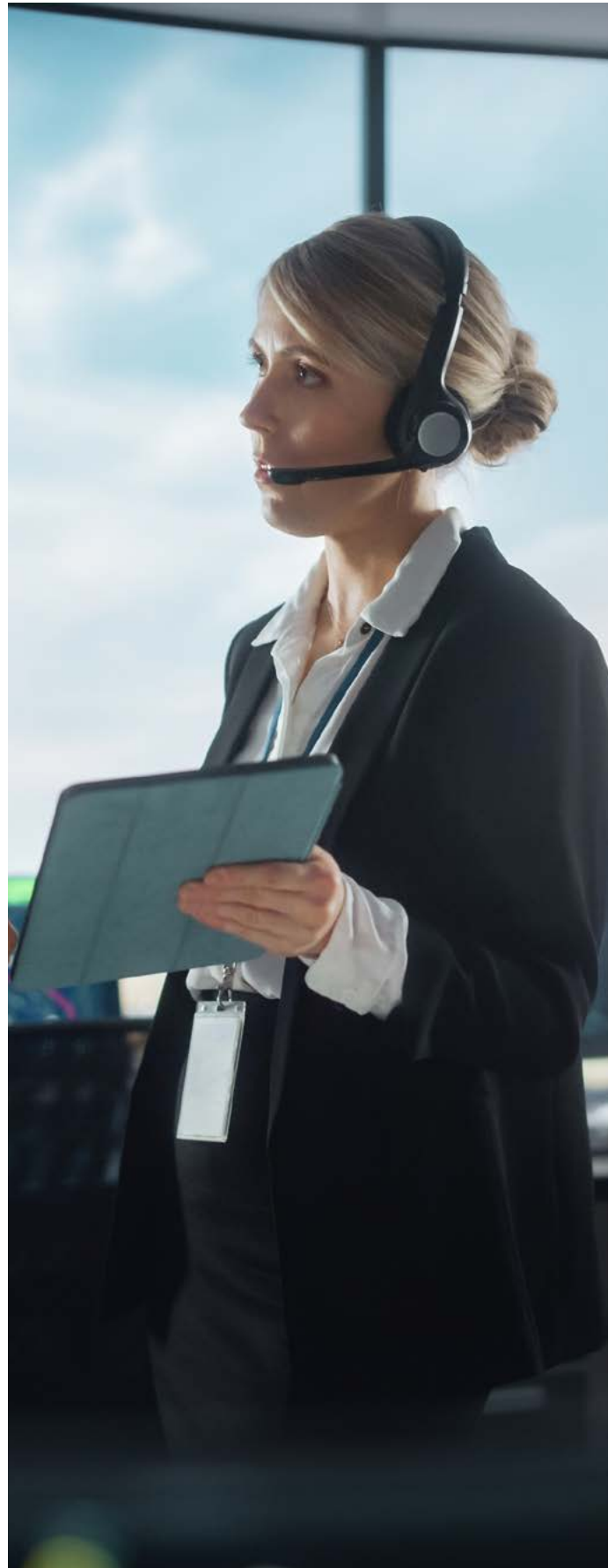
To decommission the legacy PSS, we needed to divert all operations to the new Altea system. Using MuleSoft, we enabled more agility and flexibility in the company's end-to-end processes by implementing an API-led integration approach. This meant building APIs in MuleSoft to pull and process data for Altea to not only match, but improve on how the old system was operating.

For example, the airline used to have 10 user interfaces to handle the data required by 10 different consuming applications and systems. Now, this is being handled by one simple and reusable API.

In using an API-led approach for its new PSS, the company can now better expose data to current and future applications to grow the business.

Additionally, prior to implementing MuleSoft, the company had limited capabilities within its mobile app. Now, through using APIs, the data is more accessible, enables them to add new functionality like making changes to flight reservations within the app.

In the end, we built 80+ APIs, which are delivered across more than 160 different interfaces.



2. Updated the Departure Control System (DCS) with API-led automation

Within DCS there's a large number of different systems and applications required to handle things like baggage processing and transferring, flight weight and tracking, passenger connections, in-flight catering, and more.

For example, one application handles baggage processing while another application handles passenger connections.

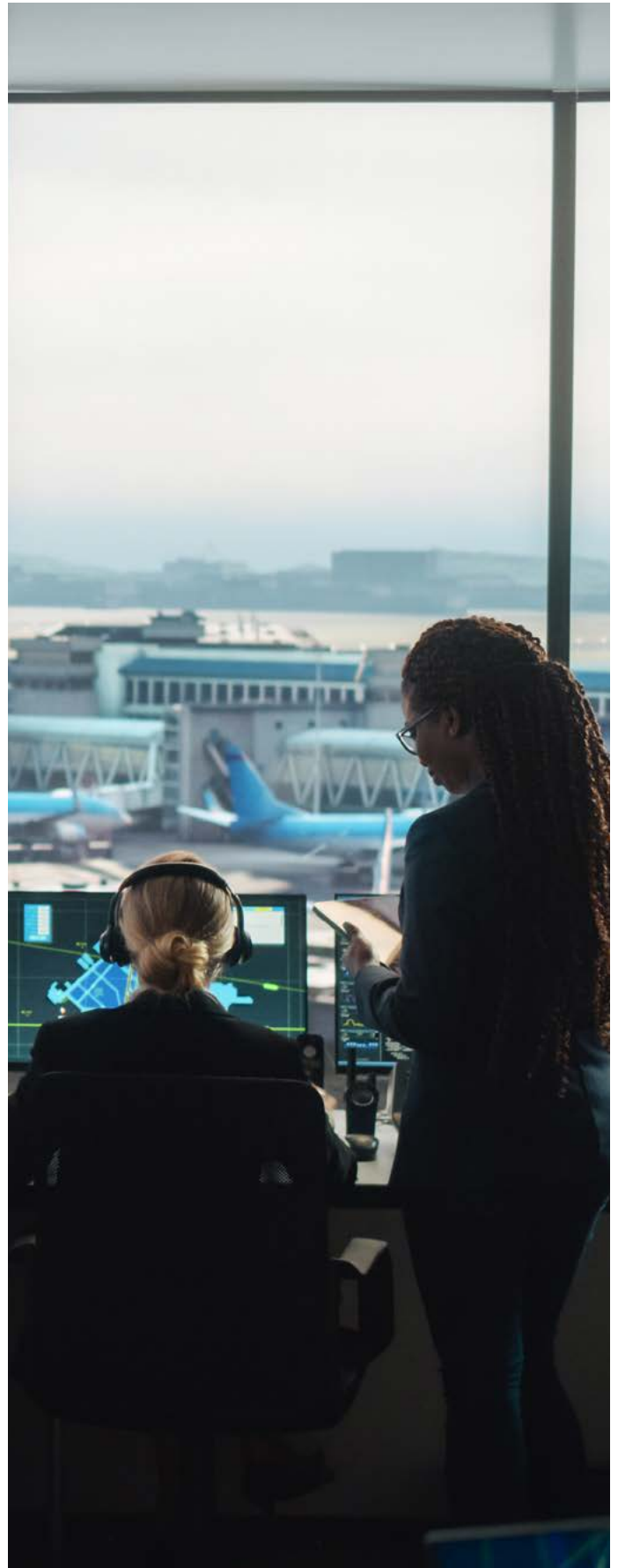
Both applications have a constant feed of data being sent to and from DCS, and employees had to go into 30+ different screens to check and process all the data related to a flight.

In moving it to Altea, we needed to design APIs to process the data being sent from all the consuming applications to DCS in a better, more streamlined way to reduce the time and manual effort required by employees.

Using MuleSoft APIs to process this constant exchange of data between systems and applications reduces the complexity within DCS.

Employees no longer need to access all the different screens and applications to process flight data, as the APIs have automated the flow for them.

This simpler process ensures data being exchanged is processed efficiently and effectively every time. Plus, it gives the company the flexibility to leverage reusable APIs and add more capabilities for DCS to grow the business.





GET BIG ON YOUR TEAM!

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