



ITC508

Airline Information System

Case Study 2

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XYZ is a growing Australian airline company which aims to provide a number of services throughout the world including airline operations, freight transport, food production and loyalty programs. This company has a requirement for a new information system which will work together to support their day to day operation of airline system. New information system must include flight reservation system, travel service reservation system, human resource management system, accounting and finance system, and sale and marketing system.

Flight Reservation System

This system provides flight reservation and booking management services. There are two types of users—ordinary customers, who occasionally use the system, and frequent flyer, who use the system most frequently.

Ordinary customers want to buy cheaper flight tickets in order to save some money and such customers are normally flexible with the dates. Flight reservation system should present with more options with cheaper alternatives when ordinary customers selects “flexible with dates” option while searching for bargain flights. As the ordinary customers have no frequent flyer credentials/points and do not wish to participate in frequent flyer program as they only travel rarely. For that reason they have only the option to pay by the credit card.

Frequent flyers have special profiles where they can get advantage of special discounts and other benefits as royal member. The flight reservation system should be able to display, add, deduct, and maintain the history of frequent flier points, as well as provide a pleasant travel experience and convenience of avoiding airport check-in lines. Furthermore system can reduce check-in effort for the staff and reduce the cost of airport operations. In most of the cases, the royal customers are employees of companies, as they reserve frequently for first or second class seating's, they expect discount rates based on their profile. Furthermore since frequent flyer points are targeted at individuals and they demand discounts as loyalty rewards. Purchase is usually made through corporate credit cards.

Travel Service Reservation System

XYZ requires travel service reservation system to offer ordinary customers and frequent flyer for other non-flight facilities including hotel, car hire, travel activities, packages, and travel insurance. This system to be used to provide a holistic travel experience to customers and will generate additional sources of revenue. Customer search for available travel services and the system should provide maximum information for all travel services. For example, if customer is searching for a hire car, then maximum information should be displayed about the car such as price, model, capacity, pickup and drop off locations, dates & times, etc. Travel services companies, in this example car rental companies, provide all related information about these services. Once the customer decide about the travel services, the payment should be made either through credit card (ordinary customers), or frequent flyer points

(frequent flyer). The system should also have the facilities where the customers can also change the order by adding or removing non-flight facilities. The information about the customer's orders and payments has to be available to the other systems including accounting and finance, and sales and marketing to generate financial ledgers and sales reports.

Human Resource Management System

The HRM system is required to provide functions related to many human resources functions, including benefits administration, payroll, recruiting and training, and performance analysis and review into one package. The following functions to be used to automate this system.

Benefits administration

This function to be used to automate employee's records in benefits programs provided by company, such as health insurance, compensation and profit sharing etc.

Payroll

Payroll automates the pay process by gathering data on employee time and attendance, calculating taxes deduction, schedule periodic pay transfer to bank or cheques and employee group certificates. This function can encompass all employee-related transactions as well as integrate with existing accounting and finance management system.

Recruiting and training

Recruiting and training are crucial in HRM system, it provides basic functions related to recruitment in the company, such as listing available positions, submit and track application, etc. Additionally, monitor employee's performance and organize some training programs for employee's developments are part of training function.

Performance record and appraisal

A performance record and appraisal to be used in the system for systematic and periodic process which will assess an individual employee's job performance and productivity in relation to certain pre-established criteria and organizational objectives.

Accounting and Finance System

Accounting and Finance system is required to handle the financial transaction for the airline company. The success of this system can impact on how executives make decisions on the company's future. This system connects the customers' payments and refund information as well as use to prepare financial reports for auditing. Particularly, the system should be able to provide real-time financial information and control across people for billing, general ledger, accounts payable, accounts receivable, project accounting, and fixed assets.

Sales and Marketing System

The sales and marketing system is required to generate revenue by finding clients and making sales. All activities related to flight bookings will be sent to the sales and marketing department for strategic purposes. This system is linked with the other systems including flight reservation system, travel service reservation system, and accounting and finance system. Additionally, it is important to record detail information about any incoming and outgoing payments, as well as generate reports about payments in the given period.