IBS ACQUIRES AD OPT

First View: Rapid analysis of breaking news, providing perspective

THE FACTS

On September 10, 2019, IBS Software announced that it had completed the acquisition of AD OPT. AD OPT is now part of IBS Software Canada, with the stated goal of "evolving AD OPT's Montreal headquarters into a global Centre of Excellence for crew optimization software."

THE ANALYSIS

Over the course of its 22-year history, IBS Software has developed systems products and solutions for airline operations management. With its main office in Trivandrum, India and branch offices on four continents, IBS's core solutions enable airlines of all sizes to track the movements of aircraft and crews in real-time. In May 2019, the firm announced that it had entered into an agreement to acquire AD OPT, a Montreal-based company specializing in optimization software for use mainly by the airline industry. AD OPT's principal solution enables airlines to minimize the cost of their flight crews through a mathematical optimization of their pairings (itineraries) and rosters. The pairing solution offers hard benefits to the airline through improved crew utilization, as well as a reduction in associated cost overheads (principally hotel nights and per diem expenses). The rostering solution offers primarily soft benefits relating to improved crew satisfaction.

Crew optimization software first appeared in the mid-1970's. The earliest versions ran batch programs on IBM mainframes. For large airlines, their computing requirements were so intense that they typically ran all night. While they were primitive by today's standards, they were also very effective in reducing crew costs by generating more efficient pairings.

IBS acquired the Avient system from Honeywell in 2003 and began offering it to the airline market under the name iFlight. iFlight included software to track aircraft and crew movements but it was at a disadvantage in competing for business with airlines that needed crew optimization as well. While the integration between optimization and real-time tracking is not especially complex, most airlines preferred to work with a single vendor that could provide both capabilities. The acquisition of AD OPT now makes that possible for IBS, and it also makes the IBS solution more attractive to airlines of all sizes.

This acquisition also allows IBS to provide a more comprehensive package of solutions to its current and prospective airline customers. Of the 31 functional areas within Airline Operations that T2RL tracks, Sabre has products covering 24 of them; IBS, Jeppesen, and Lufthansa Systems each cover 18, and the next highest total is 14. In terms of having a broad portfolio of solutions appealing to a wide variety of airlines, IBS is certainly competitive.

The optimization capabilities of AD OPT will also enhance IBS's current and future products in other industries where it does business, including Oil & Gas, Cruise Lines, and Hospitality. All industries that depend on reliable logistics for delivering their product(s) at the right time would benefit from the kind of optimization skills that AD OPT brings to the table.

THE SPECULATION

IBS has also solved another problem that some of its competitors still have. It has re-architected the iFlight product to take advantage of the current web-based environment, where access from mobile devices is essential. Converting a system to operate within a new architecture tends to be a long and painful process for vendors because very little business functionality is added, only the data handling features that the new architecture enables. The net result is a big expense over several years without a lot of new business functionality that would justify an increase in the price tag. The alternative is even worse. If the vendor instead chooses not to provide a path to get to the functionality the marketplace wants, its solutions will be marginalized and it will become much more difficult to attract new customers.

IBS began work on a new generation version of iFlight in 2015. It is was completed in 2018 and offered to the market under the name iFlight Neo. Some of IBS's chief competitors run their solutions on old architecture platforms and are debating internally when and how to make the transition for their products. Some of the newer products for Operations Control and Crew Management were designed to be web- and mobile-enabled from the start. However, these systems do not have the breadth of functionality needed by medium to large airlines.

Operating within a modern architecture platform facilitates integration of other databases and systems that can add useful cross-departmental functionality. One area where this could be very useful is in Irregular Operations (IROPS) recovery, where IBS has taken a somewhat unique approach to developing recovery plans when weather events, airport closures, and other forms of havoc cause large numbers of cancellations and delays. Many of the current solutions available in the marketplace resolve all the disrupted flights in a

single run but these solutions are often rendered useless by subsequent disruption events only a few minutes later. IBS has chosen to support a more robust approach, where the disruption is divided into small chunks that can be distributed among the operations and crew controllers. Over time, the infusion of AD OPT's expertise in optimization could help generate solutions for IROPS situations that are faster and more cost-effective than is possible today.

AD OPT also has a longstanding relationship with GERAD (Group for Research in Decision Analysis), a Montreal-based academic organization doing research on optimization methods. As new optimization technologies are developed, the connection to GERAD will ensure that IBS will have access to those technologies and can incorporate them into future products.

Fundamentally, IBS's acquisition of AD OPT gives it access to technologies it will need to stay competitive in the airline solutions marketplace. The company has already modernized its product architecture, which opens the door to larger airlines needing to replace legacy operations systems over the next few years as well as medium sized airlines needing a higher level of capability to support their growth plans. The addition of optimization capabilities from AD OPT will provide new opportunities for IBS to differentiate its solutions in the marketplace. For these reasons, the outlook is good for IBS to increase its market share and become a market leader in airline operations systems over the next few years.

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 by airlines to enable them to make informed choices of 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.