With 15-20 different ways that airlines can leak revenue, it is estimated that some carriers are losing up to several hundreds of millions dollars per year in lost sales and revenue. There are several systems and IT products on the market that can help stem these losses.

Systems & techniques to combat revenue leakage

The majority of airlines are each guilty of leaking tens or hundreds of millions of dollars of passenger revenue each year through up to 15 or 20 ways at various stages of the passenger sales process. In recent years software products and systems have become available for airlines to plug the largest leakages. Some airlines have experienced benefits of up to a few hundred millions of dollars in improved revenue.

Sources of leakage

There are numerous ways airlines can leak revenue or lose the ability to maximise its generation, and these start with the distribution process. "Revenue integrity is the utilisation of every seat, getting all the revenue that is possible to achieve and not losing any sales opportunity," explains Magnus Oskarrson, chief executive officer at Calidris. "A major issue airlines face with extracting all possible revenue is that incorrect fares are frequently used. Overall, small improvements in revenue integrity can make large differences in overall revenue.

"There are five main phases in the passenger sales process where there are revenue integrity issues, or where airlines experience revenue leakage," continues Oskarrson. "These are marketing and distribution, reservations, ticketing, revenue accounting, and fulfilment at passenger check-in.

While many airlines have seen increasing volumes of sales made through their own websites, a large percentage of sales are still made via travel agents and third party websites via global distribution systems (GDSs) for some airlines. This is particularly true of the higher yielding portion of passengers. Airlines still use GDSs to maximise their marketing and penetration into travel agents in many parts of the globe. This is particularly with agents located outside of an airline's home country where sales via their website account for a smaller percentage of sales than tickets sold domestically. A lot of corporations also still use travel agents.

The practice of travel agents making bookings and reservations, prior to confirming the sale by ticketing, is still commonplace. Each booking or reservation made creates a passenger name record (PNR), which can be found in the airline's reservation system using a six-character locator code.

Multiple & duplicate bookings

Travel agents will often make several bookings for a number of different itineraries for each person making a travel enquiry. This is particularly the case in a long distance trip involving several stops and possible routeings is being considered.

GDSs charge fees for each segment of a booking or reservation, regardless of whether it is ticketed or not. These are charged to airlines. Each segment of a complete trip has a fee of up to $8, so a trip of four flight segments could incur segment fees of up to $32. Travel agents can receive a commission or share of the segment fees from the GDSs, but travel agents also sometimes charge their own segment fees to passengers. Travel agents therefore have little incentive to cancel unticketed bookings and reservations, which also uses their time. Unticketed reservations also tie up or block seats in the airlines' inventory systems. Bookings that remain unticketed cannot be sold, and so airlines also lose revenue from potential sales as a result of these 'no shows'. This is thus one of the first types of revenue leakage.

TTLs & fare violations

Another practice of travel agents is to violate ticketing time limits (TTLs). There are several or many fare classes within each aircraft cabin class, and each fare class has a series of complex rules. These include rules relating to travel restrictions, fares, and TTLs that bookings can be held open before they have to be ticketed or cancelled. Higher fare classes have longer TTLs.

Travel agents are aware that they are able to make bookings and reservations in a high fare class, but ticket them later in a lower fare class. This is done to hold open reservations for buyers interested in the lowest possible fares. Travel agents make reservations in high fare classes to get a long TTL, to maximise their chances of achieving the sale. The agents thus violate the TTLs, and then ticket bookings at a lower than normally permitted fare class. They thus violate TTLs and fares at the same time. TTL and fare violations are clearly not an issue with website sales, since these require instant purchase. Website sales are generally used for lower fare classes, while the majority of sales of higher fare classes are still made by corporations through GDSs.

"TTL and fare violations are probably the two largest sources of revenue leakage," says Peter Gabrielsson, vice president of revenue management and pricing at Finnair. "Legacy carriers still get up to 80-85% of their sales through GDSs, although the percentage is smaller for US domestic airlines. TTLs are usually 24-72 hours after booking for lower fare classes. Most of the potential for reducing revenue leakage is here, since these non-ticketed bookings do not get cancelled."

The problem with traditional GDS, booking, reservation and ticketing

A large portion of revenue losses come at the booking stage. There are several types of bookings which result in passenger 'no shows'. These include multiple and duplicate bookings, fake & fictitious names and rogue itineraries.

systems is that there was no communication between the modules relating to fare classes, fares and TTLs. "Airline inventory systems know the number of seats on the aircraft, the number of bookings and the number of overbookings," says Oskarsson. "Airline reservation systems also know which bookings have been ticketed, but there is actually no communication between airline inventory and reservation systems in relation to unticketed bookings."

This has changed with the advent of e-ticketing, however. The e-ticketing capability is a module within the reservations module. An e-ticket requires direct communication between the various modules, and its electronic nature allows exchange of booking and ticketing fare classes and all other relevant information to be exchanged. Mismatches in fare classes and ticketing time limits are picked up automatically, and so attempted violations are thus stopped instantaneously.

Multiple bookings for the same person that do not get cancelled are in fact one type of TTL violation. "Uncancelled bookings or unticketed reservations, which are also TTL violations, account for one of the biggest causes of revenue leakage," says Melissa Deaton, marketing manager revenue integrity solutions at Sabre.

Fictitious names

There are several other ways airlines experience the problem of no shows from unticketed reservations and bookings. Travel agents have several ways to make bookings where there is never an intention to ticket them. These include making bookings with fake or fictitious names, and are made to hold an airline's inventory on a speculative basis. This is practiced by travel agents in the event they may sell the seats. Physically checking thousands of bookings in the reservation system is too time consuming to be done manually. Some are hard or impossible to spot with any degree of certainty, and airlines do not want to cancel bookings when there is a danger of losing passenger goodwill.

Rogue itineraries

Agents also book several segments of a multi-leg trip with connections times that are less than the minimum connection times (MCTs) required by airlines. These bookings are ticketed and usually not spotted by the airlines. It is often physically impossible for passengers to make the connections between the proposed or ticketed flights. Passengers actually travel on the first segment, and miss the connection to the second and, possibly, other segments. Tickets for new connections therefore have to be re-issued, which takes time and may even incur additional segment fees. In some cases airlines may even have to pay hotel accommodation for the passenger. Reissuing of tickets is also normally done manually and errors are made. While passengers should usually pay a higher fare class for re-issued tickets on different segments, airlines fly empty seats on the flights originally booked, with it being too late to re-sell them to another passenger. Airlines thus lose revenue in several ways from MCT violations.

In other cases passengers may fail to fly on the first segment of a multi-leg trip or cancel a later segment, with the other segments still ticketed and uncancelled. Again, the airline is unable to re-sell these and loses potential revenue.

There is also the issue of partially confirmed bookings or incomplete itineraries. There can be a booking of four flight segments, and only three are confirmed, while one is waitlisted. It is clear that the booking will not be used unless all four segments can be confirmed. Airlines should really either confirm the waitlisted segment, or cancel the entire booking so that inventory that is unlikely to be used can be sold to other passengers.

The problem of no shows for airlines leads to lost revenue potential through unsold seats. Airlines have always had to accept the existence of unticketed bookings and no shows. Moreover, airlines have traditionally had to build a percentage of bookings as no shows into their RM system, and define an overbooking policy with an accepted risk of passenger spill, and consequently limited load factors at the 75-80% range. These have been accepted, since no-shows were treated as inevitable. If they could be reduced it would free unticketed bookings and reserved seats that could be sold. Load factors and revenues earned would be increased.

Solutions

All the leakages of revenue described occur during the distribution and ticketing stages, and all generally result in an excessive number of no shows.

"We have our Revenue Integrity product, which is Sabre hosted and performs 12 main processes for revenue integrity and minimising revenue leakage," says Deaton. "These include automatically scanning for TTL violations, looking for duplicate PNRs, passive segment cancellation, and fake and fictitious names. The system receives data in batches from the airline's PNR warehouse at a frequency of up to every two hours, and they are processed in two to three minutes; providing a real-time solution. This automation allows airlines to reject or keep unticketed bookings, and airlines send messages instructing agents to immediately cancel or cancel within a specified time limit."

While Revenue Integrity is Sabre's standard product for revenue leakage used for all airlines, it has also introduced

Many airlines find that two of the largest causes of revenue leakage are TTL & fare violations. These are prevented with e-ticketing, but are still an issue when distributing through GDSs and travel agents. Fare violations are often not detected until the revenue accounting stage.

a customised revenue integrity product called SmartFlow. "This robotically performs particular auditing processes that are designed specifically for individual airlines," says Deaton. "It is locally installed and allows the airline user to create a robotic process, such as data aggregation. It is a robot that can be programmed to audit most things.

Calidris is a specialist provider of software to enhance revenue integrity, and has its Calidris Operational data Store to analyse the various revenue leakages that occur. "The Operational data store is loaded in real-time, and checks data for integrity and potential leakages," says Oskarsson. "British Airways, for example, uses the operational data store that has information fed in real-time from its reservation system. Since analysis of problems can be made in real-time, as bookings are made in the reservation system, they can then be corrected immediately and revenue losses prevented. An example is looking for fake and fictitious names.

"All types of revenue leakage problems are searched for, and each one found is scored on a level of 1 to 5," continues Oskarrson. "The most common problems found are TTL violations, fake names, duplicate bookings, fake ticket numbers, incomplete itineraries, and booking class mismatches. Duplicate analysis, for example, deals with the problems of duplicate bookings. Many are relatively easy for the system to pick out, since the same person cannot physically travel on all the flights. Once duplicates have been found, however, the problem is to decide how to handle them and which ones to cancel.

"Our Revenue Integrity solution identifies and removes bad bookings from an airline's inventory system and makes the seats available again so that they can be sold," continues Oskarrson. "Calidris Integrity is the only real-time solution that processes bookings as they are made or changed. This allows them to be removed quickly, and so maximises their chance of being sold. The typical pattern of bookings prior to a flight means there is low availability during the last 4-8 days before a flight. Our system has had the effect of increasing availability during this critical period, especially when there is a high demand from business travellers, due to bad bookings being cleaned out. The main benefits are clean inventory all the time, increased availability, fewer and more stable no shows, and higher passenger load factors. A spin-off benefit of this is that demand can be forecasted more accurately, which leads to improved average passenger yields.

"Emirates, for example, has implemented our revenue integrity product and had an improvement in profits of $8 million in just six months," continues Oskarrson. "One element of this is that it has had 1.5 million seats per month returned to available inventory due to unticketed or bogus bookings being removed. No shows have been reduced by more than 50%, and the variation in the rate of no shows has also been reduced. This allows estimates of overbookings to be made more accurately and the incidence of spill to be reduced. Emirates now consistently has load factors of 97-100%."

Airlogica is another specialist solution provider that has systems to audit for a range of booking violations and leakages. It has a robotic software product called Flash which seeks out various violations such as duplicate bookings, waitlist violations, fictitious names, and MCT violations. "This audit process is made before passenger check-in, and the overall objective is to get segment fees for unticketed bookings reimbursed and release inventory for real sales," explains David Harms, chief executive officer at Airlogica. "Most airlines prefer to do this analysis in batches rather than in real-time, because some time is required to let bookings settle down. Airlines are free to choose the frequency of audits and the number of bookings checked. Once audits have been done, Flash can send Y messages to travel agents to cancel unticketed bookings, update PNR information relating to a PNR, and add or remove TTLs.

Amadeus also offers a revenue integrity product that runs checks for duplicate bookings, bookings with fake names, and fake ticket numbers. "We claim to have the most accurate duplicate PNR processor that helps eliminate a large number of no shows to maximise seats sold," says Tony Dinsdale, director of revenue integrity sales and service at Amadeus. "The PNR processor analyses new and changed bookings. When a new reservation is made, our system gets a notification so that it can analyse TTL violations, duplicate bookings and fake names. The system is also notified when a booking or PNR changes, and the ticketing status may also change. As a result of the analysis PNRs can be ticketed, PNRs can be cancelled due a violation of some sort, or a PNR does not get ticketed but not cancelled, since it may still be possible to generate a sale from it."

GDS & distribution leakage

Other types of revenue leakage originate from incorrect or inaccurate fare and seat availability data and information on GDSs. "GDSs can show inaccurate information, which can undermine an airline's ability to generate revenue," explains Deaton. "Our GDS Analysis tool allows an airline to see if the GDS systems are correctly displaying all fare and seat availability information correctly. It basically reconciles the airline's information with the GDS's information. This is done periodically and automatically. The frequency these

Several causes of revenue leakage originate from GDSs. There are several solutions on the market that are used to detect rogue bookings and robotically search for violations. Systems are also in place for airlines to make analyses of how effective their GDS distribution is, and what levels of abuse they are experiencing.

reconciliations are done depend on the airline's policy. The same tool can also be used to check that MCTs between several segments, that have been put together by the GDSs for multi-sector trips, are being used. This prevents revenue loss by minimising passengers' chances of missing connections, that result in lost revenue as previously described. The system also checks that MCTs posted by the GDS are correct to prevent revenue loss."

Another issue relating to GDSs is that of cancelled segments, with segment fees still being paid. "Airlines send HX messages to travel agents to cancel unticketed bookings. Bookings that are unlikely to get ticketed should be cancelled. Airlines first send Y messages to travel agents asking them to cancel bookings, and then later will send HX messages to make them cancel bookings. The HX message is billable by the travel agents' GDS provider to the airline, and each HX message costs the airline about 30 cents. This compares to paying a GDS fee of up to $8, in addition to not being able to sell the seat," explains Dinsdale. "Our product alerts airlines that there are outstanding HX messages for bookings to be cancelled. Booking information data tape (BIDT) information, which comes from the GDSs with information about all the bookings that were made and which the airline pays for, are sent in arrears to the airline. Airlines can only reclaim segment fees for bookings that they sent an HX message for if the travel agent manually removes the HX message. Our product compares output from the revenue integrity system and the BIDT, and reveals HX messages that were not cancelled, but should have been cancelled."

In-hand with Flash, Airlogica has Zeus, which is a post-departure tool for auditing GDS segment fees. "All bookings that result in a segment fee payable by an airline are recorded on BIDT. Each GDS therefore has a database of PNRs recorded in the BIDT, and this information is used by the GDSs to invoice airlines for segment fees," explains Harms. "All changes to PNRs are also recorded in the BIDT, including extra segment fees when bookings are changed. Airlines are entitled to the BIDT relating to bookings on their services. Zeus imports an airline's BIDT data and compares it with the data on invoices they receive for booking fees. Zeus can be used on BIDT data that is up to 13 months old. We have built in SQL filters into Zeus that allows particular markets to be analysed. Each travel agent making bookings and ticketings can be examined. Their rate of ticketings to bookings, known as the churn rate, can be examined. Other analyses, such as which ones are generating the lowest levels of revenue or making the most passive bookings, can be made.

"Zeus thus allows airlines to see what is happening with their distribution," continues Harms. "We have 50 airlines that use Flash and Zeus together, including BA, Qatar Airways, Saudia, Singapore Airlines, Qantas and American Airlines."

"The additional benefits of Flash and Zeus together are that each time the airline sends a Y message to cancel a segment or booking to a travel agent it is recorded by Flash in tab files," continues Harms. "Zeus has BIDT data, and this can be matched with cancellation messages to see if travel agents complied with the request. This thus closes the loop for airlines in terms of reducing unticketed segment fees. Zeus also makes an analysis of all segment fees and number of passengers to determine the average segment fee per passenger. It also makes a segment fee gap analysis, where the cost of all segments is compared with the cost of unticketed segments. If the gap is larger than 10% then the airline is experiencing a high level of abuse by travel agents. The system can further identify which travel agents are the largest cause of the segment fee gap. The benefits of this are that some airlines have been able to reduce their segment fees by 15-25%, although this only happens if airlines work on the information provided to them. US majors, for example, have annual segment fees in the region of $200-300 million, so the potential saving is clearly significant."

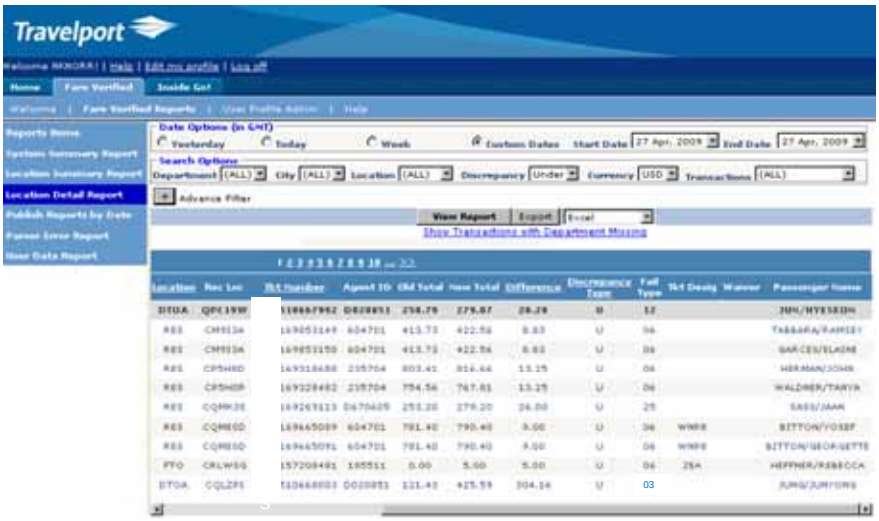
Airlogica has also recently introduced Poseidon, which looks at all distribution data and costs. The objective being to manage all an airline's distribution costs and calculate the average cost per passenger. The element of distribution with the highest cost per seat can be identified.

Ticketing leakages

In addition to distribution and reservations, revenue leakages can occur in various forms during ticketing. "One frequent occurrence is fake ticket numbers," says Dinsdale. "Ticket numbers are created when bookings are ticketed. These are 13 or 14 digits, and indicate the passenger has a ticket for travel. One issue is to make sure that the ticket number has not been used or presented by a passenger before. Fake ticket numbers can be created by a travel agent or even an airline ticket office. This can be done to hold space for a staff member that wants to travel."

Fare violations or incorrect use of fares extends from distribution and reservations into the ticketing phase of the passenger sales process. "Fare violations are the second main source of revenue leakage," says Gabrielsson. "The problem is often found at the revenue accounting stage. That is, tickets that have been sold through GDSs. Ideally these violations should be blocked prior to the flight departing. The audit process results in agency debit memos (ADMs) being sent to travel agents to claim the

Location Detail Report



Travelport's Fare Verified product makes audits to check for ticketing and fare violations. Travelport claims that up to 99% of manually-issued tickets have errors, and 20% are underpriced. Fare Verified calculates fare errors for each ticket. This can be done in batches or automatically.

difference in the violated fare. It is possible to get some of the revenue back, but it is not possible to say how good this is. Most airlines are only able to make random checks, and really need an automated process where revenue and booking data are compared. We use the robotic version of the Amadeus Revenue Integrity (ARI) product to monitor booking information, TTLs, duplicates, incomplete itineraries, fake names and MCT violations."

One occasion is when tickets are changed by passengers. This is usually due to changed itineraries or destinations. Most ticket changes close to departure mean that most passengers should pay for higher fare classes, and so pay for an increase. "Passengers ask for tickets to be re-issued to change itineraries, or add or cancel some of the segments," explains Sue Powers, chief executive officer at Travelport. "When a segment is cancelled passengers will ask for a refund, but this may only be for a portion of the fare paid in the case of most fare classes. Changing a ticket to a new time or adding a new segment close to departure means that most of the time higher fares should be applied, and so passengers should pay surcharges to apply the difference. The problem is that calculating new fares is a complex and time consuming process, especially when dealing with interline tickets. Moreover, most airlines calculate re-issue fares manually, and often it is check-in staff that have to do this when there is a line of passengers waiting to check-in. Airline staff either make mistakes or do not even bother to calculate the new fare, and just change the flight number and departure time. The consequence of this is lost revenue in the order of tens of millions of dollars for most carriers.

"We have our Rapid Reprice product to automate the re-issuing of tickets, which requires an historical fares and rules database," continues Powers. "We are the first in the market with this type of product, and have processed 127 million ticket re-issues since the basic product went into active service in 2000. We estimate that a small airline can save about $10 million in improved revenue this way, while a large carrier can save up to $350 million.

"Airline customers for Rapid Reprice include Delta Airlines, Northwest Airlines, Emirates, Mexicana and Malev Hungarian Airlines. The product is also used by on-line travel agencies priceline.com, Expedia and Orbitz," continues Powers. "Rapid Reprice interfaces with an airline's RM, inventory, reservations and revenue accounting systems. It is used on airline websites, call centres and other distribution channels, and it goes into the e-ticket database to retrieve a ticketed booking. It is able to go back as far as 13 months, provided the airline has a 13-month historical database of fares and rules."

Passengers can use the system themselves by retrieving their ticketed booking via the airline's website. On selecting a new itinerary or adding a new segment, Rapid Reprice checks availability and prices the various options of new flights, fares and cabin classes. Airlines can also override a repricing instruction if they wish, and so can upload its own rules for fare increases. This waivers capability was added in 2004. The ability to reprice interline fares was added in 2009. Rapid Reprice can be used at airline call centres, self-service check-in kiosks, airline websites, in airline revenue accounting departments, third party websites, and travel agencies.

Another major source of revenue leakage at the ticketing stage is, with the exception of fares booked directly through airline websites, fares calculated manually by airline call centres and travel agents. Again due to the complexity of fare rules, mistakes are made in most cases, resulting in over or under charges. Batch tickets for group travel is one example where the incidence of incorrect fares being applied is particularly high.

This is another area where Travelport has specialised, and it has developed Fare Verified to make audits to check that tickets have been issued correctly with respect to fare class, rules, taxes, fees and commissions. "There are errors in up to 99% of manually-issued tickets, and 20% of manually-priced tickets are underpriced with an average loss of $50 per ticket," claims Powers. "Most of these ticketing errors come from six revenue integrity issues: fare errors, exchange rate calculation errors, incorrect commissions and taxes, incorrect refunds, incorrect segment and booking fees, and booking and ticketing violations. It basically makes audits of fares issued and then makes a report that lists the locator code of each ticket and passenger name, the ticket number, the agent ID number, where ticketing errors have come from, the old fare, the new fare, and the difference that has to be applied.

"The audits are performed at some stage after ticketing and before travel. The audit can be done automatically for all tickets, or in batches for a sample of tickets," says Powers. "While testing a batch indicates the size of the problem, it is often too late to issue ADMs, so many airlines have decided to automate the process."

Fare Verified was introduced in 2009, and a medium-sized carrier, that is one of its first customers, estimates it can save about $14 million a year on the basis of 20% of tickets being issued manually.

"If fares are verified automatically then it is also possible to use the information to prevent fraud by travel agents," adds Powers.

Other losses

Revenue leakages can also result from banned passengers travelling and stolen credit cards being used. These leakages can be reduced by audit systems that are programmed to recognise banned passengers and credit cards. "Fraud detection on our Revenue Integrity product identifies credit cards that are

As with most aspects of air transport, the 80:20 rule applies to revenue leakage. The majority of revenue losses are due to a few causes. Each airline should have high quality audits in place to gauge the cause and size of leakages, so that they can take the most effective action to combat the losses.

used excessively, or a person travelling on a large number of flights. There are several methods of fraud, and these include multireservations and fare rule violations," says Deaton.

Besides losses from distribution, bookings, reservations and ticketing, there are other causes of revenue leakage in the latter stages of the sales process. "There are also sales commissions errors, and a range of fare violations. These can be divided into the two categories of sales violations and travel violations," explains Philip Fernandes, senior vice president of passenger practice at Kale Consultants. "Sales violations include exchange rate, refund, sales and special fare document check violations. Travel violations include back-to-back ticketing and fare rule violations.

"If the whole of the passenger sales process is analysed, then the major areas of revenue leakage occur with sub-optimised yields and loads, non-productive GDS costs, fare rule waivers, incorrect interline pricing, and fare violations," continues Fernandes. "Violations on interline fares, for example, include tax, fare, pro-rate, and interline service charge violations. Tax violations occur because taxes involve complex calculations, and most systems do not apply taxes correctly.

"There are various auditing systems to search for almost every type of revenue leakage. The real issue is how are these audits being done, are they being done frequently and soon enough, are they accurate enough, and are they comprehensive enough?" continues Fernandes. "The evolution of audit systems started with products that took up to six months, which is clearly too slow to regain lost revenue. These were followed by later developments that took 4-8 weeks to perform audits. These can regain some lost revenue. Collaborative efforts between various commercial departments and revenue accounting can audit 2-24 hours after a violation has been committed. These also involve travel agents and an airline's own ticket offices, and result in long-term behaviour corrections that are the root cause of revenue erosion."

There are then preventative audits which aim to prevent leakages before they occur. This involves automating checks immediately during or prior to violations. This requires the automation of fares in the pricing engine of the RM system. Fare violations occur because pricing is a very complex process.

Besides the standard of audits, airlines require the willingness to enforce ADMs and stop bad practices by travel agents. These are assumed by some airlines to be the cost of doing business. It is also expensive and difficult for airlines to get booking, ticketing and fares data. There are also problems with integrating all the various systems in the sales process, and technical issues with the pricing rules engine for example which is a complex system.

One example of an auditing system is Softec's MonaLisa, which is basically a revenue accounting product. MonaLisa makes a sales check at the time of sales data entry to audit taxes and sales commissions, published and unpublished fares, and fare rule violations. It also enables fast creation of ADMs, which are then sent to travel agents. "The fare audit occurs after the ticket has been issued, and is based on sales data rather than flown data," explains Mamta Saxena, managing director at Softec.

"The tax audit uses a master database of all global taxes that are published by IATA, and it checks the taxes on each ticket," continues Saxena. "Taxes were distributed as a RATD file, but are now distributed as TTBS files. Sales commissions audit calculates actual fares, taxes and commissions, and compares them with charged fares. These then generate an ADM or ACM number, if applicable, which is allocated to each ticket number. These then go to the BSP, a clearing house between travel agents and airlines, to invoice the travel agent. Airlines can manually override ADMs if they do not want to trouble the travel agents.

"There is also the need to audit pro-rated interline fares between two or more airlines," continues Saxena. "There is about $50 billion of interlining tickets each year, and about 90% these are settled between airlines through the international clearing house (ICH) and American clearing house (ACH). The other 10% are organised by the airlines themselves. Pro-rate agreements between airlines are complex, and airlines sometimes raise incorrect invoices when claiming for a share of an interline ticket. Rejection handling is a system to audit pro-rated fares, so when incorrect fares are found and rejected, new invoices are raised and sent to the ICH or ACH. IATA is now developing a Simplified Interline Settlement (SIS) system, which is totally electronic and will include electronic invoices and will start at the end of 2010."

Summary

As with many aspects of air transport, the 80:20 rule applies to revenue leakage. That is, the majority of revenue leakage is mainly a result of TTL and fare violations. This is where airlines should concentrate most of their efforts. Each airline knows the proportion of sales achieved through each distribution channel, the mix of yields gained through each channel, its load factors in each cabin class and where most of its revenue leakages apply. What is clear is that most airlines have room for improvement in several areas. These can result in substantial improvements in revenue AC