Boost your adaptability to changes in daily operations

Airlines today demand tools that address changing market dynamics. Enhanced adaptability, integration, speed, and economies are essential. Stand-alone systems are not enough. Achieving operational and financial excellence requires new business models backed by proven technologies – the very essence of Lufthansa Systems’ IOCC Platform.

Our IOCC Platform:
- Addresses changing operations and market demands
- Improves cross-departmental optimization and controls operational complexity
- Secures a safe migration protecting your daily operation
- Delivers a fast ROI and secures long-term investment
- Reflects our expertise and in-depth knowledge of the airline industry and supports your success

Calculations based on specific customer usage scenarios demonstrate that even a mid-sized network airline with 90 aircraft can save 31.8 US million dollars a year by using the IOCC Platform.

The IOCC Platform consists of three core elements:
- The IOCC components
- IOCC Integration Layer
- IOCC Management

Integrated Lufthansa Systems solutions drive all airline operational processes from short-term scheduling, operations control and crew control to dispatch and weight and balance. Typically, business units handling these areas work from different locations and use different communication channels; not ideal to achieving seamless information flow, particularly important in managing day-to-day disruptions and achieving safe, on-time arrivals for passengers and cargo.

The IOCC Platform’s effective integration of data, processes and workflows addresses this problem by promoting faster decision-making, detecting and intercepting potential disruptions, and reducing delays.

The core elements of the IOCC Platform

The IOCC Platform
- IOCC Sched
- IOCC Ops
- IOCC Crew
- IOCC Flight
- IOCC Load

IOCC Integration Layer
- Integrated technical platform

IOCC Management
- Integrated business platform

IOCC Integration Layer
The IOCC components dock into the platform’s prefabricated, standardized and stable ESB (Enterprise Service Bus). It provides for the seamless exchange of data and communications between components. This layer also facilitates enhanced process integration and step-by-step, operationally-safe legacy system migration.

IOCC Management
Central to the integrated business platform is IOCC Management. Value-driven and based on multi-directional communications, it serves as the main decision-making component. The IOCC Platform strives to execute an airline’s flight schedule as close as possible to the original plan.
Short-term scheduling monitors and controls schedule planning during the final weeks prior to the flight event. At this point, schedules must already be set for crew and maintenance reasons. However, schedules are prone to disruption and frequently have to be modified and adapted to address changes in market conditions.

Operations control is responsible for controlling flight operations on the day of operations. An extremely complex process is required to achieve that passengers arrive at their destination safely and punctually. The operations control center is the traffic center of an airline. This is where all the data relevant to conducting a flight converges.

The hub or station control management monitors and controls aircraft, crew and passenger connections as well as the aircraft turnaround at its hub(s). By actively managing the seamless interplay between airport, airline and service providers, the propagation of delays caused by disruptions will be reduced significantly.

Maintenance control monitors the allocation and observance of maintenance intervals as well as the execution of upcoming maintenance events. To be as efficient as possible, operation controllers and maintenance technicians need to be informed about all changes in operational activities without any delay and on a real-time data basis.

Unavoidable disruptions in flight operations occasionally result in the inability to transport passengers or cargo as planned. Passenger and cargo management's role is to achieve that the delayed passengers and cargo are transported to their destination as swiftly as possible with minimum inconvenience.

The crew control process covers the handling of planned duty rosters issued to flight crews. It must achieve that the right crew is always on duty at the right time and in the right place for every flight. As in the initial planning phase, particular attention must be paid to the requisite qualifications and legality of the crew in question.

The dispatch process provides airlines with high-quality briefing packages and optimized trajectories from take off to landing. It covers all aspects of flight planning as well as flight following procedures. It calculates the optimal route between two airports while taking flight-related and all current aeronautical information including NOTAMs into account.

Weight and balance as a process evolves around coordinating the planned weight and center of gravity of a flight. The weight for take-off, cruise and landing must be in strict control to stay within the structural limits of the airframe. Additionally, the trim must be controlled to stay within the established parameters for a safe flight.