

# GLOBAL AIRLINE EXPOSES MAINFRAME AND IMPLEMENTS AGILE DEVELOPMENT WITH IVORY SERVICE ARCHITECT

One of the largest airlines in the world flies to more than 300 destinations in 50 countries. The organization manages a fleet of nearly 1,000 aircraft that handle over 200 million passengers each year.

Following a merger with another major carrier, the airline decided to overhaul manual green screen aircraft maintenance processes, and needed to expose its mainframe and modernize its technology infrastructure and development processes to do so.



#### CLIENT

US-based Global Airline



#### INDUSTRY

Travel & Transportation



#### CHALLENGE

Needed to modernize product and development processes in a mainframe environment



#### ISA

#### SOLUTION

GT Software's  
Ivory® Service Architect™

## CHALLENGE

Agile is widely considered the gold standard of modern software development methodology. Since it can help teams deliver products and value more quickly and with higher quality, it should be no surprise that nearly all modern development incorporates at least some Agile principles. But Agile's iterative approach can be extremely challenging if the technology environment includes legacy systems that don't facilitate real-time access to data and applications.

An all-too common example is the mainframe computer. Mainframes were not designed to interact with external systems, and organizations that use them as their system of record are often faced with extremely long, waterfall-based development cycles. These long timelines add complexity and cost to projects, and can stifle innovation.

Following a merger that required massive systems integrations, one large US airline decided to move aircraft maintenance from a manual paper and green screen-based process to one that allows for real-time interaction with their legacy mainframe computers. The new system would not only equip technicians with fully connected tablets, but would provide better visibility into team productivity and facilitate faster gate turnaround to improve on-time performance.

## SOLUTION

They realized, however, that enabling the mainframe for mobile real-time access was an extremely complicated task. After evaluating their options, they discovered that GT Software's Ivory Service Architect would not only enable the real-time mainframe integration their teams needed, but would do so through a no code, drag-and-drop interface that greatly improves the productivity of their development resources.

In addition, Ivory would allow them to fully implement an Agile development approach across their architecture, including the mainframe. Without this updated development methodology, the airline would have been stuck with prohibitively long waterfall enhancement cycles and unsupported business processes on the mainframe that would not have aligned with mobile application development.



“All our teams now have access to the same datasets, giving us the ability to make quick decisions on the spot to drive operational improvements.”

*-Operations Director*

## RESULTS

The airline decided that one of the keys to modernizing their development practices was to expose the mainframe to development and QA teams. With the help of Ivory, the airline was over time able to transform their product development structure and processes into a typical agile construct. Their infrastructure groups now create user stories that illustrate business value and define requirements, and the UI, System Design and Dev teams are able to execute on them in a constantly iterative way.

In effect, the modernization brought into the environment with Ivory not only improved the technical performance of the systems being developed, but also the functional performance of the development teams. With Ivory, teams get feedback on the end-to-end performance of the application more quickly and thus can apply Agile principles and the decision-making processes to act on that feedback. Previously, this was not possible because of the technical “silos” that existed between mobile development teams and the owners of the mainframe environment. These silos limited the team’s ability to gauge the quality and performance of the features being developed, especially in the early phases of the development process.

As requirements constantly evolve through sprint schedules and daily standups, teams are able to manage backlog through automated test authentication and distribution. This accelerated testing and QA is possible due to Ivory’s service process and speed.

This agile methodology has not only created a user-centric process for maintenance and repair modernization, but allowed teams to integrate maintenance systems and functions with other airline operations, including finance and flight forecasting. The result is a widespread, coordinated approach that is nimble and user-driven - exactly what agile development should be.

Your development methodology no longer needs to be constrained due to legacy infrastructure and limited access to applications and data. Ivory’s speed and flexibility can help modernize your approach.

“The architecture has such a strong foundation, but it also tightly couples the data so you have the same data being reused across the organization.”

*-Dir, Systems Integration*

## ABOUT

GT Software ([www.gtsoftware.com](http://www.gtsoftware.com)) turns yesterday’s legacy systems into tomorrow’s leading edge applications. Its solutions help organizations extend the value of their IT investments through agile development and standards-based APIs, which improves workflow and enhances operational efficiency. Masters of application modernization and a global distributor of the Fujitsu NetCOBOL compiler, GT Software’s proven solutions power mainframe integration with today’s technologies. Currently more than 2,500 organizations globally trust GT Software’s solutions to ensure they are able to drive forward innovation that improves customer experiences, increases operational efficiency and generates revenue.



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