Post-Booking Revenue Management
Alaska Airlines Case Study

Summary
Revenue Management (RM) needs to be thought of as a continuous process that starts when a flight opens for sale, and ends only when the boarding door closes. Particularly in the COVID-altered world, to extract the maximum profit from a flight, RM professionals must continue to revenue manage their flights even after guests book. Airlines who leverage Post-Booking RM tools will have a significant revenue and operational advantage vs. those who do not.

The origins of Revenue Management
Traditional Revenue Management (RM) practices emerged in the 1980s as jurisdictions around the world began to deregulate their airline industries. Leveraging historical demand and sophisticated forecasting tools, RM’s goal is to ensure that airlines extract the profit optimal revenue from each seat sold by deciding how much capacity to sell at a specific price at a specific point in time in the lifecycle of a flight.

The stakes are incredibly high - sell too much too early at a lower price, and airlines might sell out too early missing out on high yielding last-minute sales (spillage). Hold inventory (high) for too long, and they could risk having a plane depart with empty seats (spoilage). Overbooking provides a hedge against spoilage, but it has its limits: Involuntary Denied Boardings are extremely costly, and “poorly managed” Voluntary Denied Boardings have a very negative guest impact.

Over the past 35 years, RM systems have become incredibly sophisticated in managing the spillage vs. spoilage dynamics, and guiding airline overbooking decisions. However, they have focused exclusively on the period between when a flight opens for sale, and when a guest books. As a result, traditional RM benefits are limited, and most successful under “ideal” conditions:

• Stable demand patterns.
• Minimal variations with respect to sellable capacity.
• Predictable relationships between price and demand.
• Predictable cancellation and no-show rates for flights.
• A tolerance for “high contact” resolution of oversold flights.
The issue

This ideal, however, is almost never the reality - particularly in the COVID-altered world:

- Demand is not often stable and predictable - e.g. a previous year’s demand patterns do not always apply to the present. Furthermore, exogenous factors can rapidly alter demand either upward or downward.
- Sellable capacity is changing as airlines have to make operational changes to their schedules, potentially cancelling flights.
- Price and demand don’t always have a predictable relationship. As recent COVID related events have shown, air travel demand has been extremely inelastic (ie. price changes are not always stimulating more demand).
- No show rates and cancellations can be very unpredictable. With many airlines eliminating cancellation penalties, the volatility and variability of cancellations is bound to increase.
- With respect to dealing with oversold flights, guests today have much less tolerance for “high contact” resolution - they prefer to avoid crowded spaces and face to face interactions.

Until recently, like many of their global peers, Alaska Airlines relied only on their traditional RM systems to optimize revenue. However, they faced a number of downstream challenges. Even the most sophisticated demand and price forecasts could be incorrect, resulting in spillage.

“Alaska Airlines faced many challenges with respect to both spillage and involuntary denied boardings. Essentially we had the worst of both worlds.”

Kevin Ger, VP of Pricing and Revenue Management (2013-2020), Alaska Airlines

Furthermore, overbooking was managed through a legacy volunteer solicitation system which had sub-optimal results:

- Messaging to guests was inflexible and could not easily be updated or tailored to circumstances.
- Guests could not see any alternative flight options as they considered volunteering (reducing uptake).
- The rebooking and compensation issuance process was completely manual, taking up valuable time from gate agents.
- The system was “static” and lacked machine learning, meaning that sub-optimal offer amounts could be presented to guests.

Alaska Airlines was on the lookout for a Post-Booking Revenue Management (PBRM) system that would enable them to react, respond, and optimize revenues even after guests had booked. Alaska wanted a modern solution that would mitigate spillage, reduce spoilage, and enable additional overbooking, without sacrificing guest satisfaction and compromising the relationship between the revenue management and the airport operations teams. They turned to Volantio for its industry leading PBRM solution, known as Yana, to complement their existing RM system, and provide continuous revenue management throughout the life of the flight.
The Solution

Volantio and Alaska Airlines worked together in a multi-phased approach to launch Yana network wide. Phase I involved implementing Volantio’s Oversell Protection platform, with the goal of dramatically improving and modernizing the guest experience in oversold situations, thereby enabling Alaska Airlines to reduce costly spoilage.

Alaska adopted the Yana system to proactively send targeted email offers to guests on overbooked flights, offering to rebook them (with compensation) on a later flight (if their seat was needed at departure time). The system would display to gate agents a prioritized list of guests that had volunteered, along with the alternate flight option and compensation level they had chosen.

Gate agents would be able to choose how many volunteers were needed (based on the final number of passenger no-shows), with the goal to move to a fully integrated process to notify and reaccommodate selected volunteers, as well as notify volunteers who had not been selected.

A key innovation pioneered by Alaska Airlines is the ability for guests to choose - ahead of time - which specific flight they would be rebooked on if they were selected as a volunteer. Unlike traditional volunteer solicitation systems used by other carriers, the Alaska system provided much greater predictability and control for guests, leading to positive guest feedback.
The Outcome

The outcome of Phase I has been extremely successful for Alaska Airlines: volunteer rates have doubled, enabling Alaska Airlines to significantly increase the number of seats they overbook on a typical flight, while also improving the overall guest experience and significantly reducing spoilage. Additionally, Alaska Airlines has been able to decommission and replace costly (and inflexible) legacy systems that had been used previously for volunteer solicitation.

“We have been very pleased with the outcome of Phase I. The financial impact of reduced spoilage has been well over $20 million per year, and this number excludes the additional benefits of reduced involuntary denied boardings, reduced workload for frontline staff, and improved Guest experience. We are looking forward to Phase II.”
Shane Tackett, CFO, Alaska Airlines

The manual work (by gate staff) required to manage and resolve overbooked flights has dropped significantly, freeing up critical time for gate agents to ensure flights depart on time and safely. This improvement is particularly important in the COVID-environment, where gate agents are playing an important role to ensure social distancing and mask protocols are followed. It has also helped improve the relationship between the Revenue Management and Airport Operations teams.

Our feedback has been great. A higher percentage of guests are happily volunteering. In the past there was frustration on both parts, but now these volunteers are coming to us, and they are excited.
Charity Crossest, Guest Service Supervisor, Alaska Airlines

Revenue management covers the full spectrum of the travel window. From an RM standpoint, airlines have traditionally ignored, or not fully responded to, what happens after a booking, but you’re missing out on a significant amount of incremental revenue if you stop managing after a ticket is purchased. Revenue Management does not end at the time of booking.
Kevin Ger, VP of Pricing and Revenue Management (2013-2020), Alaska Airlines

Coming attractions

Phase II will involve Alaska Airlines and Volantio implementing the Revenue Rebook module, which will enable Alaska to mitigate spillage and impacts from aircraft changes/cancellations. As demand and capacity conditions change on flights, Alaska will be able to proactively reach out to passengers days or even weeks in advance, providing them with offers to switch to alternate flights in exchange for compensation. In-so doing, Alaska will be able to free up space on high demand flights for higher yielding passengers, and better react to changes in its operations.

Having this flexibility will enable Alaska to be more strategic and flexible in the quantity and location of capacity it decides to deploy, particularly in a world where demand conditions are extremely volatile.