


Talk given by William Owen of The Flight Register at the Airline Revenue Integrity Group Conference 2008. Abbreviated web version. For further details contact william.owen@flightregister.net

The Broader Perspective


Solutions Which Benefit All Departments

The Flight Register
ARIG 2008

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IATA Strategic Partner




The Flight Register
Know your passenger

AGENDA

- “Data Warehousing”. -a broader solution for an Airline than R.I. only?
- Planning a Project –The Big Issues
- How BMI planned their Project
- The Benefits
- The Flight Register



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Is your data both available and reliable?

If you are hoping to be the person with the courage to introduce change, and particularly revenue integrity as part of that change, then I believe you need to consider these questions?

Is your passenger, and other airline data, located in different places, or is it integrated into a single decision support database. Do all your executives use the same information?

Can you and all executives of the airline access all your data 24/7 where ever you are?

Do you have the information to do your job?

Is Your Data Reliable?

Is your passenger, and other airline data, located in different places, or is it integrated into a single decision support database (data warehouse). Do all your executives use the same information to make decisions?



If you are working, like many airlines, from multiple sources of information which are difficult to access, based on different data models and different data quality, then putting that problem right first should be the core of your project..

Is your data accessible?

You are in Hawaii at a beach hotel with wifi. Can you log on and check the 'booked', 'flown' and 'paid for' data for the flights which you are responsible? Can you compare this with last month? Can you drill down and find which agent is not performing?

Is your data Accessible?

Can you and all executives of the airline access all your data 24/7 where ever you are?

Can they do their job?



Your Revenue Integrity Department must work with all airline departments.

Airlines are 'departmentalised'. They operate in 'Silos'. The data is often in operational data bases (separate 'silos'). Staff find it hard to understand and embrace the needs of other departments.

Revenue leakage occurs in *every* department. To be successful in Revenue Integrity and Revenue Management, you need to communicate between departments, especially, for example with sales and marketing.

The first step is to use common data and have access to that data, and tools, to use and interpret it.

The next slide shows quotes from a speaker from consultants SH and E, at last weeks 'airline conference in London:

The Future is RM and RI Co-operating with Sales and Other Departments

"Revenue Management will have a closer relationship with Sales and Pricing from now on. *Data sharing will enable this*"

"Revenue Management and Integrity Systems are only as good as the data going in"

S.H and E Speaker, June 2008



In a financial environment of tight budgets, you will need to think in terms of solutions which *benefit all departments*. You will also need to have a stronger and more defensible *Business Case Study* in order to get financial sign off.

For this reason, I have called this talk, *The Broader Perspective*.

By 'Broader Perspective', I mean how *you* can cross boundaries, outside of traditional R.I definitions and how *you* can cross boundaries outside of your own personal department..

I hope you will have this conference full of enthusiasm to lead change in your own airline. Then the reality will hit home. Getting your ideas accepted will be tough. So I want to guide you through real living examples of how other leaders in other airlines are doing this.

Information Requirements for Revenue Integrity and Revenue Management



As ticket prices increase, however well disguised -such as by the un-bundling of products (charging for baggage and ticket changes) -demand will drop. The rule of 'elasticity of demand' will kick in. Revenue Management and Revenue Integrity becomes centre stage.

But will you have the information to take effective action?

You Need the Best Data

At this point it becomes all about *saving revenue losses by searching for leakages* and *Understanding how passengers will react to price increases.*

Do you have the data to find the leakages?
Do you know your passenger?



Know Your Passenger

Knowing the Net Passenger Value, or NPV, of your passenger base is fundamental. *How will the passenger react to change?*



That is why The Flight Register uses the tag line '*Know Your Passenger*'.

“KNOW YOUR PASSENGER”

Without the ability to measure the Net Passenger Value (NPV) of each customer, you cannot take decisions on how to maximise revenue.

That is why our Tag-Line is

“Know your passenger”



Planning a New Project

Consider these questions?

- Should you be thinking about your department only, or across departments?
- Should the Solution be for 'pure' R.I or could it bring other benefits?
- Has you airline the ability to undergo the *planning* and *change management* to fully benefit from a R.I. Solution?
- Is a lower key, phased approach, more realistic?
- Who should lead the Revenue Integrity project. Should the finance director or the commercial director lead the team? Or should it be you?

How can you bring about a rapid decision which is the right decision for your airline?

The investigation, consultation, justification and implementation of a new system is disruptive to normal staff procedures. Therefore, it will meet with resistance and with delays internally.

Who should be the Project Leader?

Finance Director?

- Has the authority, but not operationally
- Limited R.I. knowledge
- May not be a good 'implementer' or 'change manager'

Commercial Director?

- Has the authority
- Limited R.I. knowledge
- Should be good at implementation.

Revenue Management/Integrity Director? –You?

- Understand how to find the leakages
- Willing to work across department, but may have no authority

However, a Project Manager, brought in from outside your airline, may be able obtain across department 'buy-in'

Do you have the courage and foresight to plan across departments either by providing data to those departments or allowing them access to it themselves, or both?

How the BMI project was planned.

The BMI approach was extremely interesting and well thought out.

They decided to look for one single solution, but one which had the potential to serve *multiple departments* and one on which they could build in phases *on a sound information platform*.


Their focus was on getting the data into *a single decision support environment* and then empowering every BMI employee by enabling him/her to view it, both in raw or report format, and also to let him slice and dice it themselves.

BMI looked to create a *team structure* with the characteristics shown in the next slide.


Creating a Team

BMI wanted a *Team Structure*

- with real knowledge of revenue loss, but
- with sufficient 'authority' to deliver
- that would cross department borders
- to engage, and then 'enable', multiple staff



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The Team solution comprised:

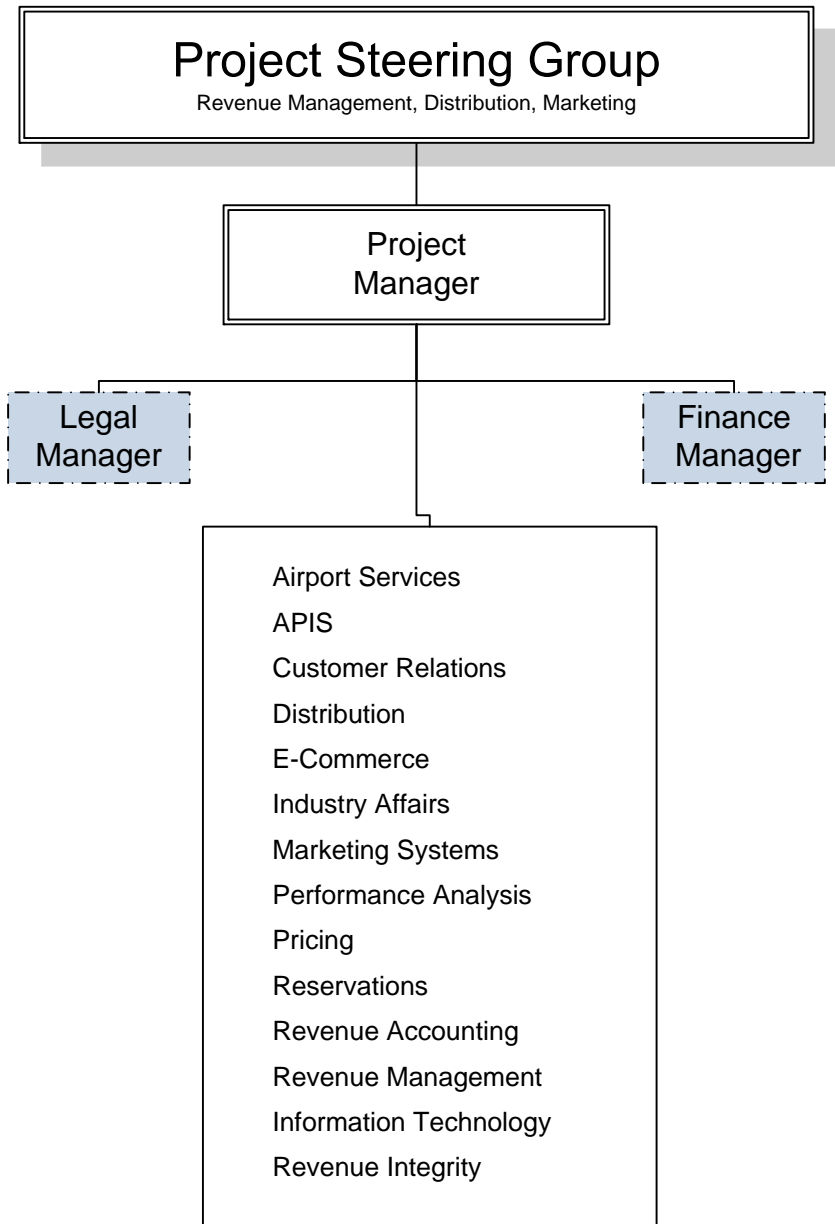
1. A Project manager, recruited from outside the company, reporting to:
2. A Steering Group of three stakeholders, being the heads of :
 - Revenue management
 - Marketing
 - Distribution and e-commerce

They brought experience and authority and real 'cross-department' bridge building.

3. Checking/Advising
 - Finance Manager
 - Legal

4. Working Groups

Fourteen working groups were formed across the company.



Business Case Analysis Document

To engage all departments, a *Business Case Analysis* document was opened. This is a live travelling document, constantly changing. It asks each member of staff to consider the questions in the slide below.

BUSINESS CASE ANALYSIS

An Essential Document

To engage all departments, a *Business Case Analysis* document was opened.

It asked each member of staff to describe

- what benefits could the project bring you?
- what could be the financial benefits to the airline?



Data Sources to be Integrated

The slide below shows some of the airline operational and other data sources we integrate

Data Sources

Some of the Data we Import to the Data Warehouse

- | | |
|--------------------------|---------------------------|
| (i) CRS | (vii) Passenger Feed Back |
| (ii) DCS Data | (viii) Banned Passengers |
| (iii) Sita Messaging | (ix) Crew Data |
| (iv) Frequent Flyer Club | (x) Credit Card Fraud |
| (v) Scheduling/Capacity | (xi) Others |
| (vi) Accounting Data | |



How Could the Solution Help?

Using a Data Warehouse with user-friendly interfaces and analysis tools would have numerous benefits, according to the Business Case Analysis report.



It was decided to implement the project in Phases.

How Could the Solution Help?

The opportunities to save revenue loss and to improve revenue management *and to help other departments were numerous.*

Phase 1 should be to integrate the data sources and provide user solutions to enable the maximum number of staff to benefit.

Phase 2 should be to analyse the results of Phase 1 and consider what additional reports, analysis tools or systems were needed, especially further R.I. systems.



Viewing and Using the Data

Viewing and Using the Data

The Data can be viewed and interrogated from any internet-connected location, worldwide, 24/7

Phase 1 Tools are:



- Flight Register 'Open Query Tool'
- Flight Register 'Reports'

and

The airline can also use third party tools to 'slice and dice' information (Business Objects/Hyperion etc.)

or acquire

- Specialist third party supplier software



Phase 1 includes four alternative ways of using/analysing the data and leaves BMI with total flexibility whether to use specialist or general third party tools, in addition to The Flight Register's.

What are the Project Gains?

Taken across three airlines, seventy-three 'events' were identified which would save revenue loss or would gain revenue.

WHAT ARE THE PROJECT GAINS?

- Three airlines have identified a total of 73 'events' where The Flight Register solution will bring them specific financial gain.
- Many of the events were Revenue Integrity Issues with substantial potential savings.
- We have selected 30 which are less obvious and which demonstrate the value of a broader approach



Thirty of the Seventy-Three Specific Financial Gains

The following thirty events, are taken from the full list:

DISTRIBUTION

- There is no, single, decision support database to generate the considerable number of reports needed across the airline or answer specific enquiries which have no report format.
- Dilution. Class abuse remains a serious problem. The new database will alert us to agency abuse, allow us to compare the ticketing class against booking class and make a choice of what action to take before or after the flight.
- Schedule changes and cancellations are a key part of call centre work. This will help us sorting problems.



SALES

- This will allow our sales managers in any office worldwide will be able to query all sales data relevant to them, 24/7.
- We would have a much better view of our forward bookings by sales channel and we could react with offers and tactical fares.



MARKETING

- Our overall capture and access to customer data is weak, especially in terms of flying patterns, frequency. The new system will help us with up-selling and cross selling.
- (Numerous similar marketing advantages were identified)
- Solving problems with club members would be greatly improved with instant access to their data.



Open Query Tool

This tool allows staff to run queries on a huge range of subjects. Marketing might ask “For next week’s Dubai flights, compare reservations with last month. Drill down to find which agents are performing.”

Revenue Management can ask ‘take all the passengers on tomorrows flight and give the names of those who previously have been ‘no shows’ on other flights.

The screenshot shows a web browser window displaying the 'The Flight Register' application. The interface includes a search panel on the left with various filters like 'Search Dates', 'Airline Code', and 'Member Number'. The main content area shows a message: 'The number of Records meeting your Search Criteria was as follows:-' followed by the number '1'. Below this, a table displays one record with the following data:

TI_serial NOT NULL	airline_code varchar(3)	member_number varchar(25)	surname varchar(31)	first_name varchar(15)	ticket_number varchar(2)	ticket_airline_code varchar(4)	ticket_serial_number
99999	LH	99225886794075	OWEN	NICOLA MS	01	0298	2130074001

The interface also features IATA and Strategic Partner logos, and a footer with the text 'The Flight Register Know your passenger'.

The Query can be on an individual or group basis

INTERLINE

- The value of any 'tactical deals' are hard to assess.
- We cannot analyse data from countries whose BSP is not administered by IATA. This system will allow us to analyse 'who is flying where'
- Advance booking reports on marketing code share services are manual and slow
- The system will allow us to profile missed interline connections, by carrier, time of day etc.
- Seat cancellations can occur behind the scenes which we are not aware of because of communication between our systems.



REVENUE MANAGEMENT

Many of the usual R.I./R.M. issues, discussed elsewhere during this conference, such as dilution and overbooking, are not repeated here

- We need to obtain flown data before the end of a promotional activity and use PNR-based pricing analysis.



REVENUE ACCOUNTS

- Requests for information from various authorities take up time.
- Dispute resolution take time and often incurs cost from our reservation system. Likewise credits and refunds.
- We could recognise fraudulent credit card bookings earlier
- Agent 'bust outs' could be predicted using the alert system.
- Individual coupons can be lost. If the boarding and seat numbers are in the new database an analysis will be possible.



AIRPORT SERVICES

- Problem Passenger List: Not available at airport.
- SS Check In Desk: Identifying what types of passengers (interline, web, call centre, travel agent, age, single, regular flyer etc.) use which check in procedure will help planning and promoting SSDs.
- Knowing how, when and where passengers check in : Helps staff rostering.
- Surveys: With better passenger information being stored, less surveys would be needed.
- Catering: Serious wastage could be cut both by having immediate access to load factors and also by profiling.



LEGAL and COMPANY AUDIT

- Having a clear traceable record of the customer's history would help in the event of accidents/major incidents/missing passengers and litigation
- Being able to run multiple passenger queries would speed the audit process for the auditors and save fees.



APIS and IMMIGRATION

- Resolving disputes/lost passports on arrival
- Making snapshots of flights pre departure at different times to check % APIS compliant
- Avoiding Fines
- Planning for new legislation based on past statistics
- Potentially an APIS interface solution



Cost of a Data Warehouse Solution

The Flight Register provides a solution, based on the actual benefit to an airline, but capped. There is no cost to you of hardware or software. The guideline cost is \$US3,000 to \$US15,000 per month for a carrier with between 5 and 15 million passengers.

The Open Query Tool and a range of reports, alerts, and worldwide access are included.

COST

The monthly charge is based on the number of 'events' where we make savings for airlines and volume of data stored.

No Capital Cost for Hardware or Software


Monthly cost likely to be between US\$3,000 and US\$15,000 for carriers with between 5 and 15 million passengers. Correspondingly less or more for larger or smaller carriers.




Summary

Summary

- A complete Data Warehouse
- Numerous Cost Savings and Revenue Opportunities
- Brings together staff across departments
- Instant access to all data, enables staff to improve their performance



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Proposal

Subject to prior discussion we are normally willing to carry out an initial assessment to list the actual benefits which would be applicable to your airline. This would form the basis of a *Business Case Analysis*.


Business Case Analysis Document

A *Business Case Analysis* Document makes it all easy. Use this document when you commence planning your project


If you would like a copy of our skeleton document, e-mail me or ask me

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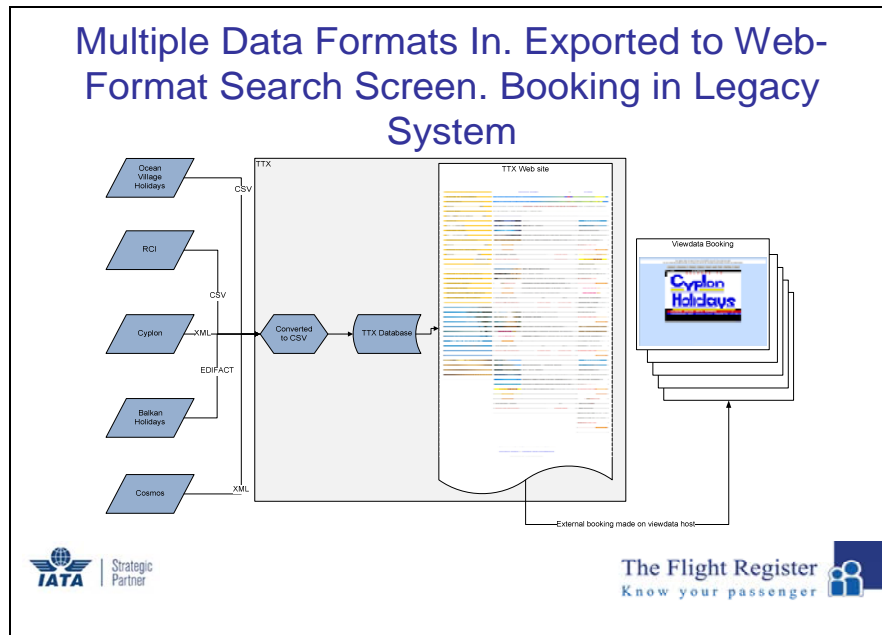
The Flight Register

The Flight Register is a UK company specialising in data management for the travel industry.

The Flight Register has two core skills. The first is building Interfaces which are capable of receiving data in any format and integrating them into a single data warehouse. The second is processing that data exporting it to *user-friendly interfaces*, so it can be viewed and interrogated easily.

For example, we built a system which imports 15 million 'availability' files *every morning* from thirty four operators. The data input flow is in multiple formats.

The data is then re-exported to travel agents. Historically, those agents have used thirty year-old toxic-green screens which are unfriendly to unskilled staff. The system presents the data in searchable web format, but when a selection is made, it drills down into the final booking screen of the legacy system. NTL and Telewest and Worldspan are the principle clients, with Yahoo using a version adapted for the internet.



Whilst working on a similar project with a GDS, we were asked by their headquarters to propose a solution for a 'flights cache' capable of handling 10,000 enquiries per second. For web bookings flight enquiries can rise to 3,000 enquiries per booking as against the 2:1 ratio which used to apply to travel agent bookings. The word got round in the airline industry and BMI, and other airlines, asked us last year to provide information solutions focussing on revenue management and revenue integrity requirements, running off a core data warehouse.

We also advice on the problems of APIS, which will soon become a real headache for airlines

Here in Amsterdam, our associate company Multrix is an application service provider, hosting hundreds of different software applications. Our clients tend to be fast growing companies with complex requirements. The operation runs out of twin data centres situated 30 kms apart, with a 24/7 support team, and provides a Tier 6, Advanced Continuity Service.

We are IATA Strategic Partners and Industry Partners of AACO.

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