

Phase 1: Problem Understanding & Industry Analysis

Project Title

Flight Reservation & Scheduling System

Salesforce-Based Flight Operations and Scheduling System

Problem Statement

Managing airline operations such as flight scheduling, pilot assignments, and passenger communication is a complex process. Traditional systems often lack automation, resulting in data duplication, scheduling errors, and delayed updates.

This project proposes a Salesforce-based **Flight Scheduling and Operations Management System** to streamline flight management. It centralizes flight, pilot, and schedule data, automates notifications, and generates real-time reports for operational efficiency and better decision-making.

Requirement Gathering

- Passengers should be able to search, book, and cancel flights.
- Airline staff should manage flight schedules and availability.
- Payments and refunds must be tracked in real time.
- Automated notifications for booking confirmations, delays, and cancellations.
- Reports and dashboards for revenue, occupancy, and cancellations.

Core Objects Identified:

- Flight: Auto-generated Flight ID, Flight Name (e.g., Go-102), Airline Company (IndiGo, AirAsia, etc.), International/Domestic indicator.
- Flight Schedule: Source City, Destination City, Departure Date & Time, Arrival Time, Duration (auto-calculated).
- Booking: Booking ID, Linked Flight, Passenger Details, Seat Number, Status (Confirmed/Cancelled).

- Payment: Payment ID, Linked Booking, Amount, Method (Card, UPI, Wallet), Status (Paid/Refunded).

Objectives

- Centralize flight, passenger, booking, and payment data in Salesforce.
- Automate booking confirmations, cancellations, and seat availability updates.
- Provide a self-service portal for passengers.
- Enable real-time dashboards for airline management.
- Improve customer satisfaction with timely notifications.

Stakeholder Analysis

- Passengers: Search and book flights, manage cancellations, receive updates.
- Airline Staff: Manage flights, bookings, and passenger data.
- Finance Team: Track payments, refunds, and generate financial reports.
- Management: Monitor revenue, occupancy, and performance via dashboards.
- Travel Agents (Optional): Book tickets on behalf of passengers.

Business Process Mapping

Current Process:

- Manual flight updates through legacy systems.
- Passengers book tickets via agents or fragmented online systems.
- Seat availability updates are delayed, causing overbooking issues.
- Notifications for delays/cancellations are not automated.

Proposed Salesforce Process:

- Flights managed directly in Salesforce.
- Passengers book via a Salesforce-powered portal.
- Seat availability updated in real time.

- Automated booking confirmations and flight status updates.
- Management tracks revenue and occupancy via dashboards.

Industry-Specific Use Case Analysis

- Real-time seat utilization to reduce overbookings.
- Instant booking confirmations for passengers.
- Automated payment and refund tracking.
- Dashboards for performance insights.
- Competitive edge through better customer engagement.

AppExchange Exploration

- Travel Booking apps.
- Payment Gateway Connectors.
- SMS/Email Notification apps.
- Aviation Analytics dashboards.

Conclusion

The Flight Operations Management System built on Salesforce streamlines airline operations by automating flight scheduling, pilot assignments, and reporting. By centralizing data and workflows, it minimizes manual errors, improves coordination among departments, and enhances overall operational efficiency. This system empowers management with real-time visibility for smarter and faster decision-making.