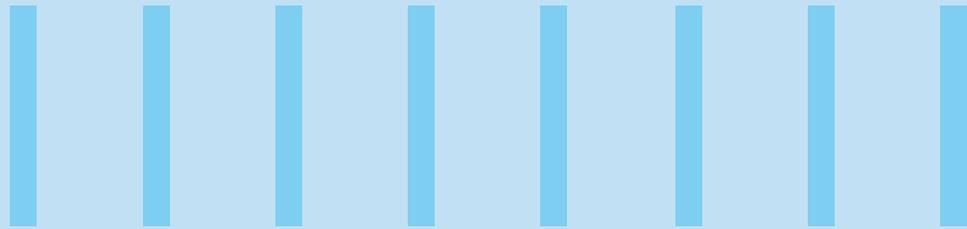




INFOSYS IATA NDC SERVICES: INTEGRATING THE AIR TRAVEL ECOSYSTEM



The airline industry is a wafer-thin profit margin business, which makes growing ancillary products and services, a business imperative. Unbundled flight products and ancillary services such as extra legroom, frequent flyer miles, onboard F&B, checked bags, baggage insurance, and in-flight retailing help airline companies grow their top and bottom lines.

The global market for airline ancillary services is estimated to grow to US\$ 183.7 billion by 2026 (from US\$ 83.4 billion in 2020), according to Global Industry Analysts Inc. The market research firm also predicts steady growth across segments of ancillary revenue.

Airlines sell ancillary services by sharing the offerings portfolio with passengers, travel agencies and travel management companies. The Electronic Data Interchange for Administration, Commerce and Transport (EDIFACT) protocol of the Global Distribution System (GDS) enabled airline operators to display prices and flight schedules externally. However, the legacy GDS methodology and messaging technology limited airline retailing. It did not allow airlines to include ancillary services as part of their offers or share the content repository directly with reservation and ticket agents, and marketing partners.

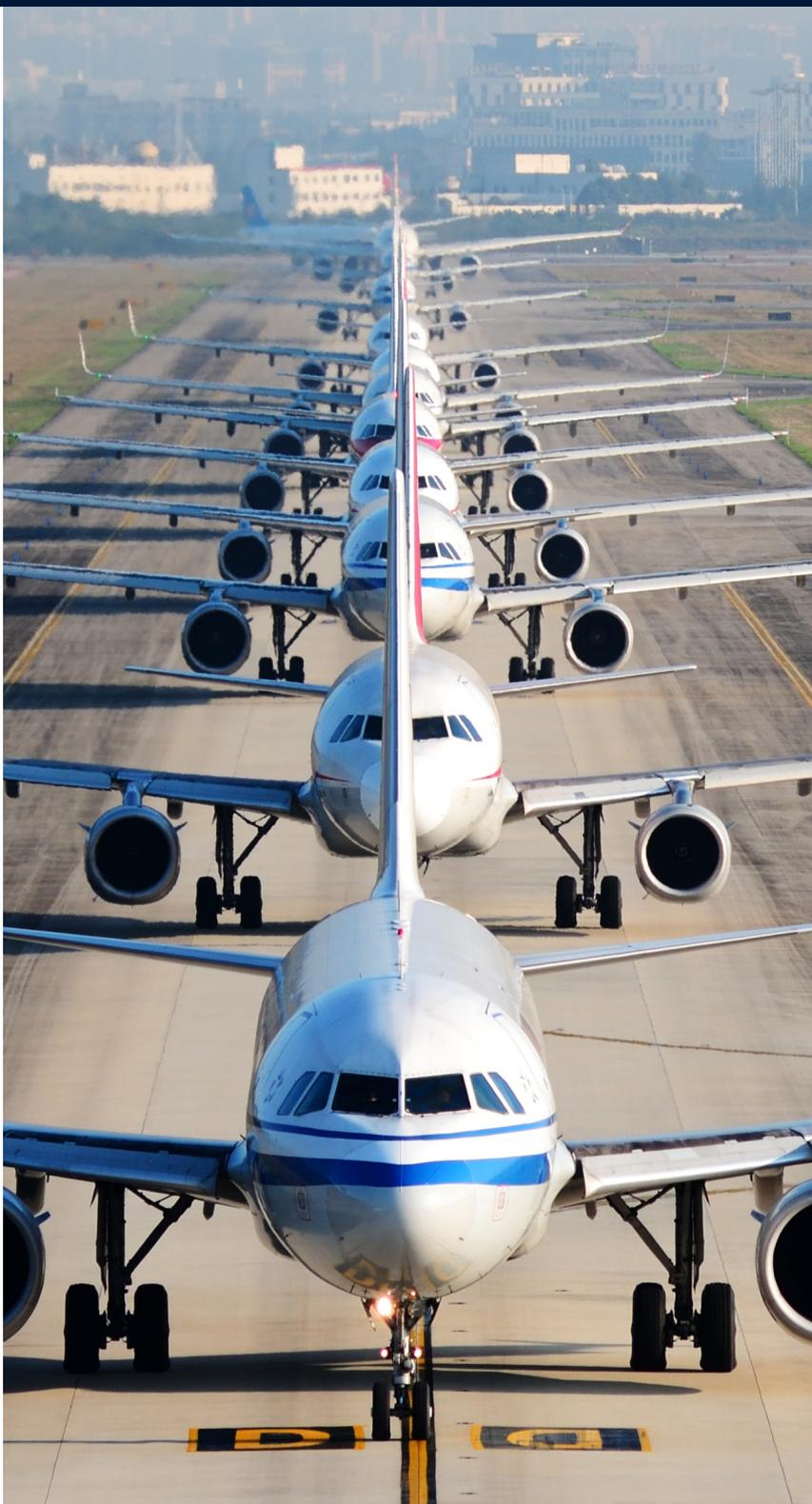
Connecting airlines with service suppliers

The International Air Transportation Association (IATA) launched the New Distribution Capability (NDC), an XML-based data transmission standard to boost airline product distribution as well as the travel experience. The standardized NDC messaging format facilitates seamless data exchange between stakeholders across the global travel ecosystem – airlines, travel agents, tour operators, online travel aggregators, digital booking tools, IATA intermediaries, merchandise suppliers, transportation and hospitality enterprises, IT service providers, non-IATA members, and travelers.

IATA NDC communication protocol replaces the EDIFACT protocol, creating an efficient system for product distribution and order management. Real-time collaboration with partners allows air carriers to develop and deliver a rich content repository to enhance the flight booking and shopping experience for leisure as well as business travelers. In addition, the NDC protocol supports brand differentiation and enriches marketing through seamless integration of travel, retail, hospitality, and entertainment.

Interactive content and multimedia messaging attract customers to ancillary products and services. Further, the ability to present a wide range of ancillary services via diverse direct and indirect distribution channels expands the reach of regional and global carriers, and accelerates the generation of additional revenue.

Apart from augmenting the portfolio of third-party products, the implementation of IATA NDC standards allows legacy and low-cost carriers to increase profit margins via value-added services such as priority boarding, seat choices, bundled fares, à la carte meals, and frequent flyer programs. It also allows direct access to customers, which empowers airlines to deliver personalized content and offers. Moreover, better control over product and pricing strategies enables dynamic pricing of airfare and retail products, while ensuring consistency across distribution channels. Significantly, a rigorous implementation methodology streamlines virtual interlining, which improves time-to-market for ancillary services.



Enhancing travel retailing

Infosys offers consultancy and implementation services to migrate legacy data transmission schema to NDC messaging standards. We develop cloud-hosted NDC data exchange platforms to streamline communication and collaboration. In addition, we develop application programming interfaces (APIs) to simplify distribution of rich media content and maximize the reach of airline product offerings. Notably, our consultants align the NDC deployment roadmap with the enterprise distribution strategy.

Our robust architecture for implementing the IATA NDC data standard (Figure 1) modernizes the travel ecosystem, and integrates operational subsystems with NDC messaging services. It is aligned with the NDC reference architecture, and supports reliable transmission of a high volume of multimedia content. Further, it enables a self-service model for customers to access flight reservation data, travel products, and marketing content through direct sales channels, search engines, and indirect distribution networks.

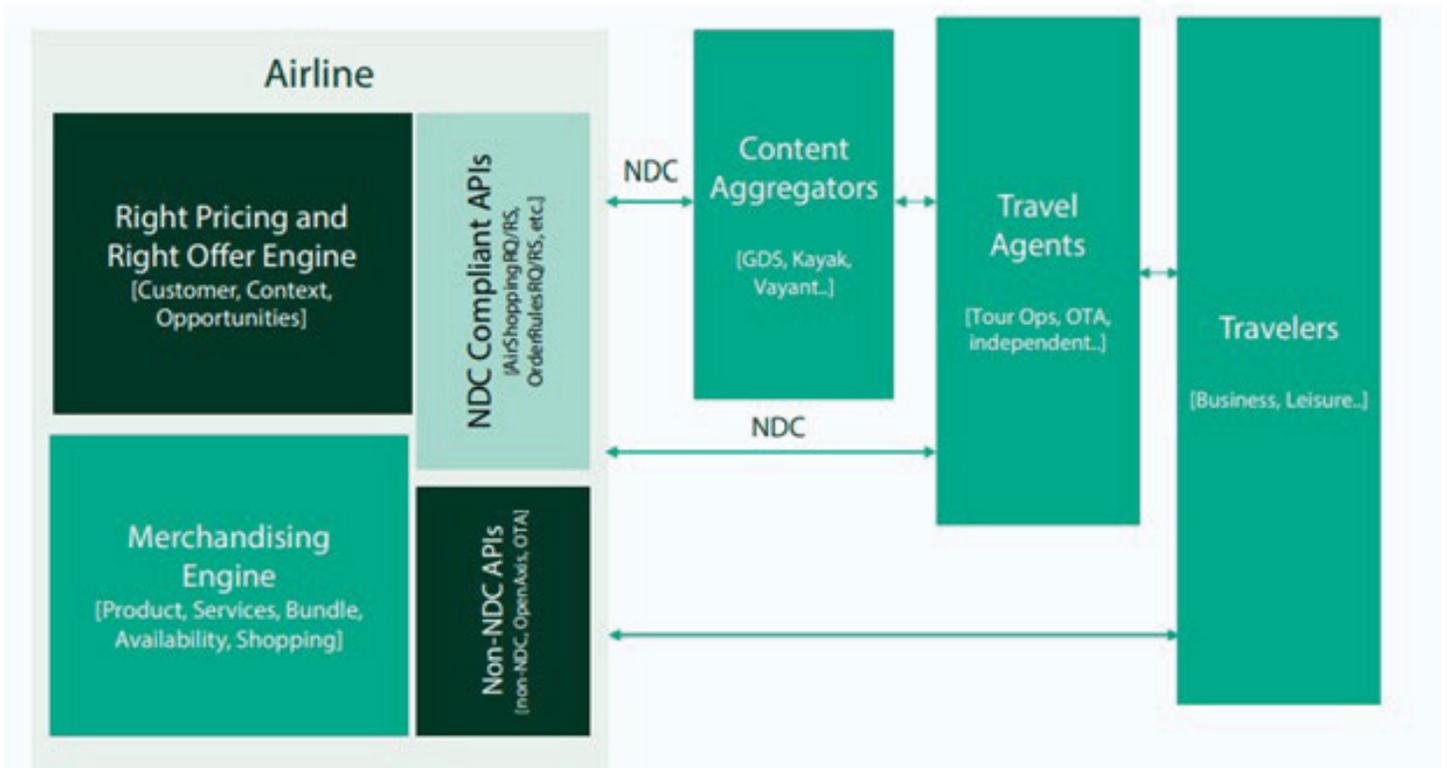


Figure 1: Infosys NDC architecture

Airline-specific APIs facilitate secure sharing of data stored in internal databases, and ensure uninterrupted messaging between passenger service systems and external distribution systems, including B2B platforms, travel portals and legacy aggregation systems. Moreover, API-driven connectivity for airline content and inventory distribution supports omnichannel flight reservation and shopping.

APIs integrate revenue management systems and distribution channels, enabling airlines to personalize base fares, content bundles, travel packages, and value-added services. Dynamic pricing and personalized offers based on customer metadata deepens the engagement, which leads to more frequent flyers. Further, superior distribution increases merchandise sales and maximizes revenue passenger miles.

NDC-compliant communication across the airline distribution value chain and passenger touchpoints provides visibility into travel requirements. The insights allow airlines to enhance the travel experience with contextual offers and promotions, be it a limited-edition discount or an exclusive itinerary. Notably, an IATA NDC ecosystem empowers travelers to make informed decisions before and during the journey, whether buying from the digital storefronts of agents, third-party sellers or airlines. Ready access to relevant data enables them to compare options, including tariff and surcharges, service details, and bundled packages.

The Infosys NDC architecture unifies marketing, sales, pricing, and distribution systems. This ensures backward compatibility of NDC

standards as well as adaptability to protocol changes in the future. Our approach eliminates operational issues in digital distribution, facilitates up-selling and cross-selling, and cultivates primary as well as ancillary revenue streams while rationalizing the cost of distribution.

IATA NDC communication protocol creates a user-friendly ecosystem for enhancing the distribution strategy and flying experience. Infosys offers end-to-end services to address implementation challenges, and capitalize on opportunities by adopting the NDC functionality.

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