Re-inventing non-aeronautical revenues with connected airport ecosystem

Abstract

The aviation industry experienced a significant jolt due to COVID-19, losing over one billion passengers last year and forcing airlines to suspend flights. However, unlike airlines, airports cannot be shut even in a crisis like the pandemic as they have to handle essentials and cargo. They have to meet the high fixed costs necessary for maintenance and operations of the infrastructure components, including runways, taxiways, aprons, parking stands and terminal buildings, despite the hit to revenues.

Globally, airports derive about 40% of revenues from non-aeronautical streams or commercial activities like rental on land, retail concessions, parking, space and equipment, fuel and oil concessions. There is a need to diversify this array. A re-imagined revenue-sharing business model enabled through an innovative collaborative platform can deliver desired outcomes for airports, air transport value chain, customers, and relevant partners. This paper outlines how airports, as they revive from the crisis, can reinvent their business models to enable newer revenue streams and also orchestrate future growth and transformation.

Reimagining business models for resilient airport ecosystem

Prior to COVID-19, airports faced elevated pressure from airlines on aeronautical fees. As per industry body Airport Council International, which represents global airports' interests with governments and international organizations, and develops standards and policies, aeronautical revenue covers only around half the cost of operations for an airport. While COVID has put more pressure on aeronautical revenues due to decline in flight volumes, the cost of airport operations remained largely unchanged as airports could neither close nor relocate their terminals during the outbreak. Additionally, a majority of the non-aeronautical revenue is passenger-dependent. With the decrease in passenger footfall, non-aeronautical income streams such as parking and commercial revenues decreased substantially. These developments put airports under enormous pressure as they had to manage both the operating as well as developmental costs, emphasizing the need for them to augment non-aeronautical revenue in the new normal.

Airports have achieved only minimal success in tailoring and planning concessionaires and offers by studying passenger buying patterns and profiles. Several leading airports are investing in seamless passenger flow solutions to make passengers spend more time in the retail space of the terminal area. A few airports are launching mobile and web-based services to increase revenue. However, the success rate has been minimal due to the lack of partner collaboration. For instance, there is no effective way or reason for airlines to open up airports' products and services to their travelers or for airports to provide passenger and baggage status insights to the airlines. This lack of collaboration among partners not only compromises travelers' experience but also leaves potential revenue opportunities untapped.

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> Airports and retailers specifically need to align their incentive-sharing model and transform to newer resilient collaborative business models, as retailers may not be able to accommodate high concessions in uncertain times, even in future.

This year, robust digital platforms have been launched to enhance collaboration across the air cargo ecosystem, bringing IT providers, airlines, freight forwarders and other partners together. Airports need to augment a similar revenue-sharing and collaborative model to drive growth and transformation for themselves and partners like airlines, retail, food & beverages (F&B) and other service providers. Rather than focusing on traditional choices and operations for retail and F&Bs and acting as passive observers, airports should rethink and closely look at the entire passenger journey. Adding a digital layer to the brick-and-mortar retail setup will open up immense opportunities for airports.

Simply put, redefining customer experience will drive the non-aeronautical revenue opportunities for airports. A collaborative solution (Figure 1) will be effective in enabling seamless services for customers as well as benefit the airports that already have infrastructure expansion plans in place, thereby helping them achieve higher operational efficiency. The key components of a collaborative platform would include: an operational suite, a commercial suite, a registration suite and an analytics suite driven by an intelligent analytics engine.
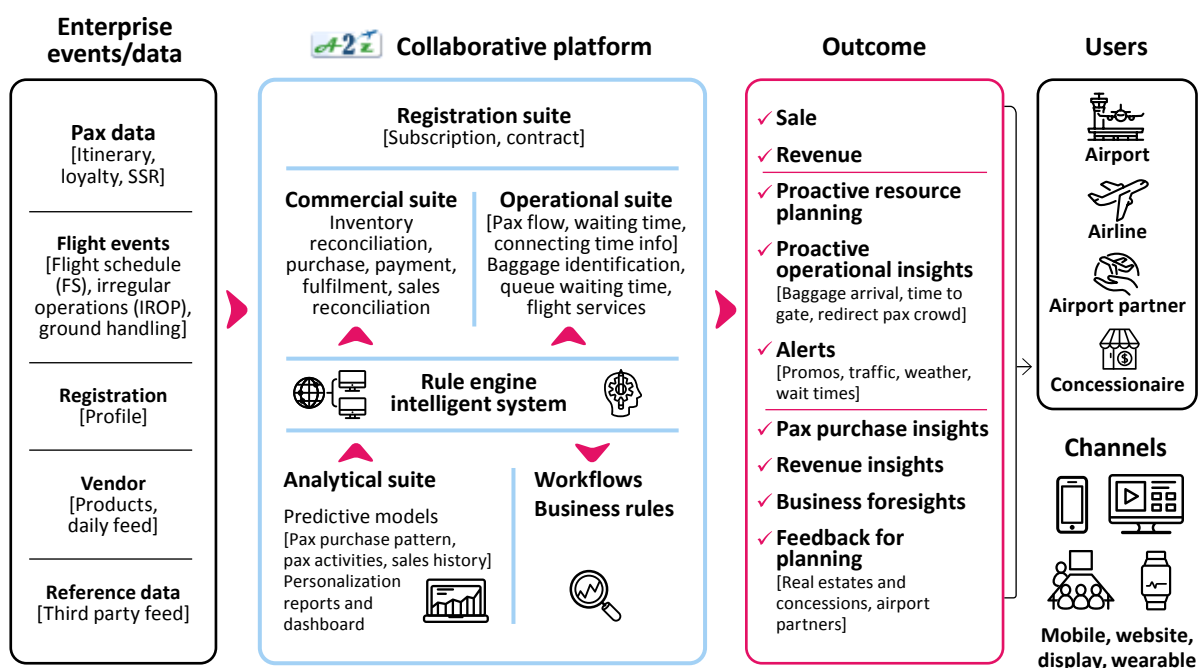

Figure 1: Collaborative platform architecture

The architecture orchestrates a seamless interface of data among partner ecosystems, delivering passenger and operational services. The platform for enterprise events/data will possess the ability to read, validate and process various flight, passenger events from the operating airlines and other partners such as ground handling service providers. The registration suite is a registration portal to onboard participating stakeholders (such as retailers and airlines) seamlessly (on day one) to the ecosystem, enabling them to avail and sell the various services rendered by the platform solution instantaneously. The commercial suite of the solution will process the products, inventory, price, discounts, promotion, payments data and help fulfil the service needs by making use of the flight, traveler and other pertinent data attributes. Another solution tenet will facilitate arriving at sales and revenue reconciliation and revenue-sharing settlement among partners in a transparent manner without disputes. Like the commercial suite, the operational suite will also process service data pertinent to flights and passengers concerned to provide valuable insights on their current status to stakeholders and aid decision-making. It will also help airports and their stakeholders optimize operations, thus helping save on resources and cost. The analytics suite of the solution will possess a rule engine component that will dynamically help configure rules (without code changes) to initiate and trigger various processes associated with the rendering of right services at the right time and at the right place. It will also possess analytical solution components to predict and provide insights and intelligence to take proactive actions to enhance the revenue and experience of all stakeholders, thereby improving planning and operational efficiency.

This collaborative platform's services catalogue will align to the three key elements: customer experience, commercial services, and operational insights. The customer experience services would include sleeping pods, gym, health and wellness services, lounge services, play areas and specialized care services for children, spa services and layover options, among others. The commercial services would include trip, car rental, and hotel bookings, car parking services, food and beverages and shopping services. The operational services would include baggage insights, location insights, data-sharing services, maintenance services and waiting time data, among others.

This will help the airports, airlines and their partners to provide a greater guest experience by providing various services emerging from a single platform. It will result in improved revenues for airports and their partners. Due to the various operational insights, operations would be optimized more and there would be better resource planning. This would result in improved customer satisfaction and increased loyalty.

The conclusion

In future, airports and their ecosystems would leverage digital collaborative platforms that would enable seamless customer experience and drive resilience for partners. Retailers with physical stores at airports need to leverage the larger platform to fend off the threat from ecommerce and innovate on the advantage of talking to the customers physically.

However, the collaborative platform for the airport ecosystem would be put to test in scenarios where there is a lack of data-sharing among partners, and a lack of knowledge on passenger personas, profiles, and buying and spending patterns. Possible disagreement on data-sharing between the airport ecosystem partners, data privacy and passengers' lack of knowledge about retail products available at airports are a few roadblocks to enabling seamless implementation of collaborative solutions.

As the non-aeronautical opportunity market grows, new revenue-sharing business models may emerge. IT companies would play a key role in defining the growth and transformation strategy that determine the future of airports. Airports need to be ready for this if they want to be able to deal with a crisis like the pandemic and enjoy better days ahead.

About the authors

Ramesh Babu – Domain Consultant, Travel, Transportation and Hospitality, TCS

Ramesh Babu, a senior business consultant-cum-architect, is part of the travel, transportation and hospitality, North America unit's domain, technology, and innovation practice team. He has worked extensively with leading airlines and airports across the globe for over a decade.

Romil Shah - Research Analyst, Corporate Marketing Research, TCS

Romil Shah is a research analyst with TCS' Corporate Marketing Research. He has over seven years of experience and looks into travel, transportation and hospitality industry research, assisting in market and competitive intelligence, and strategic research initiatives for leadership.

Elakya Karthikeyan - Business Analyst, Travel, Transportation and Hospitality, TCS

Elakya Karthikeyan is a business analyst working for one of top US airlines. She has seven years of experience. Her expertise includes providing innovative solutions for airlines' thought leadership teams and articulating success stories in the TTH domain.

Awards and accolades