TRAVEL TECHNOLOGY RESEARCH
FIRST VIEW

21st October 2012

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.

Thomas[1] (son of Amadeus) for the North American Carriers

T2R Staff

The Facts

Hewlett-Packard has failed to conclude the development and deployment of a marketable solution for American Airlines. American managed to walk away with a contribution of less than $8M and no further obligations following tens of millions of investment by HP.

SITA's Voyager programme is late and has cost much more to develop than the original $100M allocated by the SITA Board.

Following cancellation of its Passenger Services System (PSS) project at Air Canada, ITA (by Google) has only managed to deploy its solution to a small regional player, Cape Air.

Unisys's Aircore is still not up and running for ANA's domestic network.

The Analysis

It is too early to call HP, SITA, ITA by Google or Unisys's efforts to develop and deploy a competitive PSS solution outright failures. But as of today none of them has been able to come to market and capture a significant share.

The reality is that the global addressable market place for PSS is shrinking as airlines sign long-term agreements (10 years +) with the leading providers. Amadeus, Sabre and Navitaire between them have more than 50% of all revenue passengers boarded. This reduces the incentives for new entrants and discourages significant investment.

Reservations Market Share (Migrated) as at 21st. October 2012

Vendor	Total Revenue Passengers Boarded	% Total Revenue Passengers Boarded	Number of Airlines	% Airlines
Amadeus	687,163,538	22.5%	155	17.8%
Sabre	507,207,847	16.6%	85	9.8%
Navitaire	364,241,527	11.9%	55	6.3%
Total	1,558,612,912	51.1%	295	34.0%

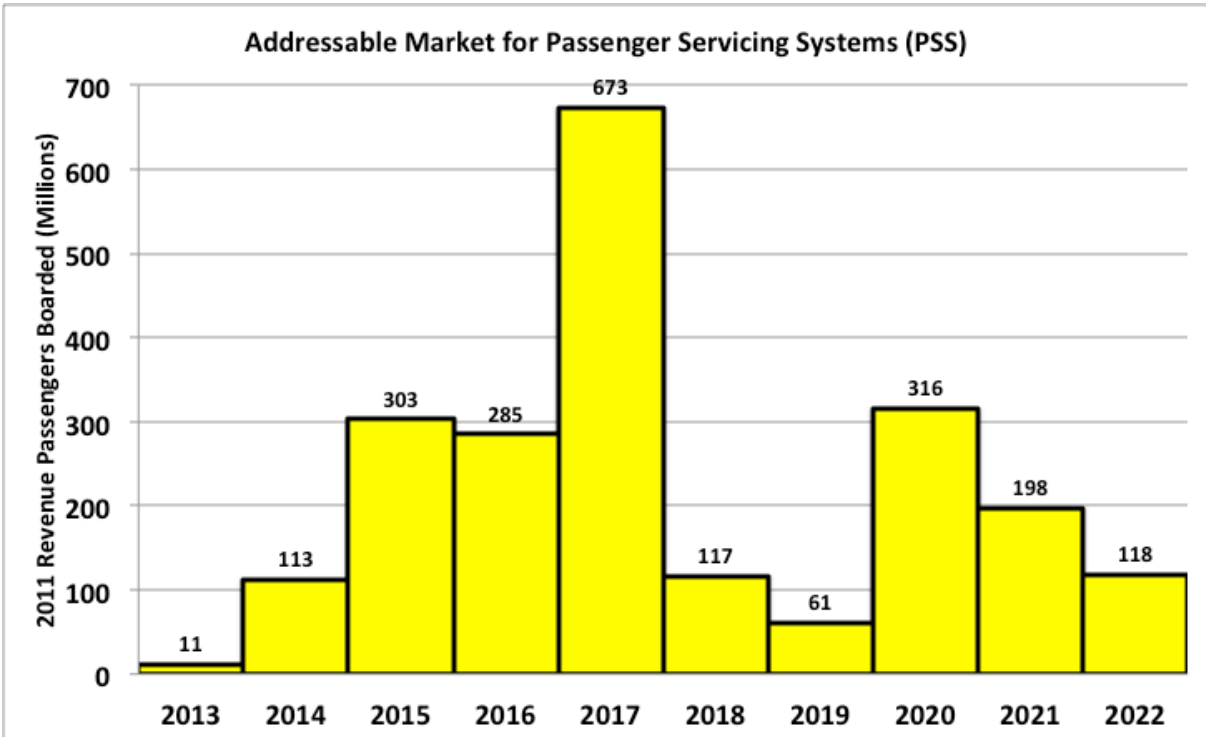
Source: www.t2rl.net

[1] **Karl Thomas Mozart was Wolfgang Amadeus Mozart's longest surviving child.**

LAN's migration to Sabre on 7 September is included in the Sabre volumes. Sabre also includes American Airlines (although their primary supplier is HP, AA still run Sabre applications) and Southwest Airlines.

Including Delta Air Lines and United Airlines there is a peak market opportunity for systems migration and implementation in 2017 of some 673 million passengers boarded (PBs), based on our volume estimates for 2011. We have not inflated volumes from their 2011 base.

We estimate Delta at 170 million and United at 143 million PBs respectively.



Source www.t2rl.net (Premium: Contracts)

With a number of vendors demonstrably unable to cover the investment necessary to build a new generation platform and take a reasonable market position then it is highly unlikely that any single airline could manage it alone. Even mega-carriers like Delta, United or a merged US Airways and American could not afford the necessary level of investment.

Delta's arrangement with Travelport and United's with HP allows them to specify, develop and have the vendors operate an efficient system at a very low cost. However there is no investment for the future built into these operating costs. American's Jetsteam project was at HP's risk and ultimately the failure of the project damaged both parties.

Whilst technology moves forward at a considerable pace and the IT industry is creating tools to enhance programmers' code productivity and capability, it will never reduce the cost of renewal to zero. Without doubt the need to invest in the new whilst operating the old makes the difficult job of building new generation systems even more challenging. Costs are driven by the need for advanced skills required to specify, document and prepare use cases, code, test and manage the processes efficiently.

The GDSs have a natural advantage in this respect. Their margins from travel agency booking fees have in the past allowed reinvestment and all have moved functionality to new generation platforms. However large debts on the balance sheet are soaking up some of the reinvestment capability for privately-held Sabre and Travelport.

T2RL's view is that North American carriers have enjoyed a number of years with favourable economics for their PSSs, but just as with aircraft the old platforms are becoming more and more expensive to maintain and evolve. Combine this with increased transaction volumes from e-commerce, self-service and mobile and some are faced with a double whammy. Revenue management sophistication is also contributing to a rise in processing costs as polling drives inventory accuracy.

Ultimately the American carriers will find it very hard to move to realistic market pricing. Whilst careful scrutiny may show that the total economic costs for the full scope of PSS and e-commerce components are very close to those prices charged by an Amadeus or Sabre, there will be real resistance inside the US airlines to move in this direction.

So what are the viable alternatives for North American carriers?

When Iberia, SAS, Lufthansa and Air France were faced with the potential scenario of being distributed to travel agents on a platform owned by a potential competitor they created Amadeus as their defence. We see the US carriers in a very similar situation today. Drastic measures are required to avoid what looks like the inevitable. Many believed that Lufthansa and Air France would never be able to work together. Why couldn't Delta and United do the same?

North American carriers might just have to find a way to collaborate to build a new generation platform. As long as their CEOs can convince board members and regulators that this is not the next round of market fixing then an Amadeus model for the US and Canadian carriers might a valid solution. Add Travelsky to the mix and a real competitor could emerge.

Once the airlines have agreed to work together they could choose one or many partners and even business models. Open source software is one way to tackle the proprietary system challenges and there are a number of successful models to follow. Red Hat and SugarCRM would be two more innovative templates available for business models for the new platform.

T2RL's view is that HP would be the most likely partner for such a venture. It has Intellectual Property (IP), datacentre skills and absolutely no appetite to fund additional development without sharing the risk. It also has technology from the financial services and payments industry that could help the airlines in their transformation efforts. Most significantly it has a leader who fundamentally understands "co-opetition" and the challenges with respect to anti-trust controls in the from of Brian Cook, ex SITA,Star Alliance and innovative Air Canada.

Travelport CEO Gordon Wilson may also be a willing participant, although the airlines' relationships with his GDS business might make this a little more challenging. Travelport is the incumbent provider for Delta. It also supplies airlines with a number of useful products and components based on more modern technologies such as pricing and shopping and a market leading automated refund and exchange capability.

Perhaps SITA's Francesco Violante would also welcome the chance to rescue the hard work and money his organisation has put in to Voyager. SITA is still owned and controlled by the airlines, although North American carriers do not seem to engage as actively with SITA as their European, Middle Eastern and Asian counterparts. Undoubtedly United's Bill Miller would ensure the idea had a fair hearing with CEO Jeff Smisek and CIO Bob Edwards, at least internally. Delta's Theresa Wise and US Airways Brad Jensen might be more challenging, although SITA's proximity in Atlanta will help for Delta.

Sabre's Hugh Jones would also be a potential partner given the desire to extend the Sabre Sonic solution. Sabre's Airline Solutions business operates relatively independently if the US carriers can set aside the GDS dispute. Many will remember that it was Sabre's conversation with American in 1999/2000 that led to the Request For Proposals for a PSS which was eventually "won" by HP, the buyer of EDS.

Even with the most aggressive of vendors bidding the idea that the American carriers will be able to purchase their system at a lower cost than today and that the new platform will give the airlines all of the merchandising services they so desperately seek is just a dream. However a concerted effort at co-opetition and a new business model might just give them a chance to hold on to their position - as long as their Amadeus-powered competitor Southwest doesn't get any big jump on them in the market.

The Speculation

Despite the attractive nature of a cooperative effort and the potential benefits, any attempt by American carriers to jointly develop a reservation and distribution platform will come under scrutiny by the US Department of Justice. Interested parties outside the circle of friends will probably work hard in the lobbies of Washington to make things even more difficult.

CIOs just might have to bite the bullet and come to an agreement with existing vendors, as the time and effort of creating Thomas the son of Amadeus is a step too far for any one of them. To succeed they will then need the support of their marketing colleagues to garner CEO endorsement for such an action and thus set the scene for a confrontation with the DoJ. It will be up to the airlines' counsel and top management to make their case to the regulators that this essential joint action may be carried through without jeopardising the competitive nature of the airline industry.

Working together for a common interest within any constraints set by the DoJ will be challenging given the different positions and interests of the carriers. All, with the possible exception of Air Canada, have extensive ownership or claim over intellectual property (IP). Valuing and assessing the relative contributions for IP could keep lawyers and consultants like McKinsey, Bain or Booz well paid for many years without progress on development and deployment of workable solutions. Assigning work shares and assessing contributions of disparate vendors would present another challenge assuming that no one single technology provider could take on the challenges alone.

There is a significant difference in cost between a true market offering and our assessment of the North American carriers current PSS costs of anything from 25-45 USD cents per passenger boarded. CEOs may not see the value of new systems in the same light as their teams, although adding GDS fees as a target into the melting pot could see a much bigger prize in the longer term. Combined with the attention the CEOs are giving to distribution and their push for IATA's New Distribution Capability (NDC) there may be an opportunity to restructure the market place. The CIOs will realise that the restructuring must come from the PSS if it is to be successful. Of course this is something Amadeus realised some 10+ years ago when they bid for British Airways and Qantas.

When Amadeus was created in Europe the airlines concerned saw that their aims were best served by pooling their reservations first, then fares and pricing and ticketing needs but maintaining inventory control in wholly separate systems. It was more than a decade after its initial deployment that Amadeus began to offer an inventory system with British Airways and Qantas. Twenty five years later the landscape has changed. A number of companies other than the PSS providers offer capable products for the front-end sales and shopping functions today. It is now in the core inventory management functions that most value is to be gained from innovative development. The outside-in development of Amadeus was right for its time but the demands of modern airlines dictate an inside-out process with enhanced inventory capability as the highest priority. IATA's NDC demonstrates that priced availability to the right customer will be the focus. PROS and Sabre have some of this capability today, perhaps Thomas' architecture will have a different structure with inventory control at the centre as reservations, pricing and ticketing become commodities.

Ultimately the creation of Thomas is just an idea. Making it work would be a wholly different thing, but the size of the prize might just be worthwhile the trouble, after all it's been done before.