Creating Value in Airline Retailing

Dynamic Offers

Quick Reference Guide

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1. Strategic Ambition

Today, the airline's mechanism to create and manage their offers relies on traditional fares and ancillaries filing with booking class inventory control. Airlines are slowly maturing to move away from these practices by leveraging the NDC standard which enables them to be in control of the offer creation and the ONE Order standard which allows the fulfilment of any retail-oriented product. After stimulating the industry's debate with a Whitepaper, IATA is now supporting the industry transition toward dynamically generated product offers, based on the shopping context and the requirements of a new generation of more sophisticated consumers.

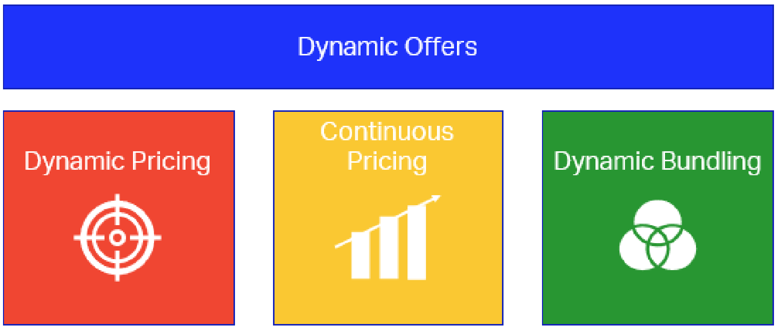
2. Industry Definitions

The ability to create an offer with one or several products and services and determine the optimal price for that offer in relation to the customer is called *Dynamic Offers*. Its main characteristics are:

→ created by the airline in response to a customer's request
→ calculated dynamically, including or not air travel and other products and services
→ based or not on filed fares, personalization, or segmentation

Dynamic Offers **is a combination of three capabilities:**

Dynamic pricing: enables airlines to offer prices to their customers based on contextual information available at time of shopping, without necessarily having additional personal information.



Continuous pricing: is an evolution of dynamic pricing which allows an airline to provide indefinite price points. This means the airline pricing becomes more granular to adapt to supply and demand at each moment in time.

Dynamic bundling: over the past 15 years, airlines have introduced fare "bundling and unbundling" so that customers can either get a tailored offer or choose only those product attributes which have value to them. Today, some airlines have taken a step further in dynamically modifying the prices of these ancillaries, based on demand, availability, and the customer's willingness to pay.

2.1. Dynamic Pricing is not new!

Through Yield/Revenue Management techniques, Airline Pricing has been "dynamic" since the arrival of deregulation in the US in the early 1980s. This mechanism has been performed via fares & rules centrally filed by many airlines, dynamically calculated with 26 booking class inventory controls. The industry is now moving beyond the concepts of fare filing and booking classes.

What is new in a dynamic offers generation environment, is the ability to adjust the price in real time without needing to file fares with a third- party system. With NDC, airlines can avoid the two-step process of fare filing, and availability computation and distribution, which has prevailed for decades.

2.2. Continuous Pricing roll-out

"*The theory is that allowing an airline to pick any price to offer will allow it to choose the exact one that maximizes revenue*," wrote Massachusetts Institute of Technology (MIT) researcher Nicholas Liotta in a paper in 2019. The same study estimates that:

1-2%

Revenue increase

When two competing airlines both implement class-based continuous pricing, revenues can increase by up to 1%, and, when both airlines implement classless pricing, they can gain up to 2% in revenue.

Some large traditional carriers successfully rolled-out Continuous Pricing by offering an infinite number of price points aiming to optimize aircrafts' capacity utilization and make use of customers' willingness to pay in the most efficient way. However, due to technical constraints still in place, the traditional pricing approach is still largely used via the GDS channels, while continuous pricing is rather used on the NDC and direct channels.

For the fulfilment of continuous pricing some adaptations were also needed. Some of the workarounds in place today consist in applying the existing RBDs as specific ticket designators for the identification and differentiation of Ticket Time Limit and Price Guarantee of a continuously calculated price.

Continuous pricing in airline retailing brings considerable benefits that is at least as big as moving Revenue Management systems from leg to O&D in early 2000s with a first mover airline advantage.

2.3. Dynamic Bundling strategies

The Continuous Pricing concept isn't just about pricing seats but also about bundling multiple services with seats into custom packages. This trend builds on years-long experiments where airlines created fare families (or bundles of products at different prices such as the basic economy fares, etc.). Carriers have seen an increase of their revenue and profit from such experiments and this made them want to experiment further.

Flight offers have traditionally comprised unbreakable flight/service combinations with typical services including check-in facilities, seat assignment, or in-flight meals. Over the last few years, service unbundling such as charging fees for advanced seat reservation, on-board food and drinks or checked baggage has gained popularity among airlines.

Many airlines have introduced pre-defined product bundles, referred to as branded fares, to establish differentiable products, drive customer segmentation, and proactively trigger upsell. From their labelling, branded fares are meant to be recognizable and support an airlines' brand, which is one reason why content is usually static over time and across customers.

A set of offers which are too complex can make consumers reluctant to purchase because of the overwhelming number of options. Choice overload can even influence people to switch to a brand that is simpler, with less options. In general, people enjoy having choices, but they experience stress if they are exposed to too many, leading to poor choices or no purchase.

Dynamic bundling in the context of dynamic offers creation, helps airlines 1) group any products from their catalog into à-la-carte bundled offers, 2) create their own fare buckets (fare families) and 3) diversify the ancillaries included. This can be achieved by managing robust retailing techniques for bundling and pricing based on channel, passenger type, time of purchase and frequent flyer level.

Massachusetts Institute of Technology (MIT) researcher Kevin K. Wang wrote in a paper in 2020:

> *When one airline implements Dynamic Offers it can increase its total net revenue by up to 2.6% through ancillary bundling alone and up to 12% in combination with dynamic flight pricing.*

3. Dynamic offers value creation for the value chain

3.1. Customers

Through dynamic offers, consumers will benefit from more attractive offers, better matching of supply and demand and being recognized and rewarded for their loyalty.

The consumer will not be negatively impacted by airlines moving towards more sophisticated algorithms for the computation of offers' corresponding prices. Currently, airlines have a lot of customer data, from sales to journey related information. However, this is most often not combined to get a good understanding of who the customer actually is and what the past experience, spend and habits have been.

The more data an airline has related to customer purchasing (and non-purchasing) behavior, the better the airline can optimize the offer. This is why airlines consider applying Continuous Pricing if their customers can see an advantage compared to the previous pricing methods.

Airlines differentiate between customer enquiries and search behaviors, but **do not identify individual customers.**

Market seasonality ✓	Customer Gender ✗
Selected days of departure/ arrival ✓	Customer Revenue ✗
Time between booking and departure ✓	Customer Place of Residence ✗
Shopping contextualized information ✓	Other Personal Information ✗

This means, the prices are not differentiated on the basis of personal customer data, e.g. gender, weight, salary, place of residence, etc. but are based solely on the general dynamic market requirements, e.g. high season, day of departure/arrival, time between booking and departure. Customer groups will continue to be segmented in the future, but without collecting individual customer data.

3.2. Corporate Buyers

One of the benefits of dynamic offers creation for corporate buyers is the ability to differentiate and customize the offer in alignment with their internal policy, by increasing the ability to work with the airlines and tailor corporate bundles for different user groups within the company.

3.3. Solution Providers

Dynamic Offers creates new opportunities for software solution providers to innovate and create new offer creation tools for airlines. While today, multiple systems are required to create an offer, and other systems are used for pricing these, and still other systems are used for putting these offers to the market, a future offer management system could well tackle all these tasks within a single environment. The success of building dynamic offering capabilities is dependent on the right technology requiring real-time pricing engines, product recommenders, user interfaces, and data processors that can run the optimization methods according to the defined processes.

3.4. Travel Agents and TMCs

The clear benefit for the travel agencies is the potential for complete and unrestricted access to an airline's offers and products catalogue via the NDC standard. By working with airlines in aligning their offerings, travel agents will be able to create a better customer proposal and add value and differentiation.

3.5. Aggregators

For many airlines, *Dynamic Offers* underlines the importance of NDC and the ability to be in control of creating and modifying their offers. Adapting to these new processes will improve the book-ability and the quality of offers provided to their travel agents and TMCs. More relevant offers result in higher conversion, thus driving a better quality of service for the aggregators' customers.

4. The Big Picture: towards Airline Retailing

Today, more than ever, the value of airline retailing is of utmost importance. Airlines together with the value chain are starting to focus on value creation beyond the individual programs as done in the past. A McKinsey study issued in 2019 says that:

~7 US$

per passenger

Modern retailing might help airlines realize the equivalent of 4% in new value annually of the current industry revenues.

As they adopt modern retailing capabilities, airlines and other players from the distribution value chain are working around five critical concepts:

- → New Distribution Capability (NDC): a standard based on modern technology that allows airlines to include more content (such as legroom, seat pitch, ancillary offers, and other essential attributes) in their offering to travel agencies and consumers.
- → Dynamic Offers: a program to support the transition toward dynamically generated product offers, based on the shopping context and requirements of a new generation of sophisticated consumers.
- → ONE Order: a new standardized and expandable reference that will become the single access point for customer orders by third parties (i.e. interline partners, distribution channels, ground handling agents and airport staff, among others).
- → Settlement with Orders: introducing an efficient framework for the settlement of agreed orders between partners in an NDC environment
- → Future of Interline: by providing more transparency, the new interline framework will empower the customer while enabling a seamless customer service.

Air Retailing can produce value for airlines in five ways:

1. Development of New Offers
2. Enhanced Revenue Management
3. Optimized Distribution Mix
4. Better Customer Targeting and Engagement
5. Optimized Payment and Fulfilment

4.1. *Dynamic Offers* contribution to Airline Retailing value creation

Based on the five airline retailing value creation pillars there are a number of tangible benefits that dynamic offers creation may bring along in the simplified context of the SHOP-ORDER-PAY process.

By order of relevance, we are listing the **top three value creation areas** where airlines could see these immediate and tangible benefits:

2 Enhanced Revenue Management

- → Improved use of contextualized shopping data leveraging offer control via NDC/Direct channels (i.e. know the demand, better segmentation, etc.)
- → Dynamic Pricing & Continuous Pricing capabilities
- → Customized Bundled Offers
- → Interline Offer and partner availability control

1 Development of New Offers

- → More sales of Ancillaries & Fares Families and rich product description using NDC in indirect channel
- → Tailor made offers via contextualized offers
- → New types of partnerships/ interline (i.e. Air/Rail, LCC/FSC, non-air package, etc)

4 Better Customer Targeting and Engagement

- → Customized Offers and Experience (i. e. new corporate bundles, User X, loyalty, conversion, etc.)
- → Dynamic Bundling/ Pricing of individual offers in NDC and/or direct channel

There are also a couple of **enablers** mainly around Order Management and Payment to achieve the full airline retailing benefits.

5 Optimized Payment and Fulfilment

- → Fulfilment with Orders only (i.e. PSS transformation, sunset ETKT, simplified delivery of interlining, etc.)
- → Alternative payment forms (control FOP, fraud prevention control, increased conversion…)
- → Reservation Accounting System simplification (i.e. real-time revenue recognition, no proration, no auditing, offer/order integrity, etc.)

3 Optimized Distribution Mix

- → Optimized Distribution mix and differentiated offers by channels

4.2. Industry transition towards *Dynamic Offers* capabilities

The transition from traditional pricing methodologies to dynamic offers will come with its challenges:

Airlines may have to support both traditional and new offer creation across four areas:

→ Technology
→ Distribution
→ Business processes
→ Organizational Design

It will depend greatly on how quickly the industry transitions, or a single airline decides to push the boundaries irrespective of the speed of adoption and implementation in the value chain and in the broader industry. Not only will they depend on the airline size and market position, but also on the importance of the relationships with their partners.

An ever-occurring theme is the size of the project, the transformation mindset, and the ability for airlines to master large organizational changes and big technology projects.

With regards to *Dynamic Offers* capabilities, there is an opportunity to make the changes step by step, especially as the channels for dynamic offers creation are limited to direct sales and NDC for the time being.

Furthermore, it is important to focus on change where it is worthwhile and avoid it where it is not necessary. An example of this is the topic of Reservation Booking Designators (RBD). Initially, there was a view that to move to *Dynamic Offers*, the industry would have to remove RBDs. The impact of removing RBDs is massive, as the concept is engrained into airline processes well beyond distribution. However, in time, it became apparent that the RBDs are not a showstopper.

Dynamic Offers can work with or without RBDs

RBDs may no longer be used during the price creation processes but kept to support the fulfillment of the offers during a transition phase.

Today's indirect distribution systems rely entirely on booking classes and published fares. Airlines publish fares and each fare is connected with one RBD. One or more published fares are applied to the customer's chosen itinerary (in addition to taxes, fees and charges) creating the total Offer. Airlines can publish fares several times a day, and many airlines have tens of millions of separate fares published at any time, many of which may never be sold.

Because of such dependencies, many industry providers often tend to propose incremental changes to existing processes. These proposals may involve partial improvements towards revenue optimization, but they still entrench the existing framework of booking classes and published fares. Accordingly, these proposals may divert resource away from the real industry transformation that will unlock the true value of airline retailing.

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