



Improved customer satisfaction for airlines through an end-to-end cargo reservation system.

The air travel industry is going through a spectacular change due to increasing customer demands and changing economic models. Many airline transportation enterprises are fast realizing the need to keep up with technology upgrades in order to enhance their service and improve customer satisfaction. To achieve this, they are swiftly upgrading their legacy systems to suit the current technology trends.

Here's how Mindtree built an end-to-end cargo reservation system for a leading IT solutions provider for the airlines industry.

The challenge

The customer, based out of the Middle East, is a leading IT solutions provider for the airline and transportation industry. They wanted to replace their mainframe based cargo reservation system with an end-to-end cargo reservation system. This had to be an open system that integrates reservations, operations and revenue management functions. The application platform also had to support analytical functions that included providing revenue earned on a real time basis.

Key challenges while developing the application included:

- Designing and building of an automated cargo reservation solution that is cost effective and easy to configure and use
- The system had to provide real time reservations, operations and revenue computation
- Remove paper based processes, while maintaining compliance with IATA's e-freight initiative
- Reduce shipment mishandling instances by streamlining processes and minimizing reliance on human input
- Improve cost effectiveness through automation of processes, reduction of data entry and increased usage of EDI messaging
- Provide seamless integration by offering a full range of web services that facilitate cost effective implementation and customized deployment
- Create and develop dashboards for real time monitoring of shipments and flights

Business impact

- Enabled proactive decisions based on real time, fact-based information
- Allowed customers to book a year in advance while existing systems permitted only 60 days advance booking
- Improved the handling of allotment leading to effective capacity utilizations
- Ensured seamless integration with systems used by numerous airlines
- Offered significant cost savings, as it supported a nearly paperless practice
- Increased accessibility via multiple channels such as PDA, rich client, and web



Our solution

The project spanned multiple geographies, bringing together a multi-disciplined team of business analysts, technical architects, developers and testers.

Mindtree worked on an iterative waterfall model for all phases of the SDLC. We enabled a seamless and smooth self-service experience for the online customer by translating the customer brand promise to an online application. The application redesign started with a series of user studies. Individual interviews were conducted with existing users of the cargo application spanning numerous locations. The insight gained provided Mindtree with solid end user use cases upon which the solution was built.

Mindtree team developed end-to-end requirements and goals related to booking, availability, flight schedule, rates and communication. This was followed by an in-depth competitive analysis to understand strengths and weaknesses of competitors and potential competitors.

Mindtree delivered the next generation cargo reservation solution within the two year duration. The application is one of the largest Java development efforts in recent times, requiring 300 person years of development effort.

About Mindtree

Mindtree is a global information technology solutions company with revenues of over USD 400 million. Our team of 11,000 experts engineer meaningful technology solutions to help businesses and societies flourish. We enable our customers achieve competitive advantage through flexible and global delivery models, agile methodologies and expert frameworks.