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The Sirax AirFinance Platform has enabled Lufthansa Systems customers to achieve considerable savings in their finance department. Leading carriers who deployed this integrated finance solution were able to reduce their operating costs in this area by up to 45 percent and total costs by more than 35 percent.

Hot Topics

From Take-off to Landing

Lufthansa Systems' Aircraft Performance solutions

Just a couple of years ago for most flights there was only one power setting at take-off: 100 percent. Today airlines have become a lot smarter - thanks to the use of sophisticated aircraft performance solutions for all phases of the flight provided to them by Lufthansa Systems. The benefits are significant - economically as well as ecologically.

How much thrust an aircraft really needs for a safe take-off depends on numerous variables - the aircraft's take-off weight and flap setting, the length and the gradient of the runway, obstacles around the airport, temperature, atmospheric pressure and wind have to be taken into consideration. Pilots who use LinTop (Lido integrated take-off performance), a module of Lufthansa Systems' flight planning solution Lido OC, just need to send a take-off request with the final weight, flap settings and temperature via data link to Lido OC. What they get back is a comprehensive set of optimized take-off parameters. It includes the optimum take-off thrust, all relevant speeds (V1, VR, V2) for take-off and climb-out and even the relevant procedures for landing in case of an engine failure.

Reduced take off thrust setting, as it is standard today, comes with a many benefits. Optimum thrust means less fuel burn, less emissions and less noise for every take-off. Additionally it reduces the wear on the engine and its components, which results in a slower degradation of the engine's performance. After 1,000 flights an engine which has been operated with 15 percent lower take-off thrust has a 0.4 percent better fuel consumption, which means average annual fuel savings of 70 to 80 tons per long-range aircraft and some 20 tons per aircraft of the A320/737 category. Additionally the engines will stay much, much longer on wing until the next costly overhaul. The Lido OC add-on LinLap combines airport and aircraft relevant data for an integrated landing performance calculation. It allows the dispatcher to calculate the maximum allowed landing weight for the destination and the alternates for the chosen aircraft and aircraft configuration. The airport situation with e.g. runway limits and climb gradients is considered. As landing result different limiting weights are calculated, the most conservative is taken into consideration. Due to precise calculations this allows for a higher landing weight, which in many cases results in a higher payload and additional revenues without compromising safety. Furthermore it makes good economic sense, too..

Besides the Lido OC modules Lufthansa Systems as well offers solutions for calculating the optimum parameters for take-off and landing conveniently, reliably and safely on-board using the Electronic Flight Bag (EFB).

All performance solutions of Lufthansa Systems not only simplify the flight preparation and reduce the potential for manual errors but help airlines to save fuel and to increase on-wing time of their engines. They are designed to ensure safe and legal operations, save costs and improve fleet performance. They are based on a close cooperation with international organizations and authorities, such as FAA, EASA, ICAO and IATA. Furthermore Lufthansa Systems cooperate continually with aircraft and engine manufacturers as well as with airport authorities.

Integrated approach for all phases of airline planning

Lufthansa Systems' market analysis solution Advance becomes NetLine/Market

In today's aviation business, market knowledge is of utmost importance. Competition between airlines is intense, even more so since the current decline in passenger numbers forces carriers to react quickly to the changing market conditions. In order to adjust capacity and schedules to demand as closely as possible, airlines routinely analyze past booking data in an aggregated and anonymous form.

Lufthansa Systems has now taken this process to a new level: Raw ticket and booking data is not suitable for the pure analysis of global traffic flows or airline market shares. Consequently, the data needs to be processed. This includes data cleaning and enhancement. The result of the data processing allows the customer to see detailed market information. It can also be used as a pre-stage for the network planning and scheduling process. To offer maximum customer benefit, Lufthansa Systems has now integrated its "Advance" data processing and analysis solution into the well-established NetLine suite under the new name NetLine/Market.

NetLine/Market is closely linked to NetLine/Plan, our strategic long term network planning solution. Through the integration both systems can now use the same data sources for consecutive planning steps. They actually access various sources, so airlines have an alternative to the costly provision of data from only one source via an exclusive provider.

The integration is part of a general trend towards platform solutions that gives users a comprehensive view of the relevant information.

The idea behind the integrated approach is simple: Current solutions like NetLine/Plan and the schedule management solution NetLine/Sched save costs and increase revenues by calculating optimized flight schedules. To maximize these benefits, NetLine/Market shows in which markets or on which routes competing carriers are active. In addition airlines can analyze how many passengers have booked a flight through which channels during the last weeks. As a result a marketing and sales strategy can be developed to extend the market share by increasing the sales figures in highly competitive markets.

Many airlines have voiced their interest in an integrated market data solution. Addressing this demand, the new NetLine/Market is a valuable addition to NetLine/Plan, /Sched, /Ops, and /Crew. Now more than anytime before, the enhanced NetLine suite provides airlines with added value - because, as the saying goes, Knowledge is Power.

News

Ethiopian Airlines connects to global IT network of Lufthansa Systems

Managed WAN solution covers more than 100 international locations

Lufthansa Systems today announced that it will connect Ethiopian Airlines' worldwide sites with a Wide Area Network (WAN). The airline has opted for a managed WAN solution from the aviation IT provider, which will ensure reliable, fast and secure data traffic between its 113 city and airport offices around the globe.

Kemeredin Bedru, Vice President Information Technology at Ethiopian Airlines, welcomes the cooperation with Lufthansa Systems. "The managed WAN network from Lufthansa Systems gives Ethiopian the flexibility, reliability and cost transparency that is so important to data communications these days," he said. "We will also have the advantage of Lufthansa Systems' renowned airline process expertise. The efficiency and data security gained will ultimately benefit our customers as well."

With its managed WAN services, Lufthansa Systems provides a global network which carries airline data traffic quickly and securely. The multi-provider network is composed of the best available sub-networks of various regions and local providers (best-of-breed concept). It combines high availability and maximum flexibility which are essential for the business-critical applications of Ethiopian Airlines. The solution also provides fast response in the event of an outage and enhances transparent invoicing known as "Easy Billing."

"We welcome Ethiopian Airlines, one of Africa's leading carriers, to the growing circle of customers for our managed WAN solution in the region. We will provide Ethiopian with a future-proof data network which will optimally support the airline's projected future growth", said Dr. Gunter K uchler, Member of the Executive Board of Lufthansa Systems.

The managed WAN services offer economic advantages as well. Since the multi-provider concept will enable Ethiopian Airlines to reduce its network costs, this investment will pay off quickly and in the long run will make a significant contribution to the strategic business performance. Ethiopian Airlines will also benefit from Lufthansa Systems' established position in Africa. Several customers in the region are already using these WAN services and taking advantage of the provider's experience in areas with less developed IT infrastructure.

Ethiopian Airlines has been a permanent player in African aviation for over 60 years. From its hub in Addis Ababa, the airline serves 53 international destinations in Africa, America, Europe, the Middle East and Asia as well as 15 domestic destinations with a fleet of modern aircraft. Ethiopian has an extended route network in Africa and is committed to uncompromising standards of quality.

Germanwings manages flight ops documentation more efficiently with IT from Lufthansa Systems

Low-cost airline Germanwings has opted for the Lufthansa Systems IT solutions EFOM (Electronic Flight Operations Manuals) and DocSurf. These solutions enable Germanwings to access current electronic operations documentation at any time. They also improve the quality of this documentation and save airlines time and money.

EFOM is the optimal solution for creating, managing and publishing operations manuals. In the medium term, Airbus will apply the XML concepts used on the A380 to the user manuals (OM-B) of its A320 fleet. The involved change from paper documents to electronic ones will enable extensive process optimization. For example, EFOM automatically imports Airbus FCOMs (Flight Crew Operations Manuals) and detects changes

to the documents. The software then supports and monitors the subsequent revision process and ensures the manuals are released according to specifications.

Germanwings will use the DocSurf solution from Lufthansa Systems on all of its pilot laptops to display the operations manuals. EFOM also stores metadata which makes it possible to set aircraft- or fleet-specific filters, navigate between documents for additional information, or view revisions to previous versions, so pilots can focus on the information relevant to their aircraft.

Germanwings is a wholly owned subsidiary of Deutsche Lufthansa AG. The airline serves 65 destinations throughout Europe with a fleet of 27 Airbus A319 aircraft.

WestJet optimizes flight operations with navigation charts from Lufthansa Systems

Canadian low-cost carrier opts for the innovative Lido RouteManual

Lufthansa Systems today announced that WestJet, Canada's leading low-cost, high-value airline, has successfully migrated to the Lido RouteManual navigation charts from Lufthansa Systems. Based in Calgary, the Canadian airline serves 51 destinations in North America, the Caribbean and Mexico. With Lido RouteManual, WestJet's pilots benefit from the excellent quality, clear color coding and design of the true-to-scale charts.

With the introduction of the Lido RouteManual, WestJet has migrated from so-called pilot manuals to ship manuals. This makes work significantly easier for pilots since the manuals are kept in the aircraft and pilots no longer have to carry their own manuals. The Lido RouteManual contains take-off and landing procedures, airport and en-route charts. These charts are generated directly from the Lido navigation database, which includes worldwide aeronautical information and topographical data.

Lufthansa Systems has for the first time integrated RNP (Required Navigation Performance) procedures into the navigation charts for WestJet. RNP is independent of ground-based navigation aids and utilizes Global Positioning System satellites to allow aircraft to fly direct, precision approaches to airports. This in turn shortens flight time and miles flown, reducing fuel burn and emissions. The airline is the first carrier in Canada to adopt this technology.

"I am proud that WestJet has opted for our Lido RouteManual. This sales success underscores our position in the North American market, which we have expanded continually during the last years," said Klaus Bernhardt, Senior Vice President Sales Americas at Lufthansa Systems. Navigation solutions from Lufthansa Systems are being used by several renowned US airlines.

Meet Lufthansa Systems

If you would like to talk to one of our IT experts about any specific solution in detail, we would be happy to coordinate a meeting. You can find us at the following events:

Name of Event	Date, Location	Solutions presented
IATA 124th Schedules Conference	June 18-21, 2009 Montreal, Canada	NetLine, SchedConnect, NetLine/Market