New Distribution Capability (NDC)

New Distribution Capability (NDC) is a travel industry-supported program launched by IATA for the development and market adoption of a new, XML-based data transmission standard.

The NDC standard enhances the capability of communications between airlines and travel agents and is open to any third party, intermediary, IT provider or non-IATA member to implement and use.

It is transforming the way airline products and services are retailed to corporations, leisure, and business travelers and will facilitate product differentiation, time-to-market, access to full and rich travel content, and a transparent shopping experience.

Full information can be found at: [www.iata.org/ndc](http://www.iata.org/ndc)

United Airlines

United Airlines and United Express operate an average of nearly 5,000 flights a day to 342 airports across six continents. In 2015, United and United Express operated nearly two million flights carrying 140 million customers.

United is proud to have the world’s most comprehensive route network, including U.S. mainland hubs in Chicago, Denver, Houston, Los Angeles, New York/Newark, San Francisco and Washington, D.C. United operates more than 700 mainline aircraft, and this year, the airline anticipates taking delivery of 20 new Boeing aircraft, including 737 NGs, 787s and 777s. The airline is a founding member of Star Alliance, which provides service to 192 countries via 28 member airlines.

More information about United can be found at [www.united.com](http://www.united.com)
The NDC Pilot

As a means to allow United’s global distribution system (GDS) provider, Amadeus, the ability to sell United Economy Plus® seats, Amadeus and United agreed to use the NDC schema to market the product. This appealed to the airline because the NDC version 1.0 promoted flexibility and the potential to be used throughout the industry.

According to Tye Radcliffe, United’s director of distribution, payment and ticketing systems, when an airline invests capital and resources to distribute ancillary services with GDS providers, it makes sense to develop around an XML standard, which is repeatable with other providers and scalable into the future.

To accommodate the NDC schema, United leveraged its new Host Services Gateway platform enabling the airline to accept any industry standard message and translate it for their internal IT systems. This allowed the airline to manage its business in line with its existing philosophy and methodology. It was one of the first set of services to be implemented on the Host Services Gateway platform.

Whether a customer books through the airline website, a travel agent or a call center, the same mechanisms and business rules apply. Radcliffe describes this as an essential development given that the airline will be the sole source of information for the United Economy Plus product.

Objectives

United Economy Plus was an appropriate product to trial using NDC, as the airline wanted to test the schema. United dynamically-prices each individual United Economy Plus seat and the NDC schema enables this functionality through indirect channels.

Of course, other XML schemas exist and can get the job done, but as the industry aligns on NDC, implementations should be faster and easier.

Typically, airlines use other means to file optional extras such as United Economy Plus, but the airline felt a greater degree of flexibility was required to dynamically price each United Economy Plus seat and is using the Farelogix Merchandising platform to price ancillaries more dynamically using factors such as available inventory.

Opportunities

Because United was among the first to implement the schemas using a new platform, the airline and Amadeus worked together to develop creative solutions to facilitate adoption.

Overall, United and Amadeus report the challenges were not significant and the implementation went extremely well.

Working Together

United uses the Farelogix Merchandising platform to manage its ancillary products in all channels. Leveraging this existing infrastructure, United worked with Amadeus to deploy United Economy Plus seat functionality to Amadeus’ subscribers.
United Airlines takes ownership of content (2)

Working Together

Working closely together, United and Amadeus used NDC 1.0 for their Economy Plus Seats and the baseline version of NDC to communicate details of seat maps, seat prices, seat assignments, the acceptance of payment, the issuance of documents, and more.

United’s lead IT architect, Barb Chazin, designed the interaction and has been an active participant in the IATA PDMG Working Group’s XML Change Taskforce. This group is responsible for reviewing all of the changes brought forward for modifying the NDC schemas.

As other companies deploy NDC schemas, they may find areas for improvement to help make the NDC schemas more useful for the industry. Through Chazin’s work on United’s NDC XML project with Amadeus, she was able to provide valuable feedback and insights to help the airline advance NDC adoption. As an example, Chazin identified several error-handling enhancements and proposed documentation to help implementation teams with future projects.

Lessons Learned

The first airline in the industry to launch an NDC production project with a GDS, United continues to use the NDC schema today.

Radcliffe explains the airline felt it was important to thoroughly understand how any changes—including new versions of the NDC schema—would impact the NDC pilot and the airline.

Radcliffe’s reasoning applies to participants in an NDC pilot who must consider financial aspects when working within a budget and analyzing where funds would be most wisely invested.

Conclusion

Radcliffe notes the NDC standard enables a different way of doing business. “There are some very exciting, positive discussions going on taking place right now that are driving interest in indirect channels. There is no doubt the industry is thinking about distribution differently now.”