BA MUST RIGHTSIZE IT

First View: Rapid analysis of breaking news, providing perspective

THE FACTS

British Airways (BA) systems were brought down by a power failure at their own datacentre in the United Kingdom (U.K.). The power failure required a system restart which appears to have been so poorly managed that the net effect was widespread disruption during one of the busiest periods of the year.

There has been significant media attention both in and outside the UK. The incident will not only be financially costly due to the EU regulations (EU261) on compensation, but will damage the BA brand.

Many have pointed to the fact that BA outsourced their IT to India, but BA has a history of outsourcing services including an incredibly successful sale of WNS in 2006 that predates the latest application development.

- British Airways announced a deal to outsource their reservation systems to Amadeus in May 2000.
- BA handed over full responsibility for the running of the British Airways Booking Systems (BABS) with a view to updating and replacing the BA developed legacy technology.
- BA migrated their reservations system on Feb 24, 2002. Amadeus continued to run the BA inventory (RS13) and departure control systems (BABS).
- BA migrated their inventory system to Amadeus' solution in Q2, 2005.
- In June 2008, BA announced the extension of the Amadeus agreement.
- In 2012 BA implemented the load control portion of the departure control system.
- In 2016 BA rolled out their own customised version of the Amadeus check-in known as "FLY". This was completed by the end of August 2016.
- The BA FLY application uses web-services from Amadeus' departure control system. FLY was designed by BA but built and maintained by their third-party outsourcers including Tata Consulting Services. FLY is run in the BA contracted data centres.

THE ANALYSIS

The original deal was very simple, BA were able to turn a variable and complex multi-year capital expenditure and volatile annual costs into a predictable simple single fee tied to each passenger boarded on a BA flight. Amadeus would then work with BA on the specification of the system to build the new generation of systems.

BA and Qantas (QF) were the very first airlines to work with Amadeus on the new generation of systems. However, QF followed a much faster path and completed their cutover to the full Amadeus suite of products by the end of 2008.

Ultimately BA and QF were of a similar size and complexity, even running similar versions of the same system. Qantas Universal Business Environment (QUBE) was actually a derivative of BABS.

The BA and QF deal set Amadeus on a path to success. Since the announcement in 2000, Amadeus have become the global market leader in terms of supply for passenger servicing systems.

System Provider	Number of Airlines	Passengers as % of 3.7Bn Total
Amadeus Altea	167	27.8%
Amadeus Navitaire	59	13.9%
Total Amadeus	226	41.7%
Sabre	83	16.7%
Travelsky	48	12.1%
Others	774	29.5%
Total	1131	100%

Source: www.t2rl.net

T2RL's view is that BA's desire to customise solutions for differentiation is ultimately what led them to build and develop their own systems on top of a stable and reliable solution from Amadeus.

BA's inability to restart the home grown solutions correctly is what we believe led to the failure. This cannot be laid at the feet of Alex Cruz, the current CEO unless of course he gave the order to build the solutions around and on top of Amadeus and reduce BA's dependency on Amadeus from an IT perspective.

Although part of the IAG group which would account for approximately 107M passengers in 2015, BA are the only IAG group company in the top 30 airlines in the world as measured by passengers boarded.

Rank	Airline	Passenger Volume (including franchise) 2015	Primary Departure Control System Provider
1	American Airlines	201,252,624	Sabre
2	Delta Air Lines	182,613,789	In-House
3	United Airlines	144,750,624	DXC Technology
4	Southwest Airlines	144,574,882	Amadeus Altea
5	China Southern Airlines	109,420,550	Travelsky
6	Ryanair	101,430,000	Amadeus Navitaire
7	China Eastern	93,804,220	Travelsky
8	Air China	85,998,790	Travelsky
9	Air France	79,016,000	Amadeus Altea
10	Easyjet	69,828,383	In-House
11	Turkish Airlines	61,248,192	In-House
12	Lufthansa	59,205,000	Amadeus Altea
13	Air Asia	57,249,637	Amadeus Navitaire
14	Emirates	51,300,000	In-House
15	British Airways	45,456,155	Amadeus Altea and In-House

Source: www.t2rl.net

It is T2RL's view that BA may have aspirations above that offered or afforded by the size and scale of their business and will have relied too heavily on their those third-parties that were seeking to take a slice of Amadeus' lucrative PSS business. These third-parties were trying to develop applications that would seek to commoditise the Amadeus solution by inserting themselves between Amadeus and the end-users of the systems.

Interestingly BA and Iberia have both announced their intention to pass on GDS fees from those like Amadeus, Sabre and Travelport to their customers that choose travel agents using a GDS. This will drive an increase in transactions through the BA provided APIs and interfaces to the Amadeus PSS system.

THE SPECULATION

BA have outsourced their core passenger servicing systems (PSS) to the world's leading provider pf PSS. This has enabled them to down-size their IT but in the process they appear to have lost some key-skills around the planning, building and running of large-scale, business-critical systems.

In parallel they have been developing APIs, both internal (private) and external (public) that abstract Amadeus' systems. This means that the consumers and end-users of the services provided by Amadeus have to access them via internal platforms at BA. Their new NDC API and their internal Service Integration Platform (SIP) are key examples of this.

However, the BA platforms providing these APIs and managing any supporting functionality, such as data caches, have to be just as reliable as the core Amadeus systems they abstract or the overall reliability of the end-to-end service will be reduced. In this case, it would seem, severely.

The roll-out of FLY began in October of 2015 and was completed in 2016. Since then there have been at least three newsworthy outages, in June 2016, September 2016 and now this most recent event.

BA may still see themselves as having the size and scale to drive innovation in airline systems and to deliver a market leading customer experience. However, when the cost of innovation is both the brand and customer loyalty, this is far too high a price to pay.

Amadeus can and should step in to simplify the solution landscape for BA.

To do so, BA might just have to rethink some core elements of their distribution strategy as a result of the weekend's events, or at least focus on a new deal with Amadeus.

T2RL is an independent research and consulting company that specialises in the market place for airline IT systems. Based on data gathered and analysed since the year 2000 it has defined and tracked classifications of airlines and their IT providers. Its research is used extensively by airlines to enable them to make informed choices for systems and vendors and by the vendors to help them develop products that best meet the current and future needs of the airline industry. For further information, visit our website at www.t2rl.com.