Ancillary revenue streams and how they will be implemented by airlines post Covid-19 are discussed. Post-pandemic passenger load factors are expected to be low for an unforeseen time. Airlines will have to adapt their ancillary revenue strategies to attract passengers during this recovery period.

Ancillary revenues in the post-pandemic era

The Covid-19 pandemic has been responsible for the global collapse in air travel. With passenger demand slumping to unparalleled levels, revenues have declined to less than 10% of normal levels.

Travel restrictions imposed by many governments and the drop in passenger numbers and airline operations mean that globalisation has been temporarily put on hold.

Some carriers, including Lufthansa, Cathay Pacific and Singapore Airlines (SIA), have cancelled up to 95% of their flights. American Airlines is suspending 80% of its domestic and 90% of its international services, and Delta has announced that it is expecting to park 600 aircraft during the global crisis.

The pathogen is responsible for about 80% of the fleet being grounded. No fewer than 70 airlines around the world have completely ceased all flying operations, including established carriers such as Emirates and Etihad, as well as European low-cost carriers (LCCs), such as easyJet and Ryanair.

It has been forecast that the pandemic could cost airlines $250 billion in total airline passenger revenues this year, equating to 44% of total passenger revenues in 2019.

Pre-crisis analysis over the past three to five years shows that airline profitability had reached new heights. From 2015, many airlines improved their financial performance by unbundling their ticket prices and charging passengers for extras such as meals, baggage and seat reservations.

Total ancillary revenues derived from goods and services other than the company's primary product offering were estimated to be worth $110 billion in 2019, out of total industry revenues of $838 billion.

Given the earning potential of ancillary revenues, it is predicted that during a recovery period, the most successful airlines will be those that deploy an appropriate mixture of ancillary revenue streams to increase yields and boost profits.

Regional performance

European airlines are the leaders in generating ancillary revenue compared to their counterparts around the world.

Analysis shows that European airlines generated $31.5 billion from all ancillaries in 2019, followed by Asia Pacific airlines which generated $21.1 billion. Asia Pacific operators are beginning to augment ancillary revenue streams, and achieved the highest annual growth rate of 2019 by a 158% year-over-year growth rate. This represented an increase from about $9 billion in 2018.

Canadian and US airlines generated $14.8 billion, while African and Middle Eastern airlines generated $5.0 billion. Latin American and Caribbean ancillary revenue grew by 112% in 2019 as its airlines accumulated sales of $3.2 billion. African and Middle Eastern carriers have seen considerable growth at 147%.

Case studies

Depending on whether the airline is an LCC or a full-service carrier, ancillary revenues offer huge potential and scope to increase an airline's total revenues.

In 2019 Spirit Airlines generated about 50% of its total revenue from ancillary products, totalling $1.88 billion. The average passenger spent about $56.28 on non-fare items, compared to an average net fare of $54.63.

In 2019, Spirit Airlines' highest-yield non-fare item was baggage, which generated $734 million. Advance seat selection yielded $229 million, and other ancillary items $238 million. Most ancillary revenues therefore came from airline products.

Spirit Airlines' non-ancillary revenue items include a $9 Dollar Fare Club. Enrolment in the club costs members $59.95. Benefits include exclusive discounted fares and holiday package deals, and up to a 50% reduction in baggage fees. The subscription to the club automatically renews each year, with renewal rates of $69.95 per person.

AirAsia Group was the most successful airline in the Asia Pacific at leveraging ancillary revenues in 2018, by yielding $764 million in ancillary revenue alone in that year. This was 29% of total revenues. In 2019 year-over-year ancillary revenue increased by 31% and made up 21% of its total revenue.

AirAsia Group's non-airline ancillary revenue, such as insurance, car rentals and hotel cross-selling, increased by 189% year-over-year in 2019.

AirAsia Group's burgeoning ancillary income expanded at a faster rate than its passenger growth in 2019.

In 2019 Airasia.com developed more than threefold, and expanded its offerings to include flights of other airlines. It also launched AirAsia Deals, inclusive of lifestyle bundles. The eRetail platform includes more than 11 core product groups. These include flights, hotels and holiday packages, as well as activities and duty-free products.

Historically Emirates has been identified as a full-service carrier and one that is not known unbundle its fares. The

The ancillary revenue model is working for AirAsia. In 2019 airline ancillary revenue increased by 11% year-over-year and non-airline ancillary revenue improved by 189%. Overall ancillary revenue yields increased by 31%. Non-airline ancillary revenues are leveraged by AirAsia's digital brands such as Airasia.com and RedBeat Ventures and BigPay.

airline, however, earned $120 million from excess baggage fees in the 12 months to March 2019 that amounted to 0.5% of its total revenue of the year.

Emirates' ancillary revenue streams include charges for lounge access, seat selection and on-board WiFi.

Following Emirates' example is Lufthansa, which has recently unbundled its fares to leverage its ancillary revenue yields. Lufthansa increased its ancillary revenue yields from $315 million to $650 million from 2015 to 2019.

For a Lufthansa booking from London to New York there are three economy fares: Economy Light, Economy Basic and Economy Basic Plus. All the economy fares include meals, but the Light package does not allow for hold baggage. Neither the Light nor Basic fares permit cancellations. The Basic Plus offering is refundable except for $186, plus fare difference; it also includes an air-mileage upgrade.

It costs $137 to add baggage to the Economy Light fare for both the outward and return flights, while the cost of seat selection on each flight sector ranges from $12 for a standard seat to $18 for a preferred seat, and up to $24 for extra legroom.

Passengers can choose from several a la carte menu options, ranging from $16 to $27 per sector. Specialist health food options are available to pre-order at $16.

Travel insurance that covers against trip cancellation, damage to luggage, and medical costs is available for $83.

Airline ancillary revenue is generated from a number of sources. Airline ancillary revenue is first derived from selling airline products and services, such as priority boarding, seats selection during the time of booking.

The second main stream comes from non-airline products sold via airline websites while passengers make bookings. These include hotels, car hire, and insurance.

Other ancillary revenue streams can be facilitated onboard by inflight entertainment and connectivity (IEF&C) solutions to leveraging the airline's individual eCommerce platforms. It is possible that sales revenue and commissions can be earned by promoting airline and non-airline products.

Additionally, IFE&C systems have the potential to generate revenue through third-party marketing and from targeted adverts.

Recovery considerations

It is important to think about the aviation industry's recovery in two stages. The first is the quarantine, pre-recovery phase. This phase consists of limited flight operations because many countries have closed their borders to overseas travellers.

For example, passengers are currently not allowed to transit or enter Australia, except for nationals of the country and permanent residents. Many European countries also have restricted travel movements from outside the Schengen area, and in the US many states have extended their quarantine phase.

During this first phase it is expected that travel restrictions across the world will be eased, although people will be required to wear masks and practise social distancing. Until there is a vaccine, many people will still be anxious to travel.

It is believed that this phase could last from six to 18 months, depending on a vaccine becoming available and distributed.

Carlos Ozores, principal at ICF, with more than 16 years' experience in aviation strategy and business planning, says: "There may not be a full recovery until there is a cure for Covid-19. During this interim phase, it is natural to think that domestic flights in the US will resume first because there will be no border restrictions. International traffic will recover gradually, depending on which borders are opened first."

It is believed that during the interim phase traffic levels will be far below pre-crisis levels, with an estimated 30-40% reduction in traffic.

The Covid-19 situation is unique because there has never been a pre-recovery interim phase before. After the initial shock of 9/11 and the 2008 financial crisis, for example, the recovery began immediately.

For the Covid-19 crisis, the second phase will be when the recovery begins. It will be realistic to assume that this phase will begin in a global economic slowdown where people will have depleted their savings, and leisure travellers will have less money for travel. For businesses, travel will not be a luxury but a necessity.

Ancillary model

For LCCs, the fundamentals of the ancillary revenue model are to stimulate passenger numbers with low fares, and to generate overall higher unit revenues per passenger by selling them additional products or services.

Airlines operating at relatively low load factors are likely to increase their fares. Furthermore, it is expected that many passengers will be very price-sensitive, so it will be difficult to upsell to them.

One of the main ancillary revenue drivers for LCCs, and many airlines in general, are the revenues gained from baggage fees. During price-sensitive times, it will be unrealistic for airlines to increase the baggage fee to make up for the loss.

"I do not see baggage ancillaries becoming more or less attractive to operators. It is even possible that some airlines will want to limit carry-on baggage to help improve cabin cleanliness

Spirit Airlines' marketing slogan is, 'home of the bare fare', that highlights the airline's unbundled fare strategy. Spirit Airlines generates about 50% of its total revenue from ancillary revenue offerings. The full-service carrier Emirates has recently begun to unbundle some of its fare options, such as excess baggage fees which yielded the airline $120 million between 2018 and 2019.

and hygiene," says Ozores. "Charging passengers to put their carry-on cabin bags in the hold for their safety is unlikely to be accepted. Airlines are going to have to be extra sensitive, and they will need to put a lot of emphasis on making sure their passengers feel safe and welcome."

It is thought that forcing passengers to pay for amenities that were once free will be a delicate matter.

Frequent flyer

One way that ancillaries will help major airlines is by leveraging airmiles from frequent flyer programmes to raise their reserves. Airlines sell their airmiles at a discount to the banks in exchange for much needed liquidity and cash.

Most frequent flyer programmes will have a co-branded credit card scheme. Financial institutions incentivise customer spending on their credit cards by gifting them points or airmiles against transactions made. Before the credit cards can offer airmiles to customers they must be bought from the airline.

The Delta SkyMiles loyalty programme is facilitated by American Express, which buys the points from the airline. American Express will typically bulk-buy airmile points from Delta at significant discount during a downturn. Effectively the airline is getting an advance on its future revenue, but it is also taking a penalty because it is selling the airmile points at a discount.

"Buying points cheaply means the credit card company has a large cache of points that will last. To win new customers, the credit card companies will be able to offer more generous sign-on bonuses. Instead of getting a typical 30,000 airmile points reward for signing up for a card, it is possible to earn 100,000," says Ozores.

The credit card companies earn money from all the transactions their customers make. This is an intangible asset that is usually important for ancillary revenue for the major carriers.

Selling airmile points has been done in the past and creates a compelling case for any cash-strapped airline. It has been reported that American Express saved Delta in the last recession by advancing cash for airmiles points. In 2019 Delta generated about $4 billion in revenue by selling its airmile points.

About 60% of Delta passenger revenue is derived from active Delta SkyMiles passengers, and about 60% book flights directly with Delta.

For the short term, airlines could choose to increase loyalty over ancillary revenues. By selling airmile points, the credit card issuer is predominantly generating loyalty, yet there is an indirect benefit from credit card loyalty overspill to the airline.

As advantageous as it is for the airline to sell airmile points, an increase in underused points can become a liability, because airlines do not want to have a lot of points that are not accrued.

An ideal time for airlines to incentivise people to use their airmile points is when demand is soft. It is possible that a relaxation of the redemption requirements may persuade people to spend unused airmile points, even though this does not generate revenue. Nevertheless it will allow airlines to reduce the liability of airmiles points at a time when there are so many empty seats on the aircraft. There is little risk of diluting revenue further by making these seats available to mileage redemption.

In terms of the other more traditional ancillary revenues, such as onboard sales, these are likely to be depleted as demand will have contracted. It is forecast that additional revenue earned from hotel and taxi commissions will also fall.

Booking

The International Air Transport Association (IATA) has estimated that ticket refunds for the second quarter of 2020 will amount to $35 billion, and that airlines' cash reserves could be depleted by $61 billion during this period.

Many airlines in North America and Europe are receiving some form of government aid to sustain them during a time of crisis. It is believed that the last thing airlines want to do is upset tax-paying passengers by overcharging them in an attempt to boost ancillary revenues.

Mass cancellations of flights brought about by the pandemic has led to an unprecedented move towards flexibility regarding change fees and cancellations. Re-booking and cancellation fee charges are another source of ancillary revenue that many airlines are currently waiving.

"The airlines that are still flying are becoming more flexible towards their re-booking and flight cancellation policies, because they want to make it as easy as possible to fly by forgoing these change fees. It looks likely that airlines will continue for forgo them until demand is back to normal," explains Ozores.

Wizz Air has been offering 20% in extra credit to those passengers who choose a voucher that allows them to rebook, instead of a cash refund. During the recovery period airlines would prefer credit is kept with the airline, and are welcoming passengers to re-book with a voucher system.

"You will have to incentivise passengers to fly and treat them better than you have done in the past. You will have to give passengers a lot of reassurance around the health and safety of flying," says Ozores. "In the days of regulated air travel, there were no change fees and many of the ancillary charges did not exist."

According to Ozores, airlines are not necessarily going back to that era. For example, it is unlikely that an LCC will move away from the a la carte model. But it is believed that squeezing more from

It has been forecast that the Covid-19 pandemic will usher the end of the traditional in-flight magazine. In-flight magazines cover their production and printing costs from advertisements, and are either revenue neutral or revenue positive. It is believed that post-pandemic many passengers will not want to touch a magazine.

the a la carte offering will not be a priority. To attract more passengers, airlines will not want to look as if they are charging excessively for additional services.

Catering

Most of these airlines are not making a tremendous amount of revenue from on-board catering. Post-pandemic, this is another revenue stream that is at risk. IATA recommendations on passengers' use of facemasks means that eating on the aircraft could be a safety breach.

Furthermore, increased food hygiene practices could lead to an increase in costs that will lower their total yield.

"Airlines need to plan how they are going to handle on-board catering. They must guarantee hygiene standards, and even though catering is not their main revenue stream, it is likely that there will be a partial or total loss of that revenue during the interim recovery phase," adds Ozores.

The pandemic has raised awareness of the types of food people consume. Even though in-flight menu options could be limited during the pre-recovery phase, it is likely that there will be an increase in passengers wanting to consume healthier food options. Airlines could include more healthy meal options as part of their overall ancillary revenue strategy to good effect.

Revenue streams

It is unlikely that the percentage of ancillary revenue, as total yield, will dramatically change. Spirit Airlines' booking fee amounts to about one-third of its ancillary revenue and baggage is about 40%. The portion of total revenue coming from ancillaries will remain at 30-40%, but there will be less total revenue overall.

If fares are reduced to stimulate traffic, the percentage yield generated by ancillary charges may increase. This is because many ancillary charges are static, so a $25 baggage fee will remain the same, whether the fare is $100 or $70. Therefore, if the average ticket price is low, the portion of revenue gained from ancillaries will increase.

AirAsia has non-airline ancillary revenue streams such as RedBeat Ventures. Established in 2018, RedBeat Ventures' aim is to transform AirAsia into a digital corporation centered around travel and lifestyle. Included within RedBeat Ventures is Santan, which aims to become the world's first Asean fast food franchise. In addition to Santan is the digital bank service BigPay that has generated over 1 million users.

Collaboration

A few airlines collaborate with destination service vendors and create revenue by selling and airline products and experiences through the aircraft's in-flight entertainment (IFE) system. Destination services can include restaurant bookings, tickets to museums and events, as well as airport transfers and accommodation.

"Airlines selling destination services need to reassure their passengers that their travel experience is safe and clean, by ensuring that its collaborative partners can provide a high level of health, safety and security," says Ozores.

This will be the same for any destination services the airline is promoting. "Sanitary practices in the past were never in the equation, and now they are. This will affect who you partner with, so if there is a reluctance for travellers to go to theme parks, should the airline still promote and encourage passengers to visit these destinations?" asks Ozores.

It is possible that destination services could become more niche and cater for attractions with a lower footfall and public density.

Post-pandemic

Post-pandemic, it will be imperative for cash-strapped airlines to return to profit as soon as they can, so fares could go one of two ways. Under pressure to attract more passengers, airlines could become more competitive and lower ticket prices to win market share.

If airlines are regulated to block off seats and so lower their passenger load factors, they will not be profitable unless they increase fares. Moreover, airlines are likely to limit capacity to force fares up, so as to generate positive gross margins from all operations and to rebuild cash reserves where possible.

In addition, it is possible that passengers will be requested to pay for more items and services that they have received free in the past. In future, there may be fewer free amenities, such as IFE content.

Paying for IFE content has never really thrived as an ancillary revenue stream in the past, but the IFE system is a channel to drive ancillary revenue in the future.

Charges could be to access Over The Top (OTT) media streaming services, such as Netflix; or the IFE system could contain a payment gateway to access pay-as-you watch content, such as individual movies or box sets.

Valour Consultancy is a UK-based leading provider of market intelligence services. Co-founder Craig Foster says: "It is conceivable that airlines might purely provide a service to get passengers from A-to-B, and any extra services that come on top will be chargeable. Some may even start to unbundle everything, at least for the short term, especially if they decide not to sell every seat on the

The pandemic has illustrated that people are increasingly inclined to consume and pay for digital content. Netflix added 15.7 million new paid subscribers to its network as people worldwide sought ways to entertain themselves during lockdowns. Netflix reported that 64 million of its subscribers watched its hit documentary Tiger King.

aircraft to facilitate passenger social distancing."

Therefore, on-board meal services, IFE content and even access to USB power, could be chargeable by more and more airlines after the pandemic.

Portable IFE

"One of the things that we have done for a number of years is to track installations of connectivity systems and IFE systems, not just seatback systems, but the myriad portable wireless IFE systems that exist," says Foster. "The advantage of the portable system is that you do not need to physically install it, because it can be simply located in the overhead bins."

Once installed, a portable IFE system will wirelessly stream media content to passengers' personal electronic devices (PED). Fundamentally it is possible to implement a portable IFE system at a fraction of the cost of a seat-back system, which is also costly to maintain.

Moreover, a portable IFE system can provide the airline with an eCommerce capability to display products, services and adverts in a targeted fashion. It is thought that some passengers will be less inclined to interact with an embedded seatback screen because of hygiene fears and will therefore be more comfortable using their own PEDs.

Some portable IFE systems need to have their batteries changed every day, so they will be touched by many crew members. This could become a logistical issue if crew members do not want to handle them in future. Some portable systems can be connected to the aircraft's power system, meaning the system is infrequently handled.

Payments

It is believed that both passengers and crew will be reluctant to use payment devices that get passed from passenger to passenger throughout the cabin. It is conceivable that passengers will want to pay for goods and services by contactless methods, via their PEDs, possibly using Bluetooth and across near-field communication technologies.

These technologies will come to the fore in the future, because many passengers will not want to use cash and airlines will not want to accept it. Notwithstanding, it will be possible to make payments directly from a passenger's PED across the portable IFE system's internal network.

"We are currently developing two reports about IFE and IFE content. Airlines are starting to think about how passenger behaviour will change post-Covid-19. Much of this could depend on how long the restrictions go on for. The longer the pandemic lasts, the more likely it is that temporary changes become permanent," explains Foster.

As restrictions remain in place, passengers are less likely to want to interact with anything or anyone onboard the aircraft.

Connectivity

The cost of installing a full connectivity solution is quite substantial. The dichotomy will be that budgets will be squeezed because of the pandemic and low passenger load factors.

But the one thing the pandemic has amplified is the need for society to be connected all the time. There is an increasing reliance on eRetail for daily food essentials and consumables ranging from clothing to electronics.

The pandemic has really shone a light on the crucial role that the internet has played in our lives. Connectivity is no longer about just sending emails and WhatsApp messages. There is every reason to believe that airlines want to stimulate and better monetise on-board connectivity solutions.

According to a recent Valour Consultancy report, during March 2020, US telco Verizon reported a 75% increase in gaming traffic within one week. Online shops increased subscriber numbers by 80% year-over-year in Brazil, 45% in Australia, 32% in France and 29% in Italy.

Disney+, is one of the OTT suppliers reporting an increase in subscriber numbers, with US numbers tripling in a two-day period.

Netflix announced that it had added 15.7 million new paid subscribers globally, doubling the 7 million it had forecasted. The hit Netflix original show Tiger King was viewed by 64 million subscribers. Other hits included the reality show Love is Blind, which was viewed by 30 million subscribers over the past three months, and Spenser Confidential, which was viewed by 85 million subscribers.

The teleconferencing app Zoom added 20 million mobile users in one week.

According to Valour Consultancy, some of these changes may only be temporary, although some are likely to alter the way people take part in on-line activity forever. The report adds that there is every reason to suggest this change in behaviour could lead to increased use of in flight connectivity (IFC), either as improved take-up rates or increased demand for bandwidth.

Air-to-ground connectivity solutions have been successfully implemented by some US domestic carriers, as an economic alternative to a comprehensive Ka-band or Ku-band solution.

Hollywood content is expensive, especially early release films. However, because cinemas are currently closed and many studios are losing revenues, some films are skipping cinema release and

Many full-service carriers include access to passenger lounges as part of the fare price. However, it is possible to for airlines to charge extra for these services. During the recovery period, it is forecast that some airlines will want to improve their included offerings, such as lounge access to increase passenger loyalty. On the other hand, some may want to charge extra for additional services to increase yields during the downturn.

going straight to distribution. If Netflix, Amazon or Hulu get the early release rights for some of this movie content, then it is possible that passengers will want to access it via a high capacity connection.

Hollywood prohibits the wireless streaming of many of its early window content in the cabin because of fears around piracy. Recently however there are reports of specific deals being put in place between individual content service providers (CSP) and studios to stream this content across a WiFi network.

"It is possible that the whole IFE model will be affected by this. We are all used to engaging with the touchscreen on a long-haul flight and watching the latest Hollywood release," explains Foster. "If connectivity is free, the service can often become overwhelmed and unusable. The technology is not there yet to support widespread complimentary internet access for each passenger flying on every connected aircraft. Typically, the charge for on-board connectivity stops all the passengers from using it, which sounds counter-intuitive."

According to Foster, the discussion on connectivity needs to change from trying to use it to gain direct revenue. This is because it was believed that charging for internet passes was going to change the IFE ancillary revenue model. This has not happened because passengers are used to getting free internet connectivity at McDonalds and Starbucks, and even have the perception that the internet is free at home.

"Connectivity can be used already in a number of ways to increase indirect ancillary revenues and improve the passenger experience," says Foster. "One example of this is 'in the moment care' so if there is a problem, such as a broken seat-tray table, the cabin crew can use the aircraft's connectivity to provide a goodwill gesture on the spot," says Foster.

Other 'in the moment care' examples could be a free internet pass, or immediate credit of airmile points to the passenger's account. Research has proven that completing remedial action on the spot has a positive effect on the passenger.

The idea is that when an airline breaks the schema, and does something positive that is unexpected, the passenger will have a more pleasurable flying experience than if nothing unexpected had happened on the flight. Overall, a well-handled negative experience has the potential to leverage passenger loyalty.

End of the in-flight magazine

It has been reported that US newspapers are facing an extinction-level crisis as a potential transmitter of Covid-19. It is a concern to passengers that they could be handling an item that a previous occupant of their seat might have sneezed on.

"I cannot imagine that passengers will want to pick up and read an in-flight magazine that lots of passengers have thumbed through in the past. I think its days are over. It is likely that airlines will introduce e-journals and digital magazines reasonably quickly, depending on the system on the aircraft," adds Foster.

In addition, many advertisers in the magazine may want to re-evaluate their marketing strategy if their budgets have been cut.

Destination shopping has a lot of potential and could be a more interactive and contemporary replacement for the magazine, via the in-flight map, which is something that most passengers will engage with during a flight.

"In-flight maps are an excellent platform for illustrating destination content, such as sports events, and services such as bars restaurants and tourist attractions," says Foster. "It is possible to layer many partnership deals into the in-flight map that can relate to passenger onward transportation and partnerships with UBER and other travel companies. FlightPath3D has done a lot of excellent work on the estimated airport transfer time for passengers to their actual end destinations, and provides the option to book various transportation options with or without onboard connectivity."

Modern in-flight maps can subtly layer advertisements and partnership deals into their content. Moreover, it is possible to generate higher marketing yields by embedding targeted ad-ware software that analyses the user's scroll length and viewing patterns to determine their demographics. Once a user's age and sex have been determined, the most relevant adverts can be stitched into the map. It is possible that no two passengers on a flight will view the same adverts.

Summary

It is unknown how the Covid-19 pandemic will affect recovery and passenger behaviour. It is likely, however, that the recovery of passenger load factors to pre-Covid-19 levels will take time. Passenger expectations and disposable income must be taken into account when airlines decide their ancillary revenue strategy. Reverting to a full-service model to attract passengers has its benefits in terms of passenger expectations, but this means airlines must increase their fares to offset forecast low demand. Nonetheless the potential yields to be generated by ancillary revenue can be high when it is done correctly. It could make the difference between operating at a profit or loss.