



Airlines Demand Forecasting Leveraging Ancillary Service Revenues

An approach by TCG Digital





Traditional Revenue Management and Demand Forecasting

The year 1978 started off the transformation of the Airlines industry, and the subsequent birth of Revenue management practices among airlines. The revenue management practices caught up across the airlines industry through the Eighties and Nineties and significantly improved their profitability. The revenue management practices have evolved over the years and more and more industries have adopted and benefitted from them. In today's uber-connected global environment, Airlines face dynamic and continually evolving business challenges, and need to be far more

agile and responsive to increase profits, productivity and customer experience. To overcome these and future challenges, airlines today, need to invest in a next-generation revenue-management solution with cutting-edge technology that provides more accurate demand forecasts. Traditional Revenue management systems focus on maximizing revenue through an analytics-led inventory methodology. Airlines have coupled this inventory-management approach with an innovative variable pricing strategy that maximizes its revenue and profits in a dynamic and intensely competitive market.

Emergence of Ancillary services

The airlines industry has evolved over the course of the last 30 years, especially with the emergence of LCCs and ULCCs. The introduction of LCCs and ULCCs along with the ubiquity of internet has transformed customer purchase behavior, leading to increased pressure on the FSCs bottom line. The LCCs and ULCCs focus on lower costs has led to the complete overhaul of the product offerings. By unbundling a number of features, ULCCs have increased the use of ancillary products. According to Ideaworks Company, a leading consultancy on airline ancillary revenues, revenues from ancillary products were estimated to be \$82.2 billion worldwide in 2017, approximately 10% of the total industry revenue. This significant increase in ancillary product revenues indicates the growing importance of ancillary products in the airline industry. Ancillary revenue is generated by activities and services that yield revenue for

airlines beyond the simple transportation of customers from point A to point B. These wide range of activities include commissions gained from hotel bookings, the sale of frequent flyer miles to partners, and the provision of a la carte services – providing more options for consumers and more profit for the airlines. A la carte activity is a significant component of ancillary revenue and consists of the amenities consumers can add to their air travel experience. Revenues from a la carte services capture the major share of the ancillary product revenues; they contribute \$57 billion, nearly 70% of the total ancillary services revenues. These include fees paid for checked baggage, assigned seats, buy-on-board meals, early boarding, and onboard entertainment. Of these, the revenue from checked baggage looms large with \$23.6 billion in estimated sales for 2017.

Current RM system limitations



Although the Airlines industry was at the forefront of revenue management, it has not transformed with the changing market dynamics. Airlines continue to be hampered by their legacy systems and processes. Airlines continue to price the core tickets that either consists of all the a la carte features or lacks the a la carte features. The growing importance of airline ancillary products have fundamentally altered the industry and airlines have not updated their systems and processes to maximize revenues including these new constraints. It's easier said than done because of the inconsistency in practices across the

industry – LCCs versus FSC, and even the practices within a large network carrier. Not all the markets are the same, they differ in regulations and this hinders adoption of a common approach for all the markets. The Latin market, for example, considers fuel surcharge as a Q surcharge whereas other markets consider fuel surcharge as YQ. The unbundling of ancillary services further intensifies the existing complexity of total revenue optimization. By leaving out the ancillary product revenues, the existing Revenue management systems are not truly maximizing revenues and leaving a significant portion of the total revenues on the table. These current set of challenges provide an opportunity to gain a competitive advantage. The airlines industry, especially revenue management, has come a long way and an opportunity like this is not one which any forward looking airline would wish to forego.

New Frontier in Revenue Management



Build a True Fares platform

Firstly, airlines have a number of siloed departments: the pricing function under Revenue management and sales and marketing functions. The current pricing team don't include the ancillary service fees in any of the fares, which significantly lowers the total revenue that is being optimized. The first step towards total revenue optimization starts with the inclusion of the ancillary service fees in the current RM systems. The Ancillary services fees data resides in the Sales and Marketing function

Airlines today are not realizing the total revenue potential for a number of factors – siloed departments within the Airlines, complex fare structure and filing, and legacy Revenue Management systems. Of the three factors, complex fare structure and filing will not go away soon and airlines must continue to work with these constraints. On the other hand, Airlines have total control over their internal processes and

and airlines must include these fees in their RM model. Currently, RM systems include only the base fares, fuel surcharges, depending on the market, and surcharges (CAT12) as inputs.

Going forward, the airlines should include the a la carte features fees as inputs along with base fares and surcharges. A few ancillary service fees such as on-board meals, which were hard to track in the past can be tracked much more efficiently now because of the availability of hand held devices with Cabin crew.



Once this data is collected, the airline needs to map the fees with the relevant booking class. For example, Y booking class fare will include all the a la carte services fees; however N booking class fare will not include any of the a la carte service fees. In this era, the different data sources of ancillary service fees provide an opportunity for the data science group within an airline to analyze and include the corresponding statistical significant ancillary service fee to a booking class fare.

Path ahead



An Airline's strategic focus must be to integrate these siloes of data, most importantly the readily available data from their Sales and Marketing function and In-flight cabin crew application, into their Revenue management system.

To accomplish a true, relative to current market, and accurate demand forecast, airlines need to incorporate a new age revenue-management solution that goes above and beyond the existing inventory data led forecasting. The solution will provide airlines with a much broader view of demand, including real-time information. Unfortunately, traditional business functions and their supporting technology, which generate volumes of disparate and complex data, have been siloed, hindering the accessibility of comprehensive information airlines need to proactively sense and respond to rapidly changing market conditions. The result is lower total revenue, lost market share and uncompetitive product offerings. Airline analysts that are unable to see a single version of the truth represented in their demand, inventory, fare, and schedule information may make fragmented decisions with suboptimal results.

A new age revenue-management system that uses true real-time demand information supported by historical booking data can increase an airline's revenues significantly. Without proper integration and access to all relevant commercial-planning data sources, forecasts will continue to be inaccurate and will hamper analyst productivity.



About TCG Digital

TCG Digital, the flagship technology consulting and solutions company of The Chatterjee Group (TCG), is a leading Consulting, IT solutions & services provider to the global aviation industry for 18+ years. We have been razor focused in delivering value-driven business solutions to our clients across North America, Central America, Middle East & Turkey, South East Asia and India leading to satisfaction and delight for our valued customers.

Our focus is on modernizing enterprises enabled with digital technologies like Mobility, Cloud, IoT, Blockchain, Automation and powered by insight-driven analytics and AI.

Our experience with clients across FSCs and LCCs to name a few, our understanding of business models, domain excellence and deep technical expertise in legacy and new-age technologies makes us a strategic partner for our airline customers.

For more information about our Airline solutions, please visit <https://www.tcg-digital.com/airlines.php>

Author

Rahul Dey
rahul.dey@tcg-digital.com

Contact us

Prith Choudhury
prith.choudhury@tcg-digital.com

Debu Ray
debabrata.ray@tcg-digital.com