

Total Revenue Integrity

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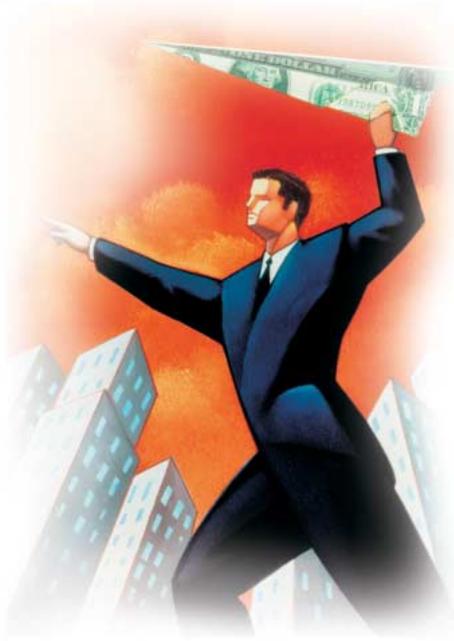
The Missing Money

Airlines are discovering how to make a significant difference to the bottom line

Also inside:

- **Revenue Integrity:**
The smartest management tool for leading airlines
- **What leading airlines are doing now**
- **The added value:**
Mutual Success & Empowerment
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Total Revenue Integrity

Smarter Management for Smarter Airlines

What have you heard about Revenue Integrity? Probably you've heard that it's the principle of stopping revenue leakage by examining bookings and reservations to ensure they are genuine. This is true. But it's also old news.

The latest trend in airline management is **Total Revenue Integrity**

The difference is in the scope of the solutions. Conventional Revenue Integrity ("Booking Integrity") looks at booking problems and solves these, mainly focusing on cost savings. Total Revenue Integrity does this too. But it does MORE and it does it BETTER because it doesn't just look at bookings; Total Revenue Integrity addresses a much wider scope, meaning both cost savings and increased revenue.

Historically, airlines have focused on aircraft technology, safety and in-flight service to improve their operations, but labor issues, yield management, excess capacity, and increased competition are now competing for airlines' attention. As a result, airlines haven't given their operations scrutiny as have many other successful mature industries. The most effective processes airlines can adopt are those that aim at process re-engineering, including stopping revenue leakages *wherever* they can be found in the organization. This is the practice of Total Revenue Integrity.

This publication will introduce you to the concept of Total Revenue Integrity and show you why it represents the most significant management change you can make to your business.

Minimum risk – maximum result.

*Leading airlines are discovering that applying Revenue Integrity principles to stem revenue leakage can yield **more revenue improvements** and **cost reductions** than any other changes to their business.*

Total Revenue Integrity means profit improvement on the bottom line – lots of it:

Lufthansa

190 million \$ / Year

Conservative estimate of revenue leakages
(Ref ARIG 2002)

KLM

70 million \$ / Year

Profit increase from TTL activity (Ref. ARIG 2002)

See page 14 for even more proof.

Total Revenue Integrity will help you find the missing money.

A man with dark, wavy hair and a light beard is shown in profile, looking upwards and to the left. He has his right hand pressed against his lips in a thoughtful or surprised gesture. He is wearing a dark blue suit jacket, a white dress shirt, and a light blue patterned tie. The background is a plain, light-colored wall.

Cover Story
The Missing Money

Airlines are discovering how to make a big difference on the bottom line

Cover story: The Missing Money

"An airline with an annual revenue of \$1 billion can be missing out on \$164,000 PER DAY in lost revenues!"

What is happening to that money?

Airlines are structured around silos, which were created by legacy systems, as well as processes and practice. It makes sense that very little information, data or knowledge flows between these silos. These information and process gaps create substantial revenue leakage where revenue is lost between or within the silo.

Business silos created by legacy systems



Airlines are estimating that at least **4-6%** of their revenue is leaking out of the company. **For an airline with an annual revenue of \$1,000,000,000, this can mean almost \$164,000 per day!** As this leakage is usually not measured, however, the magnitude of the problem is not recognized, and it becomes mentally written-off. At the same time, management is spending time and effort on less effective ways of improving profits.

Revenue Integrity principles aim at stemming this leakage by making sure that:

- **What is reserved gets sold**
- **What is sold gets delivered – no more, no less**
- **What gets delivered gets billed**

Stopping revenue leakage has a direct impact on the bottom line and is therefore one of the most compelling profit improvement opportunities for airlines.

Airlines comment on the benefits of Total Revenue Integrity

All major airlines have implemented different processes and practices to ensure they maintain quality revenues. Total Revenue Integrity, as explained in “The Missing Money”, helps to streamline these processes and practices so that all areas of an airline are working together to ensure that long-term quality earnings can be achieved. Here is what representatives at some major airlines had to say about their experiences with Revenue Integrity:

Finnair

“Revenue Integrity principles have been introduced at Finnair with huge success. The initial benefits from cleaning our inventory were more than our investment – an unmatched achievement.” *Lassi Rönkkönen, Director Revenue Management, Finnair*

Icelandair

“The Calidris solution was a revolution in our operation. It enables us to target bookings with quality problems specifically, instead of manually going through all bookings on whole flights to look for those problems. The results have been outstanding. Our benefits are both on the cost side and in increased revenue. The system paid for itself by savings in booking fees during just the first three months. But the revenue impact is far greater. It is clear that the system pays for itself over and over again each and every month.”

Stefan Eyjolfsson, Director of Revenue Management, Icelandair

Calidris

“We truly believe that implementing total Revenue Integrity solutions can bring more positive results than any other change to your business.” *Kolbeinn Arinbjarnason, Co-Founder, Calidris*

The Impact

Airlines are now looking at revenue leakage recovery as an opportunity every bit as attractive in financial terms as entering a new market, restructuring an operation or acquiring assets. Viewed on a risk-adjusted basis, revenue integrity opportunities are even more compelling. The risks are far lower than other measures, and the rewards more tangible.

Finding the missing money

Booking Integrity solutions find the common booking problems and others – it's up to you what you would like to look for! – and allow the user to either warn a travel agent, or cancel a booking. This makes the seat available for re-sale well in advance of the departure time, making further revenue more likely.

But taking a broader approach will bring even more benefits.

Total Revenue Integrity principles can also apply to ticketing procedures, departure control, e-ticketing, business intelligence, and customer relationship management. Such an approach allows you to maximize benefits across a broad range of disciplines, and to share this knowledge to further develop the tools you use.

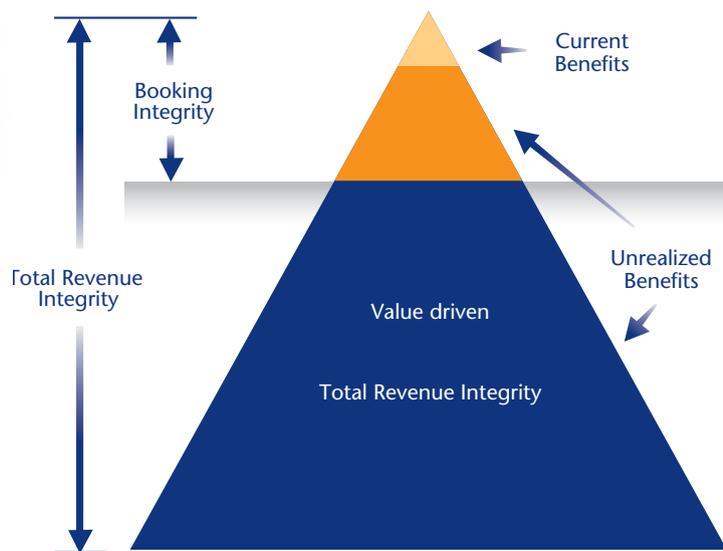
By leveraging the in-house knowledge and industry best practices, processes can be re-engineered and automated, and staff empowered to make intelligent decisions and to enforce them effectively.

With the introduction of Total Revenue Integrity principles, airlines are realizing profit improvements through:

- *Higher load factors*
- *Increased number of seats open for sale throughout the entire booking period*
- *Fewer no-shows and fewer denied boarding*
- *Reduced GDS fees*
- *Improved agent behavior*
- *Fewer resources required to analyze bookings and tickets*
- *More effective customer relationship management*
- *Improved cash flows due to reservations ticketed earlier*
- *New stream of business intelligence*

Counting the Benefits

Building on current Revenue Integrity success to realize further benefits



The Latest!

Calidris Passenger Integrity uses proven Revenue Integrity principles to ensure airlines' compliance with tough new APIS requirements. Now airlines can use their Revenue Integrity platform to introduce passenger integrity solutions that will, using an open database, enable the collection of APIS upon booking, thereby saving time and money.



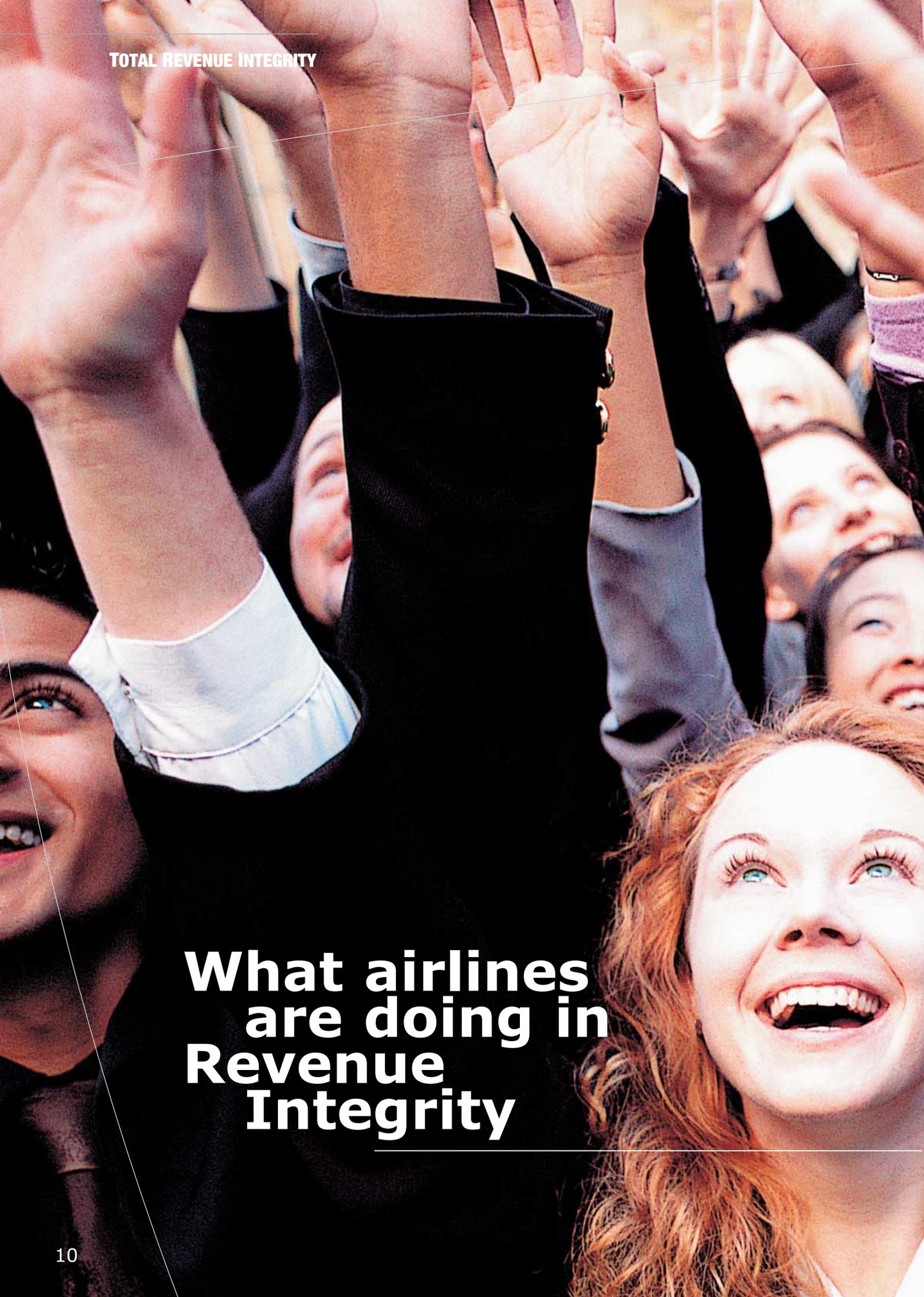
The Solution

In order to stop revenue leakage, the silos created by legacy systems must be broken down. Information is the key instrument for this. The challenge is to build a comprehensive database structure on a solid data model and sound data integration.

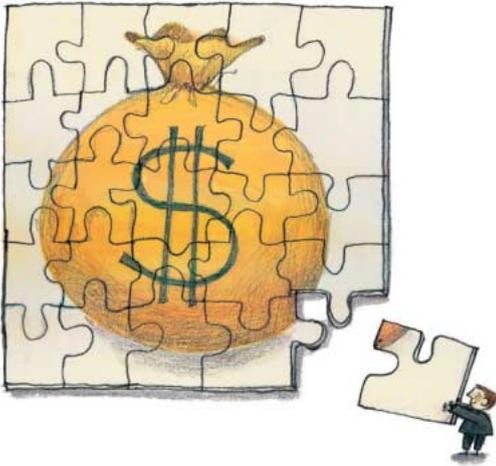
In order to harvest the maximum benefit from revenue integrity opportunities, airlines must take a fresh approach to the problem. The organization must be focused on revenue and profit, rather than simply reservations and load factors, with participation from all relevant players.

Total Revenue Integrity helps find your missing money -

- The latest and smartest revenue management change
- The highest rate of return on investment
- Profit improvement from un-exploited sources



What airlines are doing in Revenue Integrity



What airlines are doing

Leading airlines have already implemented Revenue Integrity solutions. These are some of the factors they deem most crucial to their solutions.

- 1. Empowerment:** Revenue Integrity empowers airline staff to make the differences that will raise revenues and the flexibility to tailor individual enquiries and processes.
- 2. Better Customer Service:** Revenue Integrity solutions can provide airlines with crucial information on their most valuable passengers, so they can improve frequent flyer programs and increase customer loyalty.
- 3. Mutual Success:** The benefits foster a mutual success between airlines, their customers, and their partners.
- 4. Wider Scope:** New applications mean that Revenue Integrity can apply to so much more than booking problems – including e-ticketing and departure control records.
- 5. Holistic Approach:** In order to maximize results, Revenue Integrity must become a COMPANY wide change. It affects all major processes and practices – from distribution to delivery and from the agent to the CEO.
- 6. Business Intelligence:** The extra information gathered by Revenue Integrity solutions help to increase customer satisfaction and loyalty, as well as facilitating better business planning.

Airline Marketing

Managing market opportunities and bringing down costs.

Airlines at the forefront of customer service need support infrastructures that are at the forefront of revenue integrity management. The ability to spot booking duplicates and rectify them is not enough.

Airlines themselves need to be **empowered** to identify their own problems and implement the best, most bespoke, way to fix them. This keeps you **in control** and therefore able to **maximize** the benefits of a given solution.

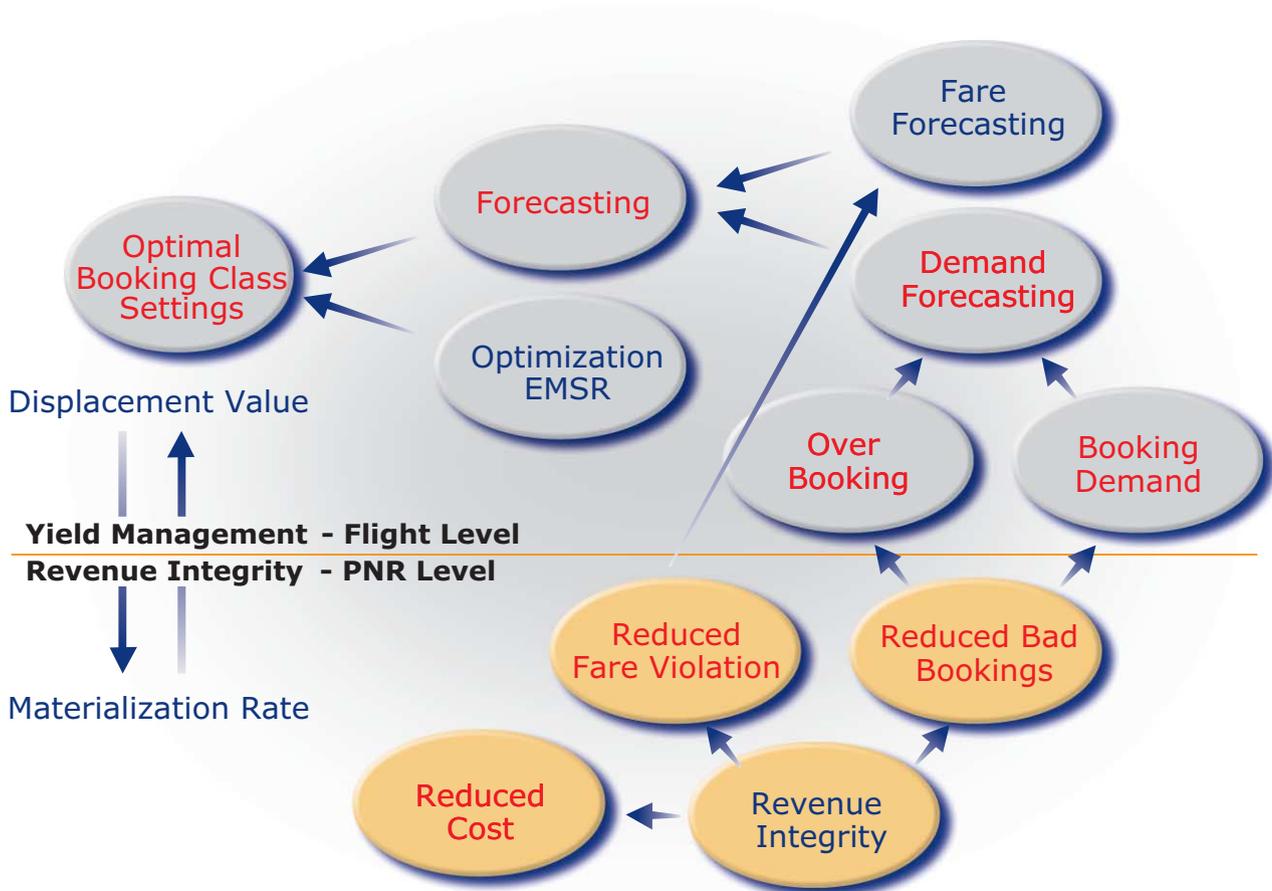


Empowerment means easy process creation. The latest Revenue Integrity solutions allow you to manually change processes yourself, rather than using call centers or complicated programming languages.

Common Airline Problems:

Booking Integrity	
Problem	Definition
Not-Ticketed Bookings	Bookings that have not been ticketed, although, according to applicable fare rules, they should have been.
Duplicate Bookings	The same person holds two or more confirmed reservations for a similar itinerary.
Fake names	Bookings that have been made by a booking agent using fake names, either for testing or training purposes, or to reserve space for a potential sale later.
Redundant Itinerary	The same booking has two or more confirmed flight segments for a similar itinerary where only one segment can ever be flown.
Incomplete Itinerary	A booking that has some confirmed segments, but also waitlisted segment(s) that need(s) to be confirmed if the passenger is to be able to travel his/her intended itinerary. If the waitlisted segments are not confirmed, the confirmed segments cannot be flown.
Booking Class Mismatch	A booking that has some confirmed segments booked on one booking class, but others on another booking class. This indicates a potential fare rule violation.
Fake Tickets	Agents are known to use all possible means to circumvent the rules that are being enforced. Issuing a fake ticket number is a well-known practice.
Ticketing Integrity	
Routing Violation	Routing violations such as point of sales violation where the first coupon is thrown away and the corresponding segment is cancelled after ticketing.
Fare Rule Violation	Once a booking has been ticketed and the Fare Basis Code is known the fare rules are looked up in the fare database and compared to the booking.
Group Integrity	
Group Firming	Manage group firming according to airline group firming profile.
Group Acceptance	Allows the Group Analyst to quickly assess the status of the flights and to decide whether to accept or deny the group.
Group Evaluation	An extension to the Group Acceptance module where the revenue impact is considered. Evaluating groups and series using based on materialization rate forecast and displacement value.
Passenger Integrity	
APIS collection	Minimize the cost of collecting APIS information by automating processes.
Watch lists	Bookings on certain routes are compared to official watch lists and if a match is found, an appropriate action is taken.
Revenue Intelligence	
Revenue Forecasting	Use best information from YM, RI or revenue accounting at all times to create the best possible forecast of future revenue.
Agent Integrity	
Varying quality in travel agents	Some agents follow the rules more closely than others. Agents are scored according to their compliance and processes can be enforced differently depending on the agent scoring.
e-Ticketing Integrity	
e-ticket eligibility	Determines if e-ticket can be issued.
Ticket information update	Each name-segment analyzed to detect if there is a discrepancy in the e-ticket and updated if necessary.
Total Revenue Integrity Solutions will help to solve all of these problems.	

Look for synergy between Yield Management and Revenue Integrity



Implementing a Total Revenue Integrity solution will also help Yield Management systems to become more accurate.

Revenue Integrity differs from many other disciplines because airlines benefit from co-operation in this field. For example, when it comes to booking and ticketing integrity, the long-term goal is to bring more discipline to the sales channels. If more airlines are practicing Revenue Integrity, the quicker the travel agent will adopt to the new discipline – benefiting all the airlines in question.

What else can Revenue Integrity do?

- Revenue Integrity improves process management by creating a system for monitoring processes in bookings, reservations, and departure control systems.
- Revenue Integrity benefits customer relationship management and empowers you to monitor trends and reservations of your most valuable customers. This information can be used to further tailor benefits to them.
- Revenue Integrity can provide you with business intelligence on passenger trends, booking and reservation statistics and other vital information for future planning.

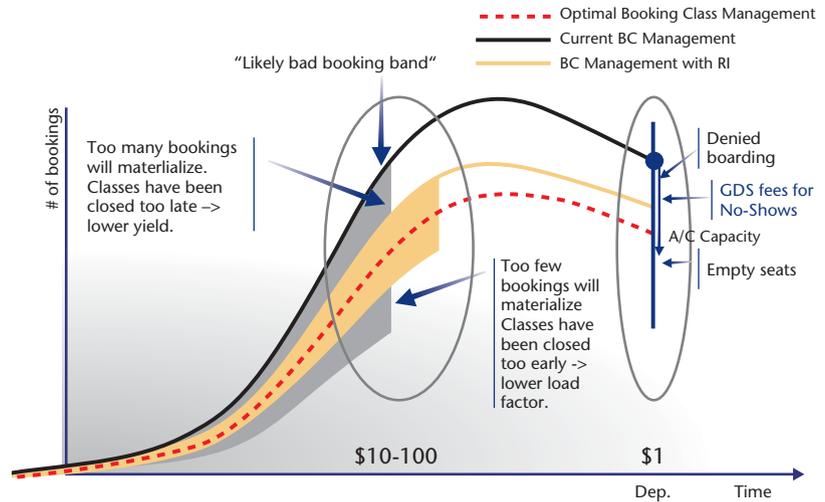


The Bottom Line

Without any form of revenue integrity, airlines are losing at least 4-6% of their revenue per day.

Focus on the most valuable opportunity not only the most obvious

Investment in leading Revenue Integrity solutions would, using a conservative estimate, pay for itself in re-captured revenues within only a few days!



Total Revenue Integrity solutions allow airlines to automate processes which are easy to maintain, thereby freeing up valuable resources to work on the key issues that are worth the most.

In today's world, airlines are more concerned about costs than ever before. Staying one step ahead of the competition, while keeping costs low and customer service high, are crucial, but these alone do not guarantee an airline's survival in the face of so many threats.

For the finance team, the priority is to cut costs and to save money. **Revenue Integrity will help you in this respect like no other change can.**

By looking at the top 10 biggest airlines by revenue, it is estimated that they could capture a very least of 4% of their revenues by implementing a comprehensive Revenue Integrity program, like Calidris Integrity. Using the revenues of the 10 biggest airlines, this equates to \$5.5 BILLION per year, or a staggering \$15.2 million per day in lost revenue.

For an airline with \$1 billion in annual revenue, a conservative estimate suggests that they are missing \$164,000 PER DAY in lost revenues. But there is just a small investment to make: **For our 'average' airline, an investment in leading Revenue Integrity solutions would, using a conservative estimate, pay for itself in re-captured revenues within only a few days!**

Based on saving a very conservative 2% of revenue and implementing the Calidris Integrity system.

Where does the money come from?

- Lower denied boarding costs
- Increased sales due to released seats
- Money in the bank earlier thanks to Ticket Time Limit rules being enforced
- Higher yield due to improved Yield Management

Your return on investment is guaranteed to save you money on the bottom line. That is what keeps airlines in business.

Lufthansa

190 million \$ / Year

Conservative estimate of revenue leakages (Ref. ARIG 2002)

KLM

70 million \$ / Year

Profit increase from TTL activity (Ref. ARIG 2002)

Finnair

20 million \$ / Year

Profit increase from RI2001 activity (Ref. ARIG 2002)

The Latest Trends

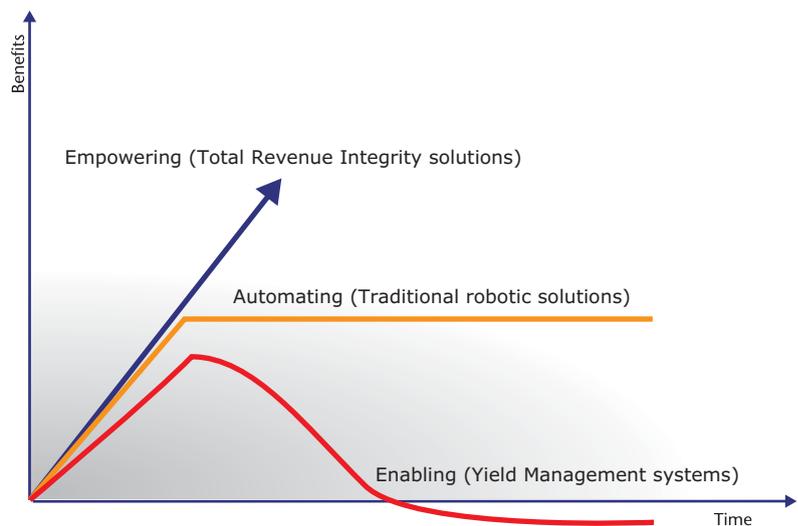
Best of breed technologies guarantee maximum results for minimum investment.

Investing in Revenue Integrity solutions has long-term impact. New systems must meet both current and future needs. To achieve this, they must be easy to implement, flexible, and adaptable. Using best of breed technologies will ensure that you get the most from any system. Here are some of the latest trends in Revenue Integrity technologies:

Minimizing the risk in IT investment

Revenue Integrity solutions are based on proven technologies and are one of the lowest risk IT investments possible. The latest technologies offer more, however. Total Revenue Integrity systems contain powerful analysis and process management tools, empowering the user to tailor the software to his or her specific needs and rules. The process management means you get all the business logic without all the coding work involved. And all of this means users will reap the benefits of a proven architecture.

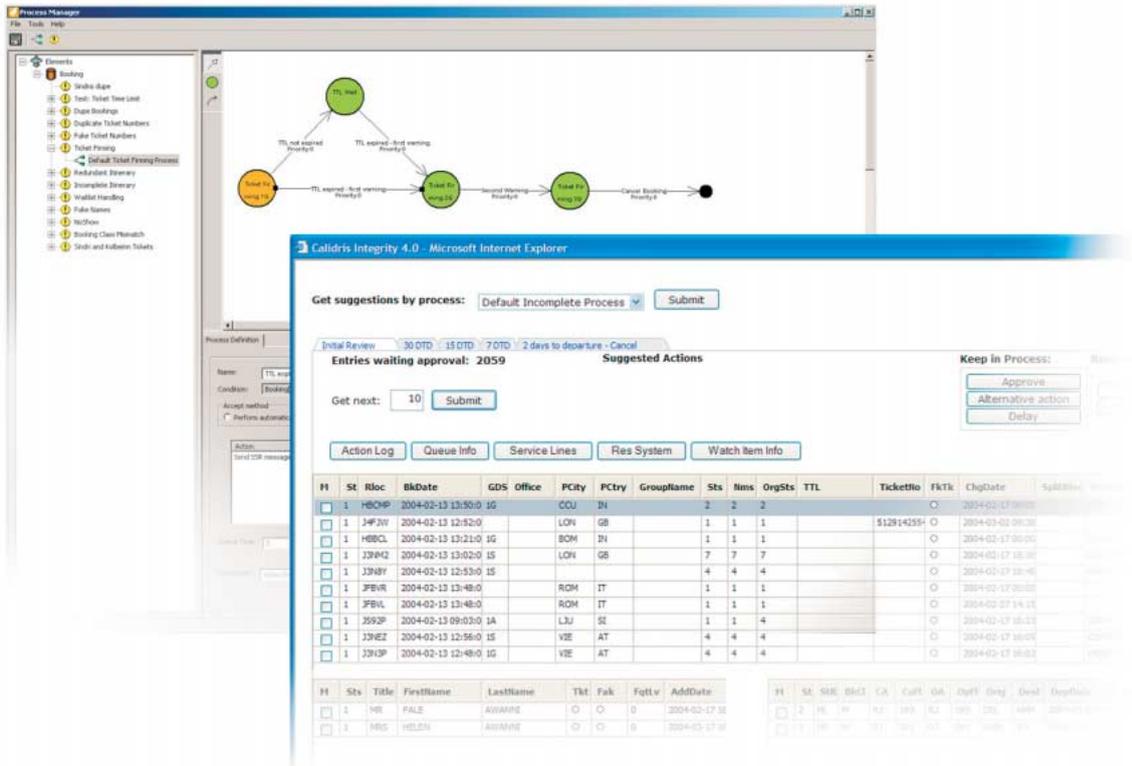
IT investments do not all offer sustainable benefits



Flexible databases and architecture

Revenue Integrity solutions need to be flexible. Message queues like JMS or MQSeries facilitates information flowing from the legacy systems to the Revenue Integrity solution. This enables it to easily plug into existing EAI (Enterprise Application Integration) tools. J2EE technology ensures the scalability and fault tolerance of the solution, while databases like Oracle and DB2 are capable of providing the data in a format suitable for business intelligence applications. The smartest and newest Revenue Integrity architecture has all of these components and is flexible enough to transfer data and harvest it from airlines' legacy systems.

Calidris Integrity, a Total Revenue Integrity solution



Extendible and open API systems

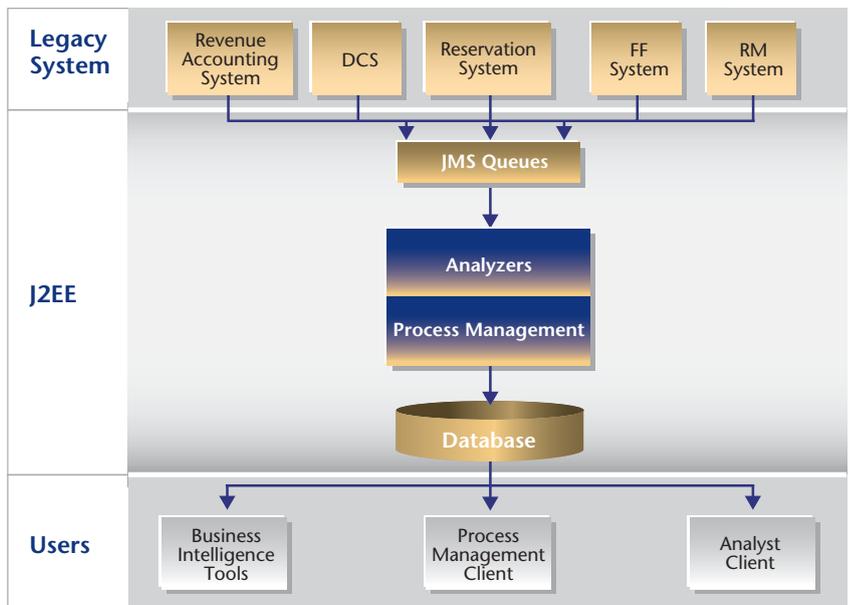
The latest Total Revenue Integrity systems are extremely flexible for fulfilling many business needs. To ensure complete satisfaction, however, the introduction of open API (Application Program Interface) systems will allow the user to create his or her own analyzers to detect and actions to respond to various Revenue Integrity problems, and to plug into any existing architecture for business information or other purposes.

Easier implementation

The latest technology is all provided by an ASP, meaning there is no software to send, no lengthy set-up process, and only user training to provide. Implementation couldn't be easier. Of course back up support is also provided 24 hours a day, 7 days a week.

These technologies represent the cutting edge of what Revenue Integrity solutions are now capable.

The structure of the Calidris Integrity 4.0 solution





*An airline with \$1 billion
in revenues loses \$164,000
each day by not applying total
revenue integrity.*



In the Next Issue

How it Happened – True Stories from airlines about the benefits of revenue integrity:

Royal Jordanian

Lowered Costs and Higher Revenues from new practices.

Finnair

Monitoring Group bookings for better control.

Emirates

Working together to build success and growth.

