The majority of LCCs are changing business models to become hybrid airlines. These carriers are attempting to gain greater market penetration through the use of additional sales channels. The upgrades to an LCC's sales systems are a further consideration for airlines making the change.

Distribution channels for hybrid airlines to increase market reach

The past five years have witnessed many low-cost carriers (LCCs) and legacy airlines developing a more common or similar 'hybrid' business model. For LCCs, the need for this change in their strategy has been triggered by stagnating traffic volumes and rising fuel prices. Most have reacted by taking measures to attract business passengers, who pay premium yields, in order to increase revenues through higher passenger load factors and improved yield mixes. So what changes do LCCs need to make to achieve this?

LCC business model

The LCC philosophy was to operate so as to achieve the lowest possible cost per available seat-mile (CASM). Several factors made this possible: low fuel prices; operating at secondary airports; simple schedules that avoided overnight stops for crews, aircraft parking charges, and outsourced maintenance for the aircraft; high rates of crew productivity; high aircraft utilisation and seat numbers to increase aircraft productivity; a single sales channel via their own websites; a simplified fare structure and revenue management (RM) philosophy; and the use of holistic distribution, reservation, ticketing and revenue accounting system via an internal website. These factors combined to achieve the lowest possible cost of sales, while CASMs lower than those of the legacy carriers allowed the LCCs to stimulate demand for their own products, and resulted in high traffic growth rates.

The key problems that LCCs have encountered over the past five years are that fuel prices have steadily risen, and user charges at secondary airports are now closer to those of primary airports. Higher fares have had to be introduced to cover rising fuel costs and, together with the impact of the global recession, traffic growth rates have steadily dwindled. Moreover, legacy carriers, which have larger problems than the LCCs, have taken a leaf from their book, and unbundled their services, improved aircraft utilisation and staff productivity, and cut in-flight services in order to achieve lower unit costs. They have consequently been able to lower fares, thereby becoming more competitive against the LCCs, and affecting their traffic growth rates.

The LCC business model has therefore had to evolve. The first step was to open a new revenue stream by introducing ancillary products such as preferential check-in and seat assignment, use of lounges where available, and individual meal service. The introduction of ancillary products, both airline and non-airline, has contributed to a significant generation of revenue, and LCCs are generally ahead of legacy carriers in this area. Ancillary products have not been enough, however, for LCCs to fight off competition and the problem of stagnating revenues.

Increasing revenues

The next important step for LCCs, which has been a necessity for most, has been to attract a new stream of revenue from business passengers. Their intention is to increase passenger load factors and attract higher yields, thereby increasing unit revenue per available seat-mile (RASM). This requires several steps in an LCC's revenue-generating system and capability.

Part of the simple business model that was adopted by LCCs in order to achieve the lowest possible CASM to stimulate traffic, was to use a single system to generate passenger sales and collect revenues. The majority of LCCs that have started operations over the past 15 years have sold tickets entirely through their own direct sales channels: their websites and call centres. Moreover, LCCs have made every effort to steadily reduce the percentage of sales made via call centres. The avoidance of all indirect sales channels, such as global distribution systems (GDSs), travel agents, travel management companies, and on-line travel agents, eliminates several costs, including segment fees for GDSs and the commissions paid to travel agents. LCCs also avoid the leaked revenue that is likely to happen through GDSs due to unticketed bookings or passenger no-shows.

LCCs have also been able to avoid issuing tickets because all sales are made through their own direct sales channels, and they do not have interlining agreements with other carriers. LCC passengers receive e-mailed proof of their purchase, which has to be shown at check-in.

In contrast, legacy airlines that sell through a larger number of direct and indirect sales channels, and that have interline agreements, are obliged to issue paper and electronic tickets.

LCCs made a further saving from sales generated through their own direct sales channels, without any interlining, by avoiding the need to claim revenues for sales made via GDSs from travel agents and interline airline partners. This requires airlines to become a member of the ARC in the case of travel agents in North America, and a member of a billing settlement plan (BSP) for each country in the case of travel agents in the rest of the world. Membership of a BSP, for example, costs a hefty $25,000, and commissions have to be paid for settlements when claiming revenues.

The single system for generating

jetBlue formed interline agreements with several carriers, including American Airlines to gain further market penetration. As the largest operator at New York JFK and Boston, jetBlue has seen an increase in business passenger numbers and so needed to extend its market reach.

passenger sales meant that passengers were always required to pay at the time of making a combined booking and reservation through the airline's direct sales channel. This meant that the LCCs received all sales revenues prior to flight departure, and they had an automatic system for revenue accounting in place. As part of their holistic revenue generating system, this module is simpler than other revenue accounting systems that need to be in place to claim revenues for sales generated through a wider variety of channels.

LCCs could therefore achieve the lowest possible cost of sales, and avoid any cashflow or leaked revenue problems when opting for the simplest system of solely selling seats via their call centres and websites.

Hybrid strategy

LCCs' overall objective in adopting a hybrid airline strategy is to increase passenger numbers and improve passenger yields. The main target is therefore business passengers, who can generate significantly higher yields, and have different schedule requirements and buying behaviour to the LCCs' usual leisure travellers. Although some business passengers from small companies do fly with airlines like easyJet and Air Berlin to a limited extent, the majority of business travellers still use legacy carriers. In addition, a large number of business travellers still use travel agents and travel management companies. A significant improvement in overall passenger revenues can therefore be realised.

The main methods used to capture a significant number of business travellers are: use of indirect sales channels to reach travel agent websites, travel agents and travel management companies; and forming codeshare and interlining agreements with other airlines.

The strict use of direct sales channels, mainly internal websites, by LCCs will have been sufficient to stimulate demand in their home base countries, but not enough to generate leisure traffic outside their home bases or business traffic. LCCs' use of their websites will also prevent them from attracting passengers from other continents, such as those travelling from the Asia Pacific or South America to Europe, and needing to make several trips within Europe. Most travellers would use travel agents to organise such trips, so bookings made through GDSs would exclude LCCs from consideration.

The use of indirect sales channels and interline agreements is therefore required by LCCs to make it possible for them to attract business passengers.

Vueling Airlines in Spain has adopted a hybrid strategy. "We started operations in 2004, and even in the early years were using travel agents, despite the fact that the majority of our sales came through our own website," says Juan Carlos Iglesias, sales director at Vueling. "The big jump was in 2007 when we decided to use more GDSs and BSPs. We also started distribution through on-line travel agents."

In conjunction with a wider range of distribution and sales channels, LCCs have also had to improve their product offering. Improvements include increased seat pitch on the aircraft, and so a reduction in seat numbers, and a full transit or interline capability. The latter means that passengers checking in for the first of two or more interlined flights are able to do so with a single booking, can have seats assigned and boarding cards printed, and are able to check their baggage in all the way through to their final destination. This will require the introduction of more comprehensive check-in facilities, and probably self-service kiosks.

This also requires the departure control systems (DCSs) to be aware of a passenger's multiple-leg trip, with all details of their journey, which will only be possible if tickets are issued. With the International Air Transport Association (IATA) deadline for e-ticketing having passed, airlines will have to issue e-tickets. The use of interline agreements and multiple-leg trips on several carriers also means that fares need to be pro-rated, and the revenues claimed from the initial sales point by each of the airlines. This suggests that in order to become hybrid carriers, LCCs need to become BSP and ARC members to claim revenues. Airlines also have to be recognised by IATA for ticket settlements to go ahead.

Claiming revenues from a variety of indirect sales channels will be more complex than accounting for sales made through internal sales channels for an LCC developing to a hybrid airline model. A more complex revenue accounting system will therefore be required.

A large change in systems, technology and hardware will therefore be necessary throughout an airline's entire sales process.

Distribution channels

Prior to passing information on schedules, inventory and fares to indirect sales channels, airlines may use market intelligence and forecasting techniques and systems to determine what passenger volumes they might expect, and what fares to charge. Sabre, Amadeus and Travelport offer a variety of products for these processes.

LCCs migrating to a hybrid airline policy have several indirect distribution channels to choose from, but the use of travel agents via GDSs gives airlines the largest market penetration. The legacy GDSs like Sabre, Galileo, Amadeus and Apollo, can reach tens of thousands of travel agents and travel management companies around the world. Travelport bought Galileo and Apollo, and also acquired Travelsky, which reaches travel agents in China. Through these three GDSs airlines can reach 60,000 travel agents.

The original LCC strategy was based on achieving the lowest possible cost per seat-mile so that the lowest possible fares could be offered. This in turn would stimulate traffic. Unit costs per seat-mile have risen and demand for the LCC product has reached a plateau. LCCs have had to migrate to a hybrid strategy to generate a new stream of revenue.

Sabre's SabreSonicWeb has the largest reach of a single GDS, reaching 57,000 travel agents.

"We used Amadeus as a GDS, which has a strong penetration in Spain, but we also wanted to get deeper penetration into France, Italy and the Benelux countries,"says Iglesias. "We also have a single interline agreement with Iberia on Madrid-Barcelona, but we do not think interlining is necessary for the whole route network, since it complicates the distribution model and increases costs. We do have connections, but only between Vueling flights."

US carrier jetBlue, in contrast, has recently formed interline agreements with several airlines that include Lufthansa, Aer Lingus, Cape Air, American Airlines and South African Airways.

Travel agent websites also provide airlines with greater reach and market penetration. The other main indirect distribution channel is the use of interline agreements.

Using both of these indirect sales channels is only possible when airlines also adopt several business processes. "These include providing their schedules to the official airline guide (OAG) and GDSs," explains Andreas Guenthard, head of commercial marketing and distribution at Amadeus. "It also requires the airline to submit its published fares to the Airline Tariff Publishing Company (ATPCO), and disseminate fares and inventory to distribution and sales channels in countries from which it may only expect to get a small number of passengers. Airlines will also have to make several changes in their finance and accounting departments."

If an airline is not already using OAG to file its schedules, fares and fare rules, it needs to do so in order for it to be available on the GDSs. "Fares need to be filed with ATPCO or SITA," explains Lewis. "Once fares have been filed with ATPCO, they are delivered to the GDSs. They take data feeds from the airlines and match them to the available inventory and fares and fare rules in the system. This means that those LCCs filing with GDSs and ATPCO can open up a lot of sales opportunities."

One LCC adopting a hybrid business model is Spanish carrier Vueling, which uses the Navitaire system for its entire sales and revenue accounting process and has subscribed to the Amadeus GDS to reach travel agents. "Our original system, Open Skies, was first introduced as the LCC model was starting to become popular in the mid-1990s," says Raelynn Sink, product director reservation and distribution products at Navitaire. "This was based on the older Hewlett Packard technology. This was a website distribution, reservation and sales, ticketing and revenue accounting system in a single solution. Open Skies was replaced by New Skies in 2005, and most customers, like Vueling, upgraded to it. New Skies has a more robust codeshare engine, allows GDS processing, has e-ticketing capability, and handles interline sales. It also has two new features: Travel Commerce, which is an engine for selling ancillary products; and an airport and passenger services module for passenger handling and departure control."

Air Asia subscribes to Galileo. "We used Open Skies when we were a pure LCC, and could use it for GDSs and BSPs," says Iglesias. "The advantage of the Navitaire system is that it can add greater functionality. We distribute via Amadeus, Galileo and Worldspan on the Navitaire system. We will migrate to New Skies in the future for greater capability."

LeeAnne Lewis, director product strategy and management at Travelport, explains that the use of GDSs gives airlines access to all of their customers' ticketing information and their coupon status when tickets are sold through these channels. "This is because of the combined use of GDSs e-ticketing. Passenger information includes the number of people that boarded a flight, those that requested refunds, and where each traveller is in the journey. Just as importantly, it provides a lot of useful marketing information about travel agents' performance, and what yields are being generated."

The industry is using XML as a messaging protocol in GDSs to distribute airline information. "XML means that GDSs connect directly with an airline's system for transmitting information relating to schedules, inventory, fares and rules," says Sink. "Many airlines, including some US majors, are pushing for the use of SGML technology. This should reduce the cost of using GDSs."

US carrier jetBlue, which has always primarily been a leisure airline, experienced an increase in business passengers as its route network grew. "We now participate in all major GDSs, including Travelport, Sabre and Amadeus," says Noreen Courtney-Wilds, vice president of sales at jetBlue. "We also use on-line travel agents, such as Expedia, Travelocity, Orbitz and Priceline."

New generation GDSs, including FLX and SITA's on-line travel agency, also use the internet.

Airlines that want to reach parts of the world which are likely to generate only small passenger volumes, are able to use general sales agents (GSAs). One example is APG-GA, which offers a product called IBCS together with IATA. This is an alternative to a BSP, and is charged to users on a pay-as-you-go basis. The joining fee is only $1,000, after which a 3% commission on the ticket price is charged. This compares to the $25,000 fee for joining a BSP, which can dissuade airlines from entering markets in countries where they are unlikely to generate sufficient revenue to justify the outlay. IBCS encourages airlines to distribute via GDSs in a larger number of markets. APG-GA also acts as a general sales agent for airlines trying to

Spanish carrier Vueling has opened several new distribution and sales channels. It offers the same basic fare through all sales channels at the same time, but offers an unbundled product through its website and a bundled product through indirect sales channels. The airline has found that while it has been able to maintain its leisure passengers, it has generated an additional tranche of revenue from business passengers and a rise in yields as a consequence.

penetrate those countries where sales volumes are expected to be small.

Interlining & codeshares

Forming interline agreements is essential in order to attract larger passenger numbers, and lucrative business passengers. Historically this has been complex and time-consuming, but new technologies have simplified it, making it more accessible to a larger number of airlines.

"Forming an interline or codeshare agreement with another airline can be costly if connections are made with other airlines via the GDS systems," says Guenthard. "A codeshare between two airlines works by one airline blocking a number of seats on the other's service. This can now be done simply without any physical links between the two airlines when there are only small passenger volumes involved. If codeshares are expanded there need to be physical links between the two airlines' inventory systems, although the majority of LCCs use Navitaire's inventory system. Funds from sales then need to be transferred between the two carriers, and e-tickets take care of this."

Sink explains that in the past three to four years, the Navitaire system has been updated to cope with GDS distribution, codesharing and e-ticketing.

"Setting up a codeshare or interline agreement can take only about one hour in New Skies," says Sink. "This involves the two carriers going through the business process of exchanging data on schedules and inventory. The two airlines then need to agree on the prices that they are going to charge, and file them with ATPCO. Then the two have to exchange booking information. We have a product called Advantage Interline. These connections mean the two airlines can look into each other's systems, and can settle transactions and funds with each other. Since starting distribution via GDSs, hybrid airlines have developed a lot and now have many more connections with other carriers. Some hybrid airlines have even started flying long-haul services - for example, Air Asia flies into London. The important thing is that while airlines are generating traffic from these new sales channels, they are not diluting the number of leisure travellers generated from their original direct sales channels."

Travelport provides technology for interlining with a hub or interchange that makes it simple for airlines to connect with each other. "The airline connects to Travelport, and Travelport connects to the rest of the world," says Lewis. "That is, to GDSs, codeshare and interline partners, and an enhanced DCS. The latter is so that a passenger can be booked on a preferred seat on another airline. This hub means that the airline can access hundreds of interline agreements and thousands of travel agents. The hub also means that airlines no longer have to make lots of separate technical connections with each airline that they want to codeshare or interline with. The airlines need to have business agreements between themselves, but now the cost of forming interlines is lower. One of the GDSs to which we connect airlines via the hub is Travelsky, which is the only GDS distributor in China. Travelsky uses the Travelport hub to make connections to many other airlines outside China. Therefore, hybrid airlines, for example, can now gain interlining passengers originating from China that are travelling to their part of the world."

Reservations & ticketing

In addition to increasing distribution channels, airlines adopting a hybrid model need to adapt their inventory and reservations systems that can handle sales from a larger number of more complex channels. The same systems also need to have the capability to sell an increasingly wider range of ancillary products.

"We moved from the Navitaire system to Sabre's reservation solution when we started participating in the ARC and BSP clearing houses," explains Rick Zeni, vice president business change management at jetBlue.

Reservation systems also need to have e-ticketing capability. The drive by LCCs to use codesharing, and the IATA ruling that dispensed with paper tickets, drove the need for e-ticketing. E-tickets mean that sales can be fed through to the DCS. This provides a list of passengers that are expected to check in, monitors passengers through their trips, and handles passengers making connecting flights. E-tickets are also required for revenue accounting purposes.

jetBlue introduced e-ticketing in January 2010. "At the same time that we switched to the Sabre system, we went from a ticketless system to a full e-ticket platform," continues Zeni.

E-ticketing

As described, the use of GDSs, and codeshare and interlining agreements, and the issuing of passenger name records (PNRs) inherently requires airlines to issue e-tickets. Revenue accounting and claiming revenues from other airlines and travel agents also requires e-tickets to be issued. A final factor demanding the use of e-tickets is the selling or merchandising and ancillary products.

This was not necessary when airlines sold entirely through their own websites and call centres.

LCCs have therefore had to add e-ticketing capability to their sales process systems. Travelport offers its e-ticket interchange, known as its Interchange Suite. This services about 5,000 interline e-ticketing relationships.

APG-GA offers its services for interline e-ticketing. It sets up an interline hub for

Following a switch to the use of GDS and interline agreements, jetBlue experienced $35 higher average net fares from sales through the GDSs compared to sales through its website.

airlines that do not already have interline agreements, pro-rates fares according to an IATA formula, and takes a 9% commission.

Pricing & RM

Pricing and RM is relatively simple for airlines following the pure LCC model. It becomes more complex when they try to adopt a hybrid business model, and to attract business passengers willing to pay higher-yielding fares. Rules in particular become more complex, since barriers need to be in place to stop business travellers accessing the lower fares, and low fares should only be available under certain conditions and for particular times of travel.

"One particular issue is that airlines are generally unbundling their products and then offering them as ancillary products," says Iglesias. "The unbundled fares are usually made available through airline websites, where sales to leisure passengers are made, while the bundled product will be sold through indirect sales channels. We have therefore adapted our pricing to the different channels, and fortunately the Navitaire system is able to cope with this.

"Our RM philosophy is to make the same fare class available at the same time across all sales channels," continues Iglesias. "The difference is that the bundled product at a higher price will be available through the GDS, while the unbundled product will be available on the website. Business passengers have different buying behaviour, however, so they will go through the travel agents and purchase bundled products. They also tend to buy closer to departure when only higher fare classes are available, so we get higher yields from them."

Navitaire's New Skies system has an RM module called Sky Price, which can handle basic and complex fares sold through direct and indirect sales channels.

Lufthansa Systems offers its Dynamic Price Engine, which integrates legacy and LCC RM pricing logic. Other vendors offering RM and pricing systems are Sabre, with its Air Max product; SITA; and Travelport, with its Fares and Pricing suite.

DCS & passenger handling

With a basic LCC strategy, passengers checking in for flights only make single journeys, and do not interline on to other flights and are not flown by other carriers. In the case of hybrid airlines, all these connections with other flights and airlines are possible. This means that the DCS needs to know the personal and full trip details of each passenger that has purchased a ticket for a particular flight. The DCS therefore needs to be able to communicate with the airlines' inventory systems, reservations systems, and revenue accounting modules. "Since we now issue tickets we have implemented a revenue accounting system, and we also have a full functionality DCS at our airports," says Zeni at jetBlue.

"We offer another hub to make the handling of codeshare and interline passengers as easy as possible," says Lewis. "A passenger can check in with the first airline, and the agent can check them in all the way to the final destination. The system will issue boarding cards and allocate seats for all segments. This prevents the passenger from having to claim their baggage at the end of each flight and checking in again for the next one."

Revenue accounting

Revenue accounting is the last major module in the sales process. For a hybrid airline strategy it will now have to deal with claiming fares and sales from codeshare and interline partners, travel agents, travel management companies, and third-party ancillary product vendors.

Lewis explains that a basic LCC system will store the information for each passenger record. "An e-ticket enables this information to be automatically sent to the revenue accounting system so that it knows what revenue is due. This information is sent in real-time, and the use of e-ticketing gives the airline a view of all the sales achieved through all sales channels the airline uses. Revenue accounting across all sales channels is therefore made possible by e-ticketing. This is because when a ticket is sold, the airline gets a copy of an e-file which is sent by Travelport to its revenue accounting system."

Navitaire offers its Sky Ledger product, which interfaces with its Open Skies and New Skies systems, and is able to interline tickets.

Overall effect

The switch to a hybrid business model clearly works for Vueling and jetBlue. "The main benefit of going for indirect distribution and sales channels is that we are still getting the same volume of passengers through our website, in addition to the extra passengers we are getting through the GDSs and on-line travel agents," says Iglesias. "This means that we overall have a different mix of passengers and fares, and yields have improved because passengers coming through indirect sales channels are paying more than those coming through our website."

jetBlue has seen some clear benefits, with average net fares achieved through GDS bookings being about $35 higher than through its website. "We have seen more corporate business travellers as a result of our upgraded GDS participation in recent years, but the majority of our bookings still come through our website," says Chad Meyerson, director of global sales at jetBlue. AC