

Taking Flight With AWS

A STORY OF OWNING CHANGE

Leading airline streamlines baggage data with a cloud-native solution and reaches new heights with AWS.



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Owning Change in Transportation

As a leading global airline, our customer wanted to reimagine the baggage experience for their passengers, and they knew right where to focus: their data and merged baggage platform. They envisioned seamless integration for their end users by shifting to Amazon Web Services (AWS). Developing a net new application using a microservices-based architecture would be the embodiment of travel made easy.

THE CHALLENGE: TAKING OFF WITHOUT DELAYS Seeking a Cloud-Native Solution With Faster Processing Speed

Our customer operates 4,500 flights per day—keeping passengers connected to their baggage while simultaneously delivering a pleasant passenger experience is a big undertaking. They needed an agile, scalable, modern <u>cloud solution</u> to handle large amounts of complex heterogeneous data supported by an on-demand platform. They wanted to use data to make more informed, real-time decisions; reduce misrouted or lost bags; and reduce operation and technical overhead. They wanted to scale with minimal downtime and avoid impact on their bottom line due to dissatisfied passengers. They looked for a partner who could nail the landing. Enter TEKsystems Global Services.

OUR SOLUTION: MORE LEGROOM FOR DATA Integrating AWS and Microservices for Faster Data

As an <u>AWS Premier Tier Services Partner</u>, TEKsystems brought the experience to guide our customer to their destination. Leveraging our <u>data analytics expertise</u> and application modernization capabilities, we applied a cloud-native approach, featuring a microservices architecture and modern technology stack.

This approach led us to develop multiple microservices to run at scale and in parallel on a stateless database design that processes tens of thousands of events per second. The serverless data solution ingested data from internal and external data sources and then processed and shared that critical information using an API solution. A core component? AWS Amazon Managed Streaming for Apache Kafka (MSK).

We advanced their cloud-based architecture by refactoring, rewriting and integrating various baggage operation systems and establishing an automated CI/CD pipeline design that enabled faster time to market. We used our AMP^{GSTM} Microservices Accelerator Framework, which provided a microservices factory model to accelerate development. This framework decreased the development time from months to weeks. Together, we established an approach to release applications with built-in security, quality and agility. We created a roadmap by identifying ways to make the platform more resilient. The results? Lower costs and defects for our customer. Reliable baggage claim for passengers.

POWERFUL PARTNERSHIP: A RUNWAY TO MODERNIZATION Delivering Data Agility in Baggage Claim

platform that could deliver better, faster results.

As a global airline, our customer invests in regularly optimizing their processes, refining their data strategy and rewiring their applications with new approaches and technologies. Their passenger-centric mindset and desire to modernize their enterprise IT make them stand out from the rest. That desire fueled our collaboration to create a

Focused on the horizon, we continued to work with them to streamline and automate through best practices and tooling. Incrementally, we took what we learned and applied the feedback we received along the way to consistently improve delivery and help mature the global airline's processes. An itinerary of efficiency, scalability and long-term growth.

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Real-World Results

When it comes to efficient, cost-effective solutions and support, we're ready for takeoff. Building a strong framework, applications and delivery pipelines into the airline's baggage claim system expanded their capabilities, accelerating their operations into high speed. The new pipeline factory design enables weekly production releases, delivering new functionality exponentially faster. The new serverless data solution collected data from around the world and delivered it to the right stakeholders at the right time—allowing real-time updates for passengers and employees. Our customer now saves millions of dollars per year by averting baggage rerouting expenses.

TEKsystems has proven how leveraging AWS and upgrading to a modern data platform can contribute to improved user experiences, resulting in happier passengers. Enabling our customer to soar above the competition. Value has arrived.

Millions were saved on baggage re-routing expenses.

Functionality became exponentially faster from quarterly to weekly production releases.

About TEKsystems and TEKsystems Global Services

We're TEKsystems. We accelerate business transformation for our customers. We bring real-world expertise to solve complex technology, business and talent challenges—across the globe. We're a team of 80,000 strong, working with over 6,000 customers, including 80% of the Fortune 500 across North America, Europe and Asia, who partner with us for our scale, full-stack capabilities and speed. We're strategic thinkers, hands-on collaborators, helping customers capitalize on change. We're building tomorrow by delivering business outcomes and driving positive impacts in our global communities. TEKsystems is an Allegis Group company. Learn more at TEKsystems.com.

An AWS Premier Tier Services Partner, TEKsystems Global Services is a member of the AWS Well-Architected Partner Program and an AWS Training Partner and holds the AWS Data and Analytics Consulting Competency, AWS DevOps Consulting Competency, AWS Machine Learning Consulting Competency, AWS Media and Entertainment Services Competency, AWS Migration Consulting Competency, and AWS Security Consulting Competency.

Learn more at TEKsystems.com/AWS.