Airline Management System

Salesforce-Based Passenger & Operations Management

Introduction

The airline industry is one of the fastest-growing sectors globally, carrying billions of passengers annually. With the rise of digital transformation, passengers now expect seamless booking, real-time flight updates, and personalized travel experiences. However, airlines often face inefficiencies such as manual check-ins, delayed updates, unoptimized crew scheduling, and lack of centralized data. An Airline Management System (AMS) provides a centralized digital solution for ticket booking, check-in, flight management, crew scheduling, luggage tracking, and passenger support

Problem Statement

Airlines face significant challenges in providing smooth operations and passenger satisfaction. Manual ticketing and check-in processes delay services, disconnected communication channels confuse passengers, and poor coordination between crew and ground staff causes operational inefficiencies. With growing passenger numbers and complex international operations, traditional systems fail to deliver efficiency. The Airline Management System aims to overcome these issues with automation, real-time data, and centralized management of all airline processes.

Requirement Gathering

- Passengers require easy online and mobile booking options.
- Airlines need real-time updates for flight delays and cancellations.
- Crew scheduling and roster management are mostly manual and inefficient.
- Luggage tracking is prone to errors and misplacement.
- Customer support is scattered across call centers and emails without central tracking.

Objectives

Primary Objectives

- **Centralize Data** – Manage passengers, crew, and flights on a single platform.

- **Automate Processes** – Streamline booking, check-in, and luggage handling.

- **Real-Time Communication** – Notify passengers about delays, cancellations, and gate changes.

Secondary Objectives

- **Optimize Resources** – Efficient crew rostering and fleet scheduling.
- **Managerial Dashboards** – Track operations and key performance indicators.

Stakeholder Analysis

- Passengers: Expect easy booking, fast check-in, and real-time updates.
- Airline Staff: Need efficient crew scheduling and flight management tools.
- Ground Staff: Handle passenger check-in, baggage, and boarding.
- Airline Managers: Monitor operational efficiency through dashboards

Business Process Mapping

Current Process: Passengers depend on third-party booking sites, check-in manually at counters, and receive limited communication regarding flight delays. Crew scheduling is paper-based, leading to inefficiencies.

Proposed Airline Management System: Passengers book directly on the airline portal, use mobile apps or kiosks for self-check-in, and receive real-time flight and gate notifications. Baggage is tracked digitally, and crew schedules are optimized through automation, reducing errors and delays   Industry-Specific Use Case Analysis

AppExchange Exploration

1. AviateNow
AviateNow is a Salesforce-native solution designed for airlines. It centralizes flight bookings, CRM, aircraft management, and document automation. By streamlining operations and improving customer interactions, it reduces manual work and enhances efficiency.

2. JETNET for Salesforce
JETNET integrates aviation data with Salesforce, providing detailed information about aircraft and fleet management. It also enhances CRM capabilities, helping airlines manage customer relationships more effectively.

3. Neurored TMS & SCM
Neurored offers a multimodal transportation management system on Salesforce. It manages logistics across air, sea, and road, provides real-time tracking, and optimizes supply chain operations, improving baggage handling and resource allocation.

4. Amadeus for Salesforce
Amadeus integrates its travel solutions with Salesforce CRM. This helps contact center agents deliver better customer support and enables airlines to provide timely and efficient passenger services.

Industry-Specific Use Case Analysis

• Passengers booking tickets online with integrated payment gateways.
• Mobile check-in with e-boarding passes to reduce airport queues.
• Automated crew rostering ensuring compliance with work-hour regulations.
• Baggage tracking with barcodes/RFID to prevent lost luggage.
• Real-time dashboards for managers to track on-time performance

Real-time Examples

Indigo Airlines sends automated SMS alerts about flight delays.

• Emirates uses self-service kiosks and biometric boarding gates to speed up check-in.

• Singapore Airlines integrates AI-based customer support for handling passenger queries.

• Air India has started using RFID baggage tracking for improving transparency

Conclusion

From a Salesforce point of view, the Airline Management System leverages the power of CRM and cloud automation to transform airline operations. Using Salesforce Experience Cloud, passengers can book flights and manage profiles directly, while Marketing Cloud provides real-time notifications for delays, gate changes, and baggage updates. Service Cloud ensures efficient handling of customer queries and baggage issues, and Flow automation optimizes crew scheduling and resource management. Dashboards and reports give managers actionable insights into operations and KPIs. Overall, Salesforce enables airlines to streamline processes, enhance passenger experience, and achieve operational excellence.