

Manx Airlines



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Background

Manx Airlines, now part of British Airways through the acquisition of its parent company British Regional Air Lines Group plc, provides vital year round air links between the Isle of Man and a total of 11 destinations in the UK and the Irish Republic.

The company, at that time one of Europe's largest an independent airlines, was seeking a solution to help them manage their route accounting information. Their entire route accounting information, consisting of costs and revenues, was stored on a large number of extremely complex and unwieldy spreadsheets. As the number of routes flown by Manx Airline increased the amount of data stored on the spreadsheets increased to the point where the existing system was almost unusable.

The Challenge

PDMS were approached by Manx Airlines to review the existing Excel spreadsheet based system and recommend an appropriate solution which would meet the demands made by the recent growth in Manx Airline's business. After analysing the business and functional requirements of the route accounting system, PDMS recommended the replacement of the spreadsheets with a relational database system. A relational database combines the benefits of

an improved data structure with better security and importantly, removes any size constraints from the system.

Manx Airlines then tasked PDMS with the design and development of the replacement route accounting system based on a relational database that would handle the wide range of costs and revenues associated with running an airline. This was to be used for collating actual management accounts information as well as providing data modelling and forecasting capabilities. Additionally the system needed to be scalable both in terms of the number of routes flown and be flexible enough to allow amendments to the system to be made by appropriately qualified users, rather than having to continually rely on PDMS for support.

The Solution

The solution developed by PDMS was based around an MS Access database which would give users greater flexibility in developing their own queries and reports. The user-friendly interface was also developed using Access.

PDMS worked with Manx Airlines staff to categorise all costs and revenues associated with actually flying passengers, into a series of basic components which were grouped by the calculation used to derive the total value of each component. For example, landing and external handling charges are defined as the number of sectors flown (the number of times the plane landed) times the unit cost for the component, adjusted for the particular aircraft type and airport. The configurable calculation engine enables users to calculate results by any combination of route, date and component allowing small adjustments to be made to the data without the need to recalculate a full set of results. In order to allow data modelling and forecast data to be stored within the same date range as actual results all dynamic data was stored with an associated version number. This allows multiple sets of data to be stored for a particular year.

Data copying and archive functionality allows users to create new datasets from existing data and create restorable archives of old information. This has significantly reduced data preparation and management overheads and makes creating new datasets for data modelling and forecasting a quick and easy process. A comprehensive suite of parameterised reports provides the basis for Manx Airlines' published accounts pack whilst extensive variance reports allow users to monitor changes between forecast and actual performance. Data driven journals allow structured exports into the main accounting systems.

Benefits

The solution developed by PDMS addressed all of Manx Airline's requirements whilst providing for enhanced analysis and reporting of accounting information. The data driven nature of most of the business functions has allowed Manx Airlines to expand the number of routes flown and introduce more complex multi-sector routes and new cost components without having to make major changes to their systems. In addition, changes can be implemented by Manx Airline's staff without requiring extensive input from PDMS. The flexible reporting and data analysis options allow users to create their own portfolios of reports and queries to help them present

and manage their information in the most effective manner. Manx Airlines now have quick and easy access to business critical information such as key performance indicators which allows them to monitor their business more effectively and efficiently. Additionally the flexibility of their system has allowed them to easily add new components and amend the calculation and reporting engines to accurately reflect changes in the underlying business.