TRAVEL TECHNOLOGY RESEARCH
FIRST VIEW

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T2RL'S First View is our rapid analysis of breaking news. It helps provide perspective, putting the facts in the context of our wider and deeper knowledge of the market.

NDC will benefit the GDS and PSS Providers

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The Facts

In October 2012 IATA passed Resolution 787 which mandates the development of a "New Distribution Capability". NDC is intended to provide airlines with a much richer marketing capability than they have available through existing AIRIMP and EDIFACT messaging standards.

The Business Travel Coalition, a lobbying group claiming to represent consumer interests has launched a campaign of opposition to the adoption of NDC.

A series of lawsuits between airlines and some of the Global Distribution Systems have worked their way through the system in the United States and have mostly been settled out of court. In particular suits involving American Airlines have been settled and appear to no longer present an obstacle to the proposed merger between AA and US Airways.

The Analysis

There is little doubt that IATA is addressing one of the airlines real problems. The rush to online distribution as a cost-cutting measure in the first decade of the 21st century has led to the development of a highly transparent market place, particularly in the USA, in which air transport is frequently regarded as a commodity. This is borne out by US Government statistics showing that between 1995 and 2011 average air fares rose at only half the rate of increase of the Consumer Prices Index despite major cost items, particularly fuel, rising much faster than CPI in the same period.[1]

At the same time the world airline industry has remained resolutely unprofitable. Even in its relatively good years the industry's margins have been insufficient to cover the cost of capital. T2RL's own research suggests that there was a slight fall in the number of revenue passengers boarded between 2011 and 2012, despite double digit growth in Asia. Controlling capacity has helped produce profits despite a difficult global economy.

In the enormously complex environment of the airline industry it would be simplistic to suggest that issues of profitability could be ascribed to a single cause, but there is little doubt that commoditisation has had a depressing effect on airline revenues.

[1] Source: US Department of Labor Bureau of Labor Statistics and US Department of Transportation Bureau of Transportation Statistics: March 2013

In a bid to differentiate their products and hence avoid the trap of commoditisation airlines have two major avenues open to them:

- They can change the presentation of their product and in particular deconstruct the overall offering so that each element of the service has its own price tag which may be adjusted according to the relative value that particular customer groups may place upon it. This is the so-called “unbundling” process that has led to the introduction of baggage charges, change fees and advance seating charges among others.

- An alternative is to enhance the quality of the product in comparison with the competition by increasing leg room, upgrading entertainment systems or improving the quality of food and drink served on board.

Both of these strategies require a much higher level of communication between the airline and its customers in order that options available are clearly understood by the intended targets. In recent years airlines have developed this communication in their direct selling channels – the call centre and airline.com web site – but the systems serving the indirect channels have fallen a long way behind the capability required. It is this deficiency that IATA Resolution 787 seeks to address in an automated manner. Of course many travel agents argue that they know the differences between the airlines products and work to communicate those to the customer as a fundamental part of their value proposition.

The Case Against NDC

The objection that has been raised to NDC by the BTC and others is that it will remove transparency from the market for air travel. The NDC standard allows airlines to adjust the offers they make to the market according to information received about the requestor. This allows them to make more or less favourable deals depending on the characteristics of the customer, including the historical relationship that they have. The BTC case is that this is fundamentally anti-competitive and will result in consumers being disadvantaged.

There are many faults with this argument and no doubt they will be played out in public over the coming months but to summarise just a few of them:

- There is nothing in the NDC standard that prevents an airline publishing a list price for a particular service. Individual consumers may then receive an improved offer if they are prepared to identify themselves to the carrier.
- Airlines already do precisely this kind of targeted marketing in their direct channels. If consumers are unable to access targeted offers in the indirect channels they will be dissuaded from using them. It is hard to see how this will improve transparency.
- Many diverse industries already use information on the consumer in order to generate their offers. Examples include insurance companies that charge different prices for the same level of cover according to the assessed risk of each customer. Supermarket chains, especially in the USA, have differentiated pricing for members of their loyalty programmes. Car dealers sell the same model, with the same “sticker price” on different terms to different customers. It is hard to understand why airlines should be prohibited from adopting the same approach.

Assuming that sense prevails and that there are no insuperable legal challenges to the adoption of NDC there are several practical issues to be addressed before its benefits may be enjoyed.

Direct Connect is Not Enough

In 2002 a major research company published a paper entitled “Direct Connect is Not Enough” which identified then emerging communications technologies as representing a way for airlines to distribute their products outside the perceived stranglehold of the GDSs. Unfortunately the analysis was very naïve and neglected to address the facts of the international airline market. Specifically it assumed that the very complex task of integrating the offerings of hundreds of different airlines operating many thousands of city-pairs would somehow just emerge spontaneously from the Internet. Even with technology standards but without integration there was never any chance that travel agents would adopt such Direct Connect solutions which required each agency to implement a link to each airline. The GDSs might have been unpopular in some quarters because of their fees but they performed, and still continue to perform, a vital role in aggregating the majority of inventory available in the market. Even low cost carriers are now looking to integrate their inventory into the GDS in order to reach buyers unwilling to book directly through their own web-sites or call centres.

In 2002 we had not yet seen the adoption of ancillary revenue strategies by mainstream airlines and direct selling online was relatively new. There was no strong incentive for either the airlines or the GDSs to make the large investments necessary in building an integrated Direct Connect solution. Eleven years later the world is a different place and the airlines at least have a definite incentive to establish the same merchandising capabilities in their indirect channels as they have already achieved in their web sites and call centres.

Implementing NDC

In a previous generation the AIRIMP standard that was developed for inter-airline transactions was co-opted by the GDSs. In the same way the GDSs may now also adopt NDC in order to provide a comprehensive market offering with all the richness that it can bring. The alternative of every travel agency company building individual NDC connections to each airline with which they wish to do business is surely too complex to be sustainable. That is certainly the view of the major agency chains whose business is intimately tied to that of the GDSs from both a technological and economic point of view.

Creating an integrated NDC platform will require two major pieces of work for the GDSs. They will have to develop their airline-facing interfaces to use the facilities offered by NDC across multiple airlines simultaneously while maintaining the existing connectivity to airlines that choose not to implement NDC. This is orders of magnitude more complicated than the interfaces they have been using for the last 20 years. Fortunately Moore's Law has not yet been repealed and the raw processing power is available.

They will also need to develop much more sophisticated User Interfaces. Today’s GDS UI is not significantly different to those of the early 1990s. Essentially it presents a list of flights and allows an agent to select one. The new world is quite different. The new User Interface will need to present a more elaborate set of choices, probably using techniques that are now familiar from other branches of e-commerce such as drop-downs, pop-ups, overlays and colour coding. The interface will have to present far more information in more dimensions than could ever be contemplated using a traditional green screen terminal. It will also have to allow agents to make multi-stage and conditional selections along the lines of "I want to choose that flight but only if my customer's tier level will be recognised, otherwise I want to choose a different flight".

To add to the complexity it will also be necessary to maintain the existing processes alongside the new ones for a long time to come. With almost a thousand airlines in the world it will be many years - if ever- before all of them are ready to upgrade from AIRIMP to NDC.

The tasks of implementing an integrated NDC will be complex and expensive. Until now the GDSs have been reluctant to commit to the necessary investment but the events of the last couple of years suggest that they will not be able to avoid it for much longer if they wish to remain relevant. For the last decade and a half GDSs have been able to keep their travel agent customers loyal by means of financial incentives. Changes to the way that airline booking fees are negotiated restrict their ability to go on doing this at the same level. If significant airlines begin to insist on NDC connections in order to sell their most desirable products then the best way for GDSs to remain relevant to agencies and TMCs will be to offer those NDC connections in an integrated and coherent package.

The Speculation

If we accept that NDC - or something that looks very much like it - is coming, there remain many questions as to how exactly it will come about. Will all the GDSs follow this path or will there be leaders and laggards?

Ultimately the implementation of NDC will be about the interaction of the GDS and the Inventory/Revenue Management systems of the airlines. In todays market for Passenger Services Systems at top-tier carriers Sabre and Amadeus both have significant market share. They are the only providers with more than a fifth of the market by passengers boarded. They are also two of the three leading GDS companies. This gives them a measure of control over the introduction of new capabilities at the frontier of GDS and PSS. We expect these two companies to lead the way with integrated NDC implementation.

We think it is extremely unlikely that a new entrant will emerge to build the integrated NDC platform. Although there are undoubtedly companies, such as Google-owned ITA Software, with the necessary technical expertise to do so it is hard to see how they could persuade a critical mass of travel agencies to switch from their existing GDS contracts, especially without providing any incentives or persuading airlines to reinstate commissions and overrides to help the switch.

Of the regional GDS players the only one with the potential muscle to enter this market is Travelsky and its recently announced partner for system development, Hewlett-Packard. Although it could use its monopoly power over the Chinese airlines to establish a regional platform we believe that concerns of data security and intellectual property will prevent a Chinese solution becoming acceptable to international airlines and to agents outside the domestic Chinese market over the medium to long term.

The adoption of NDC will require a significant rethinking of standard GDS contracts. The list of GDS products has steadily grown from simple bookings and cancellations to a much more complex list of services including point of sale, married segments logic and customer itinerary controls. To some extent there will be a transfer of processing from the GDS to the PSS as airline revenue management systems make more of the decisions about what is to be shown on the agent screen. This is already the case for a number of airlines using products like Real Time Dynamic Pricing from PROS. Set against this will be the increased complexity of the integration layer that the GDS will have to provide. It is likely that simple transaction-based contracts will to some extent be replaced or augmented by contracts that reflect the amount of processing required to support each sale or even each agency session together with additional costs for accountable documents.

The issue of managing payments has the potential to become significantly more complex in an NDC world. Existing E-ticket standards are very restrictive about what may be paid and accounted through industry channels such as BSP and ARC. The EMD has been defined to address this difficulty but its uptake has so far been very slow, possibly because of the GDSs' current charging schemes and the airlines' focus on their own channels. We believe that much more capable and directly connected payment channels are required for airlines and agents alike to see the full benefits of NDC.

In summary, T2RL believes that NDC will slowly be adopted despite the misguided objections of the BTC and others. It will be critical to the generation of additional revenues for airlines and necessary for the industry's long term sustainability. It must be facilitated by the existing GDSs with Sabre and Amadeus to the fore and it will generate substantial evolution in airline distribution processes that will take many years to fully work through. Once fully adopted however, both Amadeus and Sabre will generate significant additional revenues from the deployment of the new standards as both dominant PSS and GDS providers. Travelport will also be able to exploit this opportunity. It will secure the GDS business into the future.