



IMPACT OF IT ON AIRLINE CONSOLIDATION

/// VIEWPOINT PAPER



Realizing the benefits of IT synergies

The airline industry continues to be buffeted by powerful economic, competitive and regulatory forces. Airlines have responded to this challenging business landscape by cutting costs, streamlining infrastructures and by considering the merits of consolidation. But few companies have the skills or experience to tackle the complex and time-consuming task of consolidating IT systems on their own.

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Introduction

Powerful economic, competitive and regulatory forces are reshaping the airline industry marketplace.

The cost of fuel, labor and other operating and capital requirements continue to rise. Prices and services have undergone commoditization on a global basis, further tightening profit margins and forcing fundamental changes in business models - particularly in the airline sector. New low-cost competitors are capturing passengers, profits and market share. Post-9/11 security concerns have added new layers of cost and responsibility, while governmental actions have opened new competitive fronts from Europe, Asia/Pacific and elsewhere.

In response to these drivers, air carriers and others have worked diligently to eliminate waste and to squeeze incremental efficiencies from their operations. But after five years of efforts, carriers are beginning to reach a point of diminishing returns in their current round of cost-reduction efforts, causing some to consider consolidation as an opportunity to achieve new levels of cost and revenue performance.

In this environment, individual airlines must now consider - and some must soon address - the complex and challenging issues related to migrating reservation and other IT systems from two existing platforms into a single, consolidated infrastructure. In this paper, we describe EDS' unique airline consolidation capabilities. We examine the challenges and operational requirements for a successful airline consolidation, as well as the opportunities it can provide.

Airline industry drivers

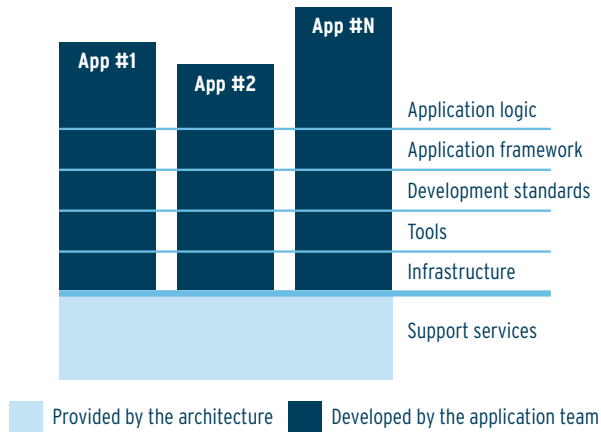
The airline industry continues to face significant challenges. From pending bankruptcies and constricted corporate spending to new regulatory constraints, pressure from low-cost competitors and ongoing security concerns - airlines are in clear need of proven and sustainable business solutions.

Current drivers

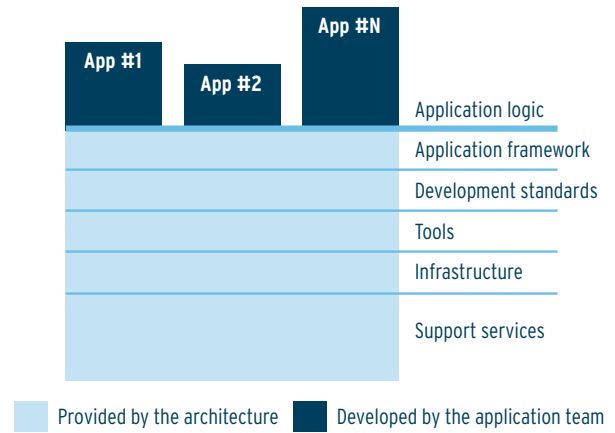
Mergers and acquisitions continue to alter the transportation landscape, affecting airlines, hotel chains, cruise lines and travel distribution firms. Overcapacity is driving consolidation, particularly in the airline sector, where the historically high price of fuel and other cost and competitive pressures are pushing carriers near or to the point of bankruptcy. The airline industry is now also increasingly subject to the forces of globalization, the growth of smaller and low-cost airlines, and the ongoing demand for more stringent but less obtrusive security measures.

Figure 1: Applications development teams spend less time on architecture, which reduces the total cost of ownership and focuses time and money on value-added functionality.

Current



Future



Most legacy infrastructures are simply no longer able to support critical airline business functions. By reducing the long-term cost of maintaining legacy IT infrastructures, companies can free up monies to invest in growth-oriented business initiatives. This opportunity is particularly promising in the airline industry, where for many airlines, maintenance now accounts for almost 85 percent of their total IT budget.

Successful airlines are working to improve asset utilization and to adopt a long-cycle approach to aircraft, ground equipment, airports and other assets. Most are responding to intense pressure on margins and operating costs by streamlining and optimizing their operational performance, by adjusting ongoing maintenance and material practices to comply with regulatory requirements, and by pursuing improved yields and a stabilized, positive cash flow.

Although these forces have certainly caused pain and dislocation, they have also created unprecedented opportunity for large-scale business transformation across the air services industry. Astute airlines have accelerated the speed and reach of their business integration efforts, and are striving to increase their levels of collaboration and visibility with partners, suppliers and customers. Some are now also evaluating the potential opportunities of merger and consolidation.

Achieving IT synergies

Airlines can realize significant benefits from a well-planned and executed consolidation. First and foremost, consolidation eliminates the need to modernize two independent carrier portfolios. By merging and integrating IT activities, a carrier can eliminate redundancies and achieve rationalization, scale efficiencies and other savings.

Up to 40 percent of airline IT personnel are typically focused on application development and maintenance functions, often representing an airline’s single largest IT-related cost component. An airline’s existing investment in its application portfolio represents a valuable resource that can be leveraged to support a larger fleet and a combined carrier environment.

Further, application rationalization can have a cascading effect on infrastructure platform operations. By combining disparate systems into fewer and larger solutions, carriers can achieve hardware, licensing and operational efficiencies.

By collaborating and standardizing automated systems, airlines can improve data quality, business intelligence and decision-making, while measurably reducing labor and payroll requirements. Airlines can also leverage more advanced and integrated IT solutions to improve customer safety and security, to meet government mandates (such as Global Distribution System and Transportation Worker Identification

Credential rules), and to support promising new technologies such as radio frequency identification (RFID) and wireless local area networks (WLANs).

Airlines can further reduce redundancies by leveraging an overlapping airport footprint. Airport WLANs can be consolidated, field support personnel can be cross-utilized and carriers can gain volume efficiencies in supplier contract negotiations.

The challenges of consolidation

Combining and integrating airline IT systems is a difficult, costly and time-consuming undertaking. It requires the ability to plan and execute a massive logistical shift, to foresee and mitigate risks, and to launch and complete the project in the shortest possible timeframe. And, of course, this must all be done while maintaining the seamless flow of planes and passengers through the operation.

Most carriers currently own and operate rigid and expensive legacy infrastructures, which in and of themselves require significant investments to achieve the benefits of modernization. In fact, single carriers can expect to achieve limited results from internal cost-reduction efforts.

Many airline firms have spent the last several years addressing common architectural synergies, such as the need for standardized enterprise data and a leveraged central processing environment. Most airlines attacked those problems in response to post-9/11 cost pressures and have achieved the benefits available from those initiatives.

Some carriers have benefited from outsourcing, but have not yet addressed rationalization or the need to reduce redundancies. Other firms have sought common alliance platforms, but due to variations in partner commitment, those efforts have yielded limited results.

When considering a consolidation, airlines should appreciate the scope and complexity of this type of undertaking. A typical consolidation/rationalization initiative can involve as many as 65 specific IT projects in the following categories:

- **Analysis and design** - This step defines the project for each application and should include objectives, deliverables, cost/benefit and risk analysis, roles, and responsibilities.
- **Build** - The build phase addresses applications development, including new systems and modules, revising existing code, and bridging legacy systems and applications to new applications, systems and interfaces.
- **Infrastructure implementation** - This step manages the delivery of critical infrastructure elements, such as new networks, routers and servers, desktops, printers, and mainframe computing platforms. Infrastructure is implemented parallel to applications work.
- **Testing** - All platform operating systems, connectivity and hardware should be fully tested.
- **Training** - All personnel, including data center employees, hardware technicians and support teams, should be fully trained on the consolidated solution.
- **Cutover** - This important step includes creating detailed lists defining all technical and business events across the entire consolidated system. Multiple simulations of the cutover process should be conducted, execution issues should be identified, and communication and decision-making processes should be evaluated at the functional, program and executive levels. A fallback plan should also be constructed and tested during this phase.
- **Transition to steady state** - During this step, all project management and support is moved from delivery to maintenance, business processes are validated, and users are monitored for system acceptance and competencies. This transitional step should also address system enhancement and new development needs, change requests, and long-term monitoring requirements.

Best-in-class consolidation projects will incorporate middleware, messaging and security platform as part of an overall service-oriented architecture (SOA). Airlines can leverage a true SOA to support the transformation of the business IT environment to an agile enterprise architecture and to correctly align IT operations with their underlying business goals.

Planners should naturally strive to minimize the duration of a consolidation program, while at the same time focusing on the quality of the integration and the need to maintain operational performance. When planned and executed correctly, a consolidation will eliminate the cost, duplication and difficulty of running separate reservation and IT systems.

IT and beyond

Airline planners should also recognize that any integration and rationalization effort will present challenges that extend beyond the realm of information technology. To ensure uninterrupted airline operations during the project, a consolidation team must move millions of electronic passenger name records (PNRs) and electronic tickets, all while maintaining the seamless movement of passengers and aircraft. Those migrated PNRs must then be aligned with travel agencies, alliance code share partners and other business allies.

A successful consolidation also requires the coordination of many complex details spanning the entire airline business model. To ensure optimum results from this type of initiative, airlines may partner with allies that offer proven IT, integration and rationalization capabilities. Key qualities to consider when evaluating potential partners include the following:

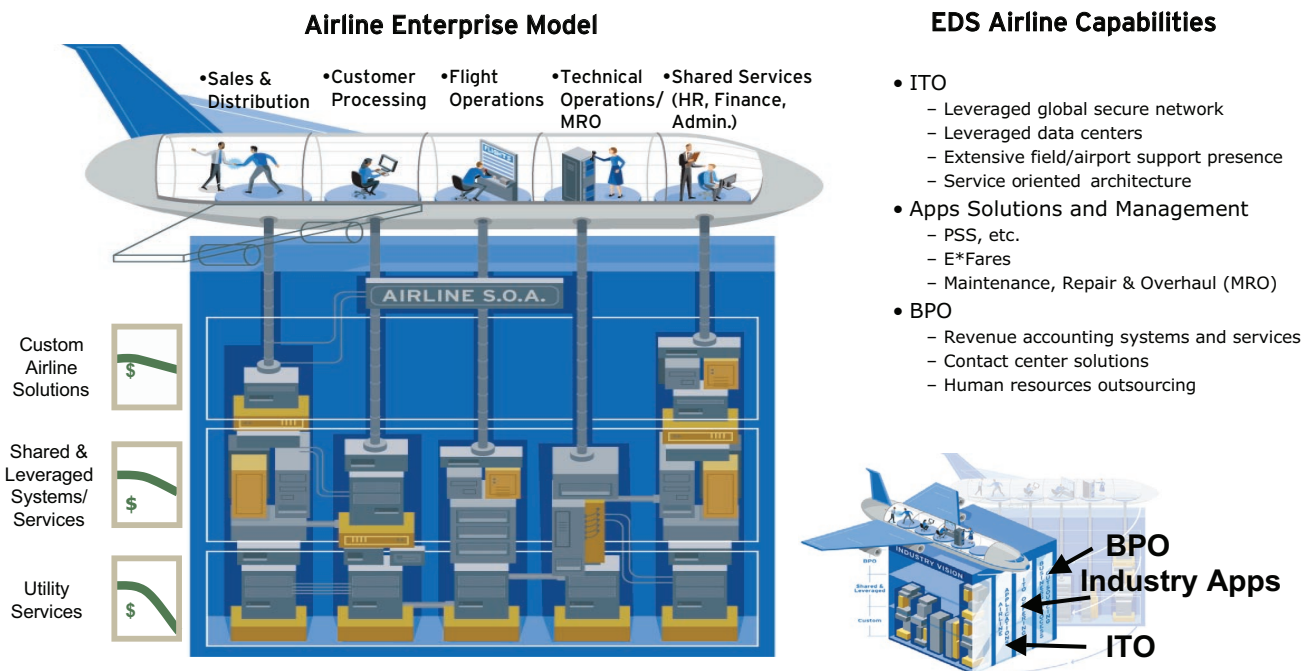
- A well-defined program management methodology formulated specifically for airline IT consolidation and rationalization efforts

- Architectural capabilities to minimize the risk and impact of consolidation
- Skilled professionals with integration-specific experience and capabilities
- A proven understanding of the trends and issues affecting the airline industry
- Detailed knowledge of the enterprise airline IT environment and reservations systems
- Established relationships with airline industry and technology partners
- An ongoing investment in airline-specific IT solutions

EDS airline consolidation capabilities

EDS, an HP company, is uniquely qualified to meet the IT and transformational requirements of the airline industry. As the largest provider of IT services in the airline industry, EDS processes more than 42 million airline reservations each month. We have more than 9,000 professionals dedicated exclusively to serving more than 300 transportation clients

Figure 2: EDS Air Services



the world over. EDS clients include more than 109 air carriers, as well as airports, airport ground handling agencies, and travel and hospitality companies.

EDS has an unmatched history of successfully planning and delivering large, complex transportation applications. In fact, no other IT services firm has more experience in the specific requirements of airline mergers and consolidations. In the last 20 years, our airline industry specialists have performed more than 50 successful passenger service system migrations. EDS has helped airlines save as much as 2 percent on flight operations, from 10-15 percent on procurement and up to 30 percent on overall IT costs.

EDS offers the industry's most comprehensive suite of rationalization and consolidation services, including the following:

- IT facilities and core IT services, including data centers, desktop management and network management
- Applications such as flight operations, maintenance repair and overhaul, decision support, and airport applications
- Enterprise support functions, including financial, human resources and employee support systems

By relying on EDS for the utility, shared and leveraged layers, airlines can focus intently on their core mission of meeting customer needs. Airlines can leverage EDS customer relationship management (CRM) solutions to strengthen their relationships with air travelers and to integrate customer information across multiple channels.

To keep our airline customers on the leading edge of IT performance and efficiency, EDS teams with best-in-class industry partners. As a result, we deliver proven solutions that produce bottom-line merger and consolidation results.

Conclusion

In response to cost pressures, increasingly globalized competition and more stringent security and regulatory requirements, forward-thinking airlines are weighing the advantages and challenges of consolidation. Yet few carriers have or want to acquire the internal resources needed to tackle the complex and specialized task of migrating the reservation and related IT systems of two organizations into a single, cohesive infrastructure. By partnering with an ally with proven experience in planning and delivering integration and rationalization solutions in the transportation industry, airlines can reap significant economic, operational and customer-service benefits.

ABOUT THE AUTHOR

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Brian Haney is an industry consultant in the EDS U.S. Transportation Group, with a primary focus on delivering operational and sourcing strategies to clients in the airline and other travel and hospitality industries. He has led teams in delivering comprehensive, billion-dollar IT service solutions to major U.S.-based air carriers. With more than 19 years of experience in business and technology, Haney has held management positions in finance, operations planning, business development and airline-related IT services solutions.

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EDS, an HP company, is a leading global technology services provider, delivering business solutions to its customers. EDS founded the information technology outsourcing industry more than 46 years ago. Today, EDS delivers a broad portfolio of information technology and business process outsourcing services to customers in the manufacturing, financial services, healthcare, communications, energy, transportation, and consumer and retail industries, and to governments around the world.

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