



Revenue Integrity

The solution to airline revenue leakage

SITA

Table of contents

Introduction.....	3
Business drivers	4
How revenue integrity problems occur.....	5
Addressing revenue integrity issues	9
Benefits	11
Conclusion	13

Introduction

There can be no doubt that airlines are currently functioning in a harsh economic climate. Now, more than ever, they must reduce costs and maximize their revenue. But, surprisingly, many are still not realizing the benefits provided by revenue integrity programmes.

Over the last thirty years, a large number of airlines have invested heavily in traditional revenue management solutions while ignoring the possibly greater return on investment offered by revenue integrity solutions. Revenue leakage – the gap between the revenue that airlines book and the amount that they eventually receive – is a significant problem. Preventing it is especially important during periods of traffic downturn. It does not make sense to ignore the problem as so many airlines have done for so long.

What exactly is revenue integrity? It is ensuring that passengers travel within the conditions applied to their ticket. This is achieved by eliminating reservations that either create unnecessary additional costs or reduce the saleable space available to other passengers. A simpler definition is ensuring that the correct passengers travel on the correct flight at the correct fare.

This paper examines the benefits to be gained from developing a revenue integrity programme and puts the case for applying a consistent approach. It also discusses the advantages of outsourcing revenue integrity solutions to reduce costs and remove the burden of yet another IT overhead.

Revenue leakage – the gap between the revenue that airlines book and the amount that they eventually receive is a significant problem.

Business drivers

There are a number of business drivers for implementing revenue integrity solutions. However, the principal objectives are to maximize the return on investment made in aircraft and routes and to increase customer satisfaction.

The AEA estimates the net cost of no-shows alone to be an average of 1.6 percent of annual revenue for European carriers.

We have already stated that airlines must ensure that the correct passengers travel on the correct flight at the correct fare. If this doesn't happen then airline investments are not being maximized. Abuse of the pricing structure rules causes revenue leakage or additional cost to recover lost revenue at a later stage.

Two major causes of unnecessary cost to airlines are 'no-shows' by booked passengers and late cancellations. These are proven to be as high as 30-40 percent on some routes in certain classes and average out at 15 percent for the industry worldwide. No-shows are the biggest problem. The Association of European Airlines (AEA) estimates the net cost to be an average of 1.6 percent of annual revenue for European carriers.

As well as additional cost, no-shows and late cancellations produce unreliable revenue management data. This results in poor forecasting which has a knock-on effect on scheduling.

Finally no-shows and late cancellations reduce customer satisfaction with an airline. They mean a lower seat access level for real customers plus, traditionally, overbooking is used to recover some of the damage caused by passengers who do not materialize. Overbooking based on unreliable booking data can result in offloads or downgrades with the associated detrimental effect on customer satisfaction. Recently huge pressure has arisen from consumer and political groups to prevent airlines increasing overbooking to combat the growing no-show problem. Overbooking is not the way forward.

How revenue integrity problems occur

Travel agencies, customers and airlines themselves all contribute to the problems that cause revenue leakage for airlines.

Computer reservation systems, ticketing, airport and revenue accounting processes all provide opportunities for an individual to intentionally or accidentally cause the loss of considerable amounts of money.

Three main problem sources have been identified:

- Badly trained staff at travel agencies and airlines causing accidental revenue abuses.
- Airlines unintentionally causing problems through the schedule change process. For example, a passenger can suffer a misconnection from one flight to another due to one of the flights changing its arrival or departure time. If this results in the passenger missing their second flight, a no-show occurs.
- Creative travel agents and customers deliberately abusing the revenue system. This is the most frequent cause of revenue leakage. It is, however, the easiest for an airline to remedy with a little determination, focus and a small amount of investment.

Revenue integrity problems can present themselves in many forms and it is worth emphasizing that an airline's sales are made through various distribution channels. Airlines have little direct control over these channels

and most do nothing to prevent any of the revenue integrity problems described here.

Given that many distribution channels charge on the basis of bookings held, not bookings that materialize as passengers on a flight, there is no incentive to reduce problems on behalf of the airlines. To do so would result in loss of revenue to the distribution channel provider.

The main revenue integrity problems include:

Unticketed bookings

Bookings which do not have legitimate ticketing details entered into the booking by the deadline specified in the conditions. This generally results in no passenger travelling leaving an unoccupied seat, which would have generated revenue for the airline.

Incorrect booking classes

In order to gain a sale the originator of the booking deliberately books into an incorrect selling class to secure space on a flight that has the desired legal classes closed for sale. This results in the airline losing the difference between the fare that should have been charged for the class booked and the fare that the passenger actually paid.

The abuses described in this section produce a number of unwanted results for airlines.

Illegal class mix

A booking made with an illegal combination of classes in order to secure space that is not then ticketed at the correct price. For example, if an advanced purchase (apex) fare is available on an outbound flight but not on the return flight requested by a passenger, an agent may book the return flight at a higher priced class but ticket for the apex fare. The airline loses the difference between the apex fare and the higher priced fare.

Abuse of fare rules

A wide range of abuse can occur. Examples include back dating the validation date in order to ticket at an advance purchase fare and not observing rules associated to the fare conditions.

Bookings below Minimum Connection Time (MCT)

MCTs between terminals or airports are created to ensure that passengers and their baggage make a successful transfer between connecting flights. However, many agents and passengers ignore MCTs in order to minimize overall journey times. This often results in no-shows for the second flight, as the passenger is unable to make the flight connection.

Passives

Passives occur when a booking record is created purely as a way of issuing a ticket for a booking that has already been made elsewhere without a ticket being issued. For example, a passenger may book a ticket directly with an airline but not be issued with a ticket. If that passenger then asks a travel agent to issue them with a ticket, the agent uses a passive booking to produce the ticket. Airlines will receive a Global Distribution System (GDS) or Computer Reservation System (CRS) charge for passives. This charge is typically around US\$ 5 per booking record and can amount to a sizeable sum if passives are used frequently.

Space blocking

Agents often deliberately block airline seats speculatively in order to cater for possible future bookings that may not materialize. At best this results in the temporary blocking of space preventing valid bookings being made. Late cancellations occur when the agent releases spaces they cannot sell. At worst, space blocking results in no-shows upon departure.

Duplicate bookings (dupes)

Sometimes more than one booking is made for the same passenger. This results in no-shows and the blocking of airline seats for legitimate sales. Dupes are often caused by passengers shopping around for the best deal and leaving a trail of speculative bookings behind them.

Cross border selling abuse

To compete in global markets, carriers often have favourable fares to encourage passengers to travel from one point to another via a secondary point – usually the carriers home market. These fares are usually cheaper than a direct ticket as they recognize the inconvenience of connecting to another service and the longer journey time. As a result these fares can often undercut the fare applied from the home market. For example, a Stockholm to Los Angeles fare via London is likely to be cheaper than the London to Los Angeles fare. This practice is undertaken by carriers to fill space that would otherwise be flown empty. There is an illegal practice, which involves a passenger trying to fly the local sector, in our example, London to Los Angeles by only using the second coupon of the Stockholm to Los Angeles

via London ticket. This is known as ‘cross border selling abuse’ and is illegal as it breaks the original intent and terms of the contract. This practice is a major source of revenue leakage for global carriers but is often totally overlooked by carriers who only consider booked loads as a measure of their success.

Multiple bookings on the same flight

This is the deliberate creation of multiple bookings on one flight, sometimes in different selling classes or cabins, in order to block space. Airline employees have been found guilty of this practice, either to prevent offloads on a flight and avoid the major aggravation this causes for airline staff, or in order to increase the chances of an employee travelling on a staff stand-by ticket.

Multiple bookings on several flights

This is the deliberate creation of a number of bookings for the same passenger across a range of flights, usually to the same destination. It is done to protect space on a number of services when the passenger is unsure as to which flight they really want to travel on. The practice prevents legitimate bookings being made and can result in no-shows if not identified and rectified in time.

Multiple bookings on multiple carriers

A variation of multiple bookings on several flights, this is the creation of bookings across several carriers for the same passenger usually on the same journey, for example London to New York. This is virtually impossible to deal with as each carrier is unaware of the space blocked on a competitor's service and doesn't have access to any shared data, even in an alliance situation.

No names in a group or individual booking

Sometimes a booking is made without a legitimate passenger name being entered by the stipulated deadline. Left unchecked, these bookings result in no-shows or late cancellations by the agent, both of which mean revenue loss to the carrier.

Name changes

The intentional changing of a name late in the booking cycle converts a speculative reservation into a real one and is done to secure a favourable fare, for example an advance purchase 21 day excursion fare.

Agents create speculative bookings, which can be advertised at favourable rates within the late high yield selling period. This places agents adhering to the legal framework at a major disadvantage. The airline loses revenue and in many cases the practice results in no-shows when real passengers fail to materialize to buy the speculative space. Fictitious names are often used, some of which are very obvious such as Mickey Mouse, in order to disguise a fictitious booking which might be picked up if no name is in the name field of the booking.

The abuses described in this section produce a number of unwanted results for airlines. No-shows and late cancellations are increased. Revenue Management data becomes unreliable. Revenue is lost when pricing structure rules are not adhered to. Costs increase due to meal wastage from the no-shows and the additional distribution costs from bookings that incur a GDS charge but do not produce a real passenger. And finally real customers experience lower seat availability as fictitious bookings prevent real bookings being made.

Addressing revenue integrity issues

A comprehensive revenue integrity programme is the only real way to remedy the revenue leakage caused by the problems examined in this paper.

A number of experts in the aviation industry recognized this fact several years ago and have been working on solutions ever since.

An industry focus group ARIG (Airline Revenue Integrity Group) exists to help airlines with the issues of revenue integrity. More information can be found at www.arigroup.org

What conclusions are the experts reaching?

The most important aspect of successful revenue integrity programmes appears to be a consistent approach 100 percent of the time. Sporadic checks by airports, reservations staff or revenue management analysts generally do more harm than good as they result in distorted passenger demand forecasts, no-show data and cancellation data which in turn can lead to offloads, downgrades and empty seats. Relying on check-in agents to catch and deal with all abuses is not a sensible way forward.

Paul Rose, a revenue integrity consultant and founder of ARIG, advises: "Actions should always be taken at the same point in the booking cycle on all flights or not at all. Airlines will succeed by automating revenue integrity processes and applying them consistently."

It is important to take an holistic approach and consider both revenue management and revenue integrity. Traditional revenue or yield management maximizes revenue in the pre-booking period. However, this represents a very limited part of the total revenue opportunity. When a booking is made, there is no guarantee it will be used and even if it is used it is very likely to get changed along the way. As we have already seen, revenue disappears with problems such as duplicate bookings and unticketed bookings, multiple bookings and name changes. A complete revenue programme is necessary.

It is important to take an holistic approach and combine both revenue management and revenue integrity.

Claudio Hoermann, Manager – Quality Control, Pricing and Revenue Management at Lufthansa states: “At Lufthansa we moved from isolated activities in different areas to a cross-functional team, including members from Stations, Sales and Yield Management. In this Revenue Integrity team we are in the process of consolidating all activities that protect our revenue, that is the investigation of processes with potential for misuse, fare auditing, and fraud prevention issues. Because of the central co-ordination of all these activities under one umbrella, we have been able to close many gaps that led to losses in the past, and have improved revenue by a consequent prosecution of misuse or fraud.”

Many airlines that began by developing their own, in-house revenue integrity software are now buying it from external providers or outsourcing the entire problem to an Application Service Provider (ASP).

Outsourcing the solving of revenue problems to an ASP is an attractive option for many carriers in the current economic climate. It avoids the need to create a revenue integrity department in-house with its associated costs and removes the need to support yet another IT overhead.

Airlines cannot entirely solve the revenue integrity problem alone. Their sales occur through a wide variety of distribution channels over which the airlines have little direct control. We have already seen how these channels charge on the basis of bookings held not passengers that materialize on a flight. They obviously have no incentive to reduce the resulting revenue leakage for the airlines. Airlines must work with the GDSs to encourage them to supply more revenue integrity checks at source.

Benefits

When considering whether to invest in a revenue integrity programme, airlines often need to be convinced that they will receive a worthwhile return on their investment.

Paul Rose, founder of ARIG, considers there is no doubt about worthwhile returns being realized. He says: "Several of the leading airline exponents of revenue integrity programmes have achieved more than US\$ 75 million per annum in measurable benefits for an annual investment of less than US\$ 790,000."

A good, consistent revenue integrity programme will reduce revenue leakage in two ways: increasing passenger access to seats through the removal of fictitious Passenger Name Records (PNRs) and reducing on-departure no-shows and cancellations that occur so late in the booking cycle that the unsold space cannot be re-sold.

Costs are lowered. For example, a typical airline meal costs between US\$ 7 and US\$ 30 depending on the cabin booked. Meals are catered for based on the booked load so no-shows often result in over-catered services. Matching resources to more accurate demand figures can significantly reduce customer service costs.

Customer satisfaction levels increase, again due to increasing passenger access to seats through the removal of fictitious PNRs.

The improved revenue management data that results from a good revenue integrity programme leads to better forecasting and scheduling. Over-forecasting is reduced, improving seat factors and revenues. Capacity can be better matched to demand either through an ad hoc schedule change approach, or by changing components of a future schedule such as capacity, frequency, routing or product.

David Kendell, Manager – Revenue Integrity for Continental Airlines, says "Revenue Integrity plays a vital role in supply chain management and the full integration of key internal processes that establish the link to revenue optimization. Understanding Continental Airlines' B2B and B2C relationships allows Revenue Integrity to implement systems and solutions capable of adding real value to both Continental Airlines and its customers."

The current trend for carriers to implement codeshare arrangements with other carriers increases the need for revenue integrity programmes.

Anyone still unconvinced about the benefits of a revenue integrity programme should consider the following basic business scenario. Imagine an airline operates 600 flights a day, and assume over-sales on 30 percent of their flights by an average of 5 passengers per flight. This produces 900 passengers who are denied boarding every day. If the airline only provides US\$ 150 in compensation per passenger (which is conservative on a global network) then this amounts to a compensation cost of US\$ 135,000 per day. Expand this to a

yearly cost and it represents an annual cost of US\$ 49,275,000. A good revenue integrity programme can be set up and run for a fraction of this cost each year. It would significantly reduce the number of offloaded passengers while providing additional benefits in revenue recovery, fraud prevention, reduction of costs and increased seat availability, all resulting in increased revenue for the airline.

It is worth noting that the current trend for airlines to implement codeshare arrangements with other carriers increases the need for revenue integrity programmes as the operating airline is effectively losing control of a large proportion of their inventory. Airlines that operate block codeshare arrangements are particularly vulnerable. In this situation automated checks become even more important.

Conclusion

Robust revenue integrity programmes stem from automating the process and applying it consistently.

The seemingly small amounts of revenue leakage which occur as the result of no-shows and last minute cancellations can result in large losses when multiplied by the many times they occur over the course of a year. Airlines should be in no doubt as to the benefits of investing in revenue integrity. An automated, consistent system has a relatively low cost and delivers a proven high return on investment. Some of the world's leading carriers such as British Airways, Iberia, American Airlines, Lufthansa, Aer Lingus, Continental and Air France have openly stated that they have achieved very large, measurable financial benefits in return for relatively low annual investments in revenue integrity.

This paper has examined some of the additional benefits of a good revenue integrity programme that might not be so immediately obvious. Benefits such as more reliable data that leads to an improvement in the overall performance of revenue management systems.

Improving the bottom line is essential to your business. Revenue integrity is a proven part of that, providing quick, easily identifiable returns. More and more airlines are recognizing the benefits to be gained. Some develop their own revenue integrity software, but this can lead to lost revenue opportunities for every year the development takes. For many, outsourcing is an attractive alternative. It avoids the costs associated with another IT overhead and is a cost effective way of gaining access to expertise and experience which can be difficult and expensive to obtain and retain in-house.

SITA is currently very focused on the issue of revenue integrity. We already deliver a range of solutions to meet the needs of the airline industry and we are constantly enhancing our offering. Should you require further information on SITA's capabilities in this area, please contact your local representative or e-mail us at info.pts@sita.aero

Airlines should be under no doubt as to the benefits of investing in revenue integrity.

Notes

Notes

Notes



**For further information,
please contact SITA:**

Europe

Weyside Park, Godalming,
Surrey, GU7 1XE,
United Kingdom
tel: +44 (0) 1483 414411
fax: +44 (0) 1483 414122

West Pier Business Campus
Old Dunleary Road
Dun Laoghaire
Co. Dublin, Ireland
tel: +353 1 663 7200
fax: +353 1 663 7227

Americas

3100 Cumberland Boulevard,
Suite 200, Atlanta,
GA 30339, USA
tel: +1 770 850 4500
fax: +1 770 612 2265

Asia Pacific

11 Loyang Way,
Singapore 508723,
Republic of Singapore
tel: +65 6545 3711
fax: +65 6548 2635

Middle East and Africa

Bachoura, Khandak El-Ghamik,
Daoud Ammoun Street, SITA
building, P.O. Box 11-6524,
Beirut, Lebanon
tel: +961 (1) 657200
fax: +961 (1) 655951

e-mail: info.pts@sita.aero

www.sita.aero/passenger

© SITA 05/WP-PTS-024(2)A4

All trademarks acknowledged. Specifications
subject to change without prior notice.

This literature provides outline information
only and (unless specifically agreed to the
contrary by SITA in writing) is not part of any
order or contract.