One thing’s for sure – the skies are getting a lot busier. According to the International Air Transport Association’s 2016 forecast, 7.2 billion passengers will be traveling in 2035, almost doubling the 3.8 billion who traveled in 2016 – with over 50 percent of that growth coming from the Asia Pacific region. Increasing passenger numbers translates to a need for increased passenger transactions – a situation requiring critical airline systems, like Passenger Service Systems (PSS), to be 100 percent operationally reliable.

A PSS is a crucial system made up of modules an airline uses to manage the various parts of its business-like the distribution of airline tickets. It typically consists of the airline’s reservation system, inventory system as well as its departure control system. Just how critical a role these systems have on an airline’s operations has been clearly demonstrated by a number of recent industry outages. Consider the May 2017 IT failure of a major UK-based airline that caused global delays, mass confusion and significant loss of revenue. Or the 2017 U.S. carrier outage due to system power loss that resulted in a $150 million revenue loss in a matter of five hours.

These situations were primarily due to computer outages and demonstrate the vulnerability of an airline’s PSS, creating operational headaches, lost revenue, major passenger dissatisfaction and damaged reputations.

PSS’ critical operational role as well as the growth of Low Cost Carriers (LCCs), which some estimates say now accounts for about 25 percent of the worldwide airline market, has resulted in significant interest in PSS. Sustained year-over-year increases in operational costs and rising passenger expectation are also driving interest.

So, knowing how critical these systems are, what are some key capabilities airlines, particularly smaller carriers, should look for in a PSS? Christopher Mackey, director, Global Network and IT solutions for Rockwell Collins, has some insights.

“The modular nature of a PSS is key, it allows an appropriate fit with an airline’s specific needs,” said Mackey. Depending on an airline’s service type and fleet size, expectations of what it needs from a PSS may differ wildly. “Only paying for the modules needed for more critical requirements, especially for smaller airlines and LCCs, is a tremendous advantage. It also provides the flexibility to add on other modules for future growth as necessary.”

Web-based systems are becoming more popular. “A web-based PSS could help a carrier avoid the type of system failure recently experienced by some airlines. It functions during normal and contingency situations and can ensure business continuity at all times.”

There are other benefits of a web-based PSS. It facilitates seamless integration with an airlines’ local and other third party applications, promoting compatibility and reducing hardware and/or network installation costs.

Another benefit is the ease of implementation and accessibility. A web-based PSS minimizes operational disruption and allows for rapid deployments with minimal staff training.

Revenue streams also come into play when choosing the right solution. “Rising operational costs continue to erode airlines’ profit margins,” notes Mackey. “More cost-effective solutions that optimize performance and provide access to additional revenues are of significant interest to many smaller airlines.”

PSS solutions, such as Rockwell Collins’ web-based ARINC PaxLink, enable an airline to manage many aspects of its business, including schedules and fares, seat inventory, reservations and electronic ticketing.

While there are many PSS offerings on the market, “ARINC PaxLink is unique,” notes Mackey. “Our PSS is web-based and runs over our ARINC Global Network (AGN), the network that has supported connectivity and messaging for more than 50 percent of the world’s aviation messaging requirements for over 85 years. That experience gives us unrivaled insight into PSS systems.”

“Airlines interested in implementing a PSS to create service differentials, achieve operational efficiency and spur growth should look at ARINC PaxLink,” said Mackey.

Learn more at rockwellcollins.com/arincpaxlink

Originally published in Asian Aviation