A Perspective - Adoption and Challenges of New Distribution Capability (NDC)
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**Introduction**

According to International Air Transport Association (IATA) forecast, the number of air travelers across the globe is estimated to grow to a whopping 3.6 billion by 2016, 800 million more than it was in 2011. This is the time for airlines to pull out all the stops to capitalize on this opportunity and grab maximum market share. This can only be achieved with personalized and seamless interaction with customers. It may prove to be challenging as 60% of air travel tickets are sold indirectly via travel agents using Global Distribution Systems (Source IATA) where customers are offered price-based comparison irrespective of their relationship with the airline which makes the whole shopping process transactional and impersonal. Customers remain unknown to airlines till the time the ticket has been purchased. Airlines are able to offer personalized and merchandizing services only to the direct customers arriving on their website as they have access to data including traveler history, loyalty status, travel preferences, and other characteristics.

IATA’s proposed New Distribution Capability (NDC) initiative aims at ringing in a paradigm shift in airline-traveler relationship. It is an innovative approach to airlines’ products and services distribution. With multitude of benefits envisaged for all players involved, including travelers, airlines, agencies, and aggregators, NDC aims to provide a dynamic airline shopping experience. As a XML-based data transmission standard, it will enable communication between airlines and travel agents. This open standard will give travel agents and consumers easy and transparent access to products, services and information that are accessible on airline websites.

Yanik Hoyles, Head, NDC Program, Passenger, IATA, said, “Today, airlines are usually the last to know who purchased a ticket. NDC standard will enable airlines to push out e-commerce offers, constructed by them, not just through travel agents, but also through aggregators. NDC will allow travel agents to better retail air products to corporations, leisure and business travelers by addressing the industry’s current distribution limitations. With NDC, airlines can bring in product differentiation, access to full and rich content and a greater shopping experience.”

IATA is currently working with leading airlines, GDS providers, and travel agencies to finalize standards and business requirements for NDC. Several pilot projects are also underway to verify requirements and feasibility of NDC. The new interface, developed in collaboration with airlines and its partners, will enable identification and engagement of customers with personalized offerings including fare alternatives, customized shopping, ancillaries such as priority boarding, onboard Wi-Fi, access to airport lounges and many more onboard amenities, and graphics such as pictures or seat maps. Agents will have greater access to all airline products and services, and will be able to serve their customers better and increase revenue.

Full service carriers who have their Passenger Service System (PSS) hosted on third party systems of GDS and other product companies, and carriers having in-house legacy systems are likely to be the prime users for NDC. These systems work in a co-hosted ecosystem model or on platforms where change is expensive and time consuming. GDSs manage exceptionally high loads of transactions, which if moved to airlines, would call for extensive performance load factor delivery.

Dieter Westermann, Senior Vice President Revenue Management & Pricing Strategies Qatar Airways spoke from the perspective of Qatar Airways, who differentiate themselves as a premium brand. He said “We invest a lot of money on our premium products; however, are unable to showcase them clearly on legacy distribution systems. Thus, customers were not able to properly evaluate offerings, while making a purchase decision. We needed a modern industry communication standard with which we could consistently distribute product offer, enable interactive shopping
NDC will enable customers to make purchase decisions based not just on the price. From the traditional Low Cost Carriers’ (LCC) perspective, NDC opens up a plethora of opportunities in terms of interlining with other carriers and exposing a single standard for data exchange with Online Travel Agencies (OTA) and aggregators. This will result in greater adoption by the industry and thereby larger revenue opportunities for LCCs. Given this scenario, conventional and proposed distribution models are likely to co-exist for the next five to seven years. This will call for maintenance of IT systems and processes that support both the systems during the transition period.

NIIT Technologies and IATA also carried-out an online survey during the webinar, aimed at determining the current status of NDC adoption; explore its benefits, and challenges preventing its implementation.

Finding 1: NDC will mature and become an industry norm by 2016

Majority of the companies are of the opinion that NDC is yet to mature in terms of technology. Over 60 percentage (60.9%) of companies represented in the IATA-NIIT Technologies survey believe that NDC is still a new phenomenon and will take another three to four years to mature. However, about one-third (31.7%) of the survey respondents said that NDC will become a norm in the next 18-24 months. Less than 10 percent (7.4%) of the companies opined that NDC will become a standard in the next one year (12 months).

Finding 2: Industry believes changes to PSS are critical for implementing NDC

Over 60 percent (63.2%) of the survey participants said that carrying out changes to passenger service systems (PSS) for the implementation of NDC is required. A little more than a quarter of the respondents said that the performance and scale required to implement NDC is their biggest challenge, while the rest feel that generating personalized offers (about 6.2%) and limited merchandizing capabilities (about 3%) are their biggest challenges in implementing NDC.

With the IATA and partner airlines striving to find solutions that will increase NDC distribution, we should be able to see a few NDC pilot implementations around the end of 2014. We, at NIIT, feel the ideal way to approach NDC adoption would be to not change existing core systems for PSS and Loyalty, but to invest into developing a “NDC Offer and Order Engine” which would provide the building blocks needed to fully leveraging the benefits of NDC and these are in the area of offer management, personalization, merchandizing and creating dynamic offers. This offer engine would deliver real-time personalized offers based on customer profile. This solution should further integrate with other core systems to provide ancillary sales, revenue accounting and integrity, and EMD fulfillment. The merchandizing engine should provide flexibility to deliver seats and offers using NDC standards. This solution will, in a short time, enable airlines to achieve their business objectives for self-operated routes, without significant investments.
An open system and service oriented architecture based solution, for merchandizing and personalization will deliver flexibility needed in this competitive environment. It can provide agility in customer intimacy, affinity selling, and cross selling which is vital in this evolving environment. Airlines need to embrace the change in a phased manner. We believe, Airlines will need to perform cost benefit analysis based on their business plans and the impact of it on their IT systems and processes. Airlines are likely to go for limited implementation to evaluate market behavior and agency response before going in for a full scale implementation.

A robust Offer & Order Engine; maturity of PSS to deliver range of functionalities from Super PNR to EMD and ticketing; real-time offer creation capabilities and availability of flexible and scalable infrastructure to support caching and supplier integrations will be the key factors that need to be considered for a successful NDC implementation.

Anil Batra, Vice President Global Head - Travel, Transportation and Logistics, NIIT Technologies, highlighted the fact that “Airlines need to have agile services, flexible Rule Engine and analytics that can be leveraged to sell right product to right customers. With NDC, airlines can distribute same content across all channels - airlines website, OTA website and aggregators. Thus, airlines can enable air merchandizing and sell customized offers based on contextual and customer information.”

Currently, there is a huge communication gap between airlines and travel agents. Though airlines provide clear description of price, schedule details and products like in-flight Wi-Fi, baggage, meals, and lounge on their websites, travel agents are unable to showcase the same due to limitations of the current distribution channel.

According to him, a key aspect of NDC is enablement of personalization and merchandizing across all the channels. Airlines need to contextually relevant from customer point of view, say, providing lounge services to a customer who on is on a business trip, on the other hand giving the same customer extra baggage options when he/she is on a family trip makes sense and not vice versa. This would require some changes in PSS system with robust personalizing &merchandizing capabilities. This will eventually act as a catalyst for airlines to differentiate themselves and stay competitive. Also, a key enabler for NDC is to have a comprehensive Digital Strategy so as to have a consistent social media experience, whose foundation is being formed by service oriented architecture.
Benefits from NDC

Finding 3: Innovative Products are the key benefit to be derived from NDC

Please select the most critical benefit you think can be realized from NDC

- Additional revenue by enhanced offering and ancillaries: 51.4%
- Limited merchandizing capabilities: 25%
- Changes to PSS systems needed to...: 17.4%
- Performance and scale to be able to...: 5.6%

More than half (51.4%) of the surveyed companies opined that innovation in product offering across direct channels is the biggest benefit that NDC can bring about. About a quarter of the respondents believe that NDC enables additional revenue with enhanced offering and ancillaries. Less than 20 percent (17.4%) said that NDC will help them reduce distribution dependency; and the rest (6.2%) said it can enhance customer stickiness and help them recognize customers on an individual basis.

NDC holds greater opportunities for Full Service Carrier (FSC), LCC Airlines, as well as travel agencies. LCCs can be directly made NDC compliant, and since they usually sell ancillaries on all routes, they can create a light airline profile entry for all their routes. What remains to be seen is how soon an airline can find a way to implement it NDC. Airline industry is also looking towards agencies to accept the change and play a leading role in this historical initiative.

Additional revenue opportunities, higher customer satisfaction through choices, brand affinity, and enhanced service is just the tip of the iceberg when it comes to advantages offered by NDC. Finally, airlines need to get their digital strategy right and see from a holistic picture for a long term solution.
About NIIT Technologies

NIIT Technologies is a leading IT solutions organization, servicing customers in North America, Europe, Asia and Australia. It offers services in Application Development and Maintenance, Enterprise Solutions including Managed Services and Business Process Outsourcing to organisations in the Financial Services, Travel & Transportation, Manufacturing/Distribution, and Government sectors. With employees over 8,000 professionals, NIIT Technologies follows global standards of software development processes.

Over the years the Company has forged extremely rewarding relationships with global majors, a testimony to mutual commitment and its ability to retain marquee clients, drawing repeat business from them. NIIT Technologies has been able to scale its interactions with marquee clients in the BFSI sector, the Travel Transport & Logistics and Manufacturing & Distribution, into extremely meaningful, multi-year “collaborations.

NIIT Technologies follows global standards of development, which include ISO 9001:2000 Certification, assessment at Level 5 for SEI-CMMi version 1.2 and ISO 27001 information security management certification. Its data centre operations are assessed at the international ISO 20000 IT management standards.