

WHITE PAPER



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Collaborative Disruption Management



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Airline Groups - The latest trend in collaboration synergies

A consolidation is taking place in the airline industry, with multiple airlines coming together as groups for strategic reasons. This happens either through capital acquisition or marketing partnerships, whereby the brand identity of each airline is maintained while fleets and crew are managed by the group. Schedules are harmonized and coordinated amongst the group members, allowing passengers to smoothly connect from one member airline to another at the respective individual hub.



Each group still has a number of operations control centers (OCC) which deploy a mix of IT systems for schedule management, flight planning, operations and maintenance control, hub management and crew tracking. Bringing together the IT systems of all members of the group in the present shape could have disastrous results because there is a diverse array of applications which operate in silos and do not communicate with each other effectively.



Non-integrated IT systems of different airlines working together in an airline group

Integration of IT systems has been a major topic within the airline industry for a decade. Data integration is the key for decision making, to predict and prevent disruptions which affect aircraft rotations, passengers and crews costing airlines billions of dollars every year.

Legacy IT, Silos and In-house developments



- + Very poor decision support with limited available data
- + A lot of time required to get the necessary information
- + Wasted time required to take decisions
- + Mediocre on-time-performance as a result

The costs for non-digital airline operations are huge

Americas

\$14.4 bn
33 airlines
13,014,143 flights
77.79%
\$436 m / airline

Europe

\$3.3 bn
38 airlines
5,607,246 flights
84.56%
\$86 m/airline

Middle East

\$520 m
4 airlines
599,782
74.26%
\$130 m/airline

Asia

\$7.5 bn
34 airlines
5,257,419 flights
71.93%
\$220 m/airline

World Total
\$25.72 bn
\$235 m / airline

Source: IATA

From Collaborative Decision Making to Collaborative Disruption Management

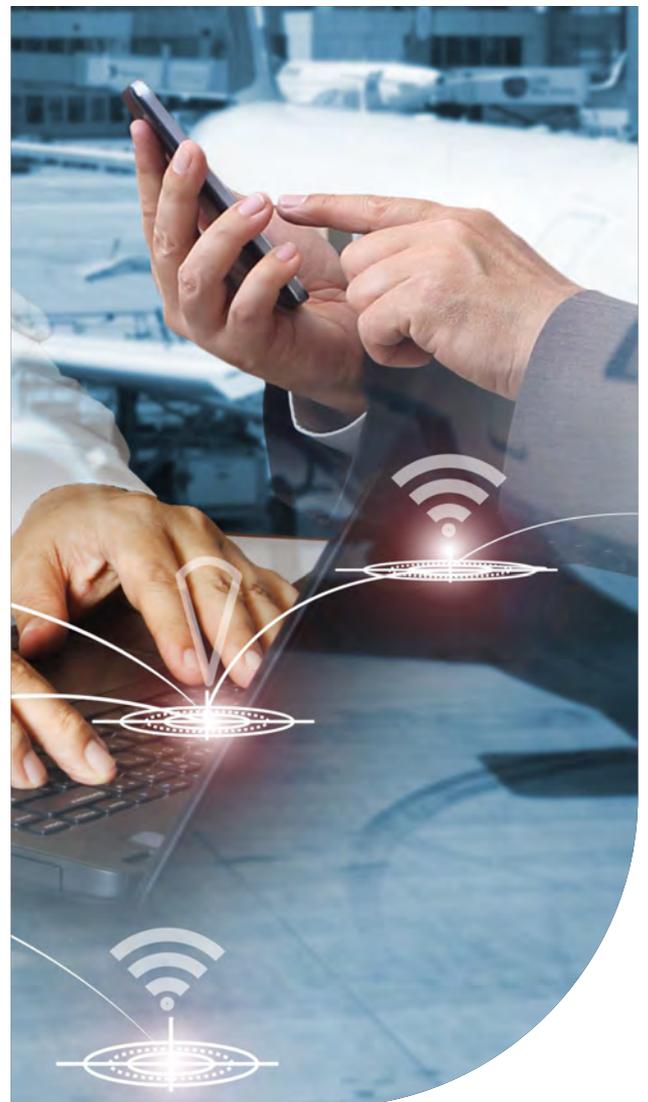
Disruptions occur regularly and every airline OCC has a sophisticated disruption management policy to mitigate the impact for travelers and crews. Unlike in the past, the heat is on airlines as passengers quickly communicate via social media channels if things go wrong.

Tweets about runway closures communicate faster than airport NOTAMs these days. Furthermore, airlines have to cope with the digitalization of passenger data. Airport Collaborative Decision Making (A-CDM) was just the beginning. System Wide Information Management (SWIM) and data sharing between airlines, airports, ground handlers and air traffic control under the SESAR project in Europe requires the individual parties to share data and prepare the individual IT systems. Hence the question now is, are the airlines ready for the next step of collaborative disruption management?

What hinders transformation Legislation or Technology?

- What hinders airline groups in the exchange of information among member IT systems?
- What is the disruption management policy if an aircraft is AOG (aircraft on ground) and cannot operate the sector to the hub of another member of the group?
- What happens if the Captain of an airline is sick and no standby from the same airline is available?
- How far away is the time when an airline group is sharing all resources among members?
- Why is an airline group not operating with an aircraft from one member, cockpit crew from another member and cabin crew from yet another member?
- Why do things which work out when creating flight schedules for each group airline suddenly not become possible on the day of ops?
- Why do members of the airline group go back to operations on an individual level when IT disruptions occur?

Of course, the legislations in some countries do not enable airlines to flexibly deploy available airline group resources. Or sometimes unions do not support the management ideas of making use of synergies and economics of scale. However, the reality is that the IT infrastructure is often the bottleneck for collaborative resource management.



Deployment of Digital Airline Operations Platform

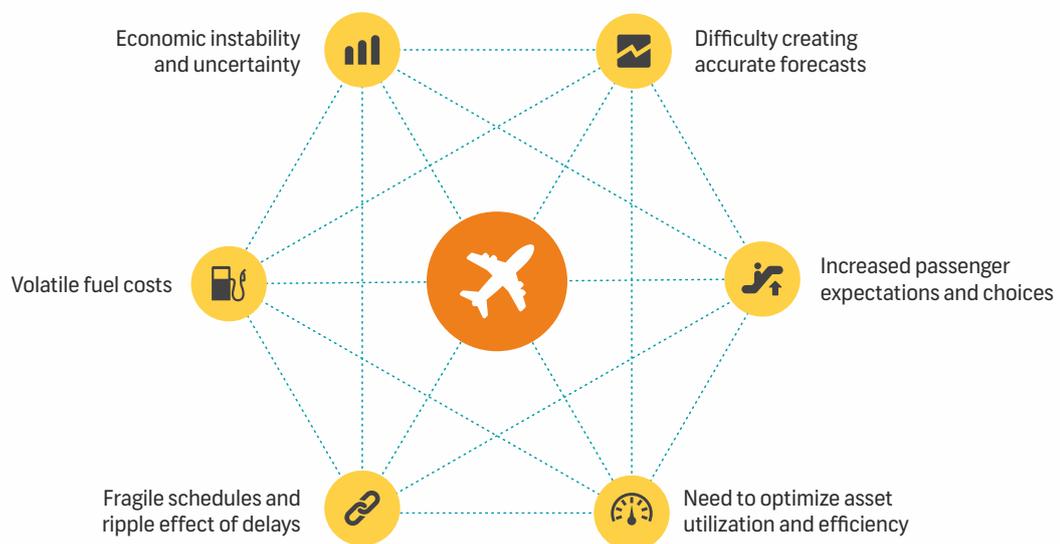
The year 2007 heralded the beginning of a new era. Instead of carrying a digital camera, a navigation system, a cellphone and a game console people just replaced all four devices (and their cables and chargers) with just one single device called the iPhone. For ten years now, people have been enjoying the flexibility and just-in-time communications wherever they are and using a digital cloud platform which eases data integration with any other device they have. Taking a picture on one device makes it available on any other device through the cloud.

In 2017 airlines still deploy a large number of “devices and cables and chargers” - in their OCC. Adding to the complexity, even airlines belonging to a single airline group rely on different systems and suppliers. There is immense potential for simplification by integration.



A single Airline Operations Platform like iFlight NEO enables all airline groups to benefit from synergies. Data integration is easy when all of these are working on one single platform which can be accessed from everywhere in the world just using a smartphone, tablet or light weight notebook. HTML5-browser deployment provides easy access and keeps hardware costs low.

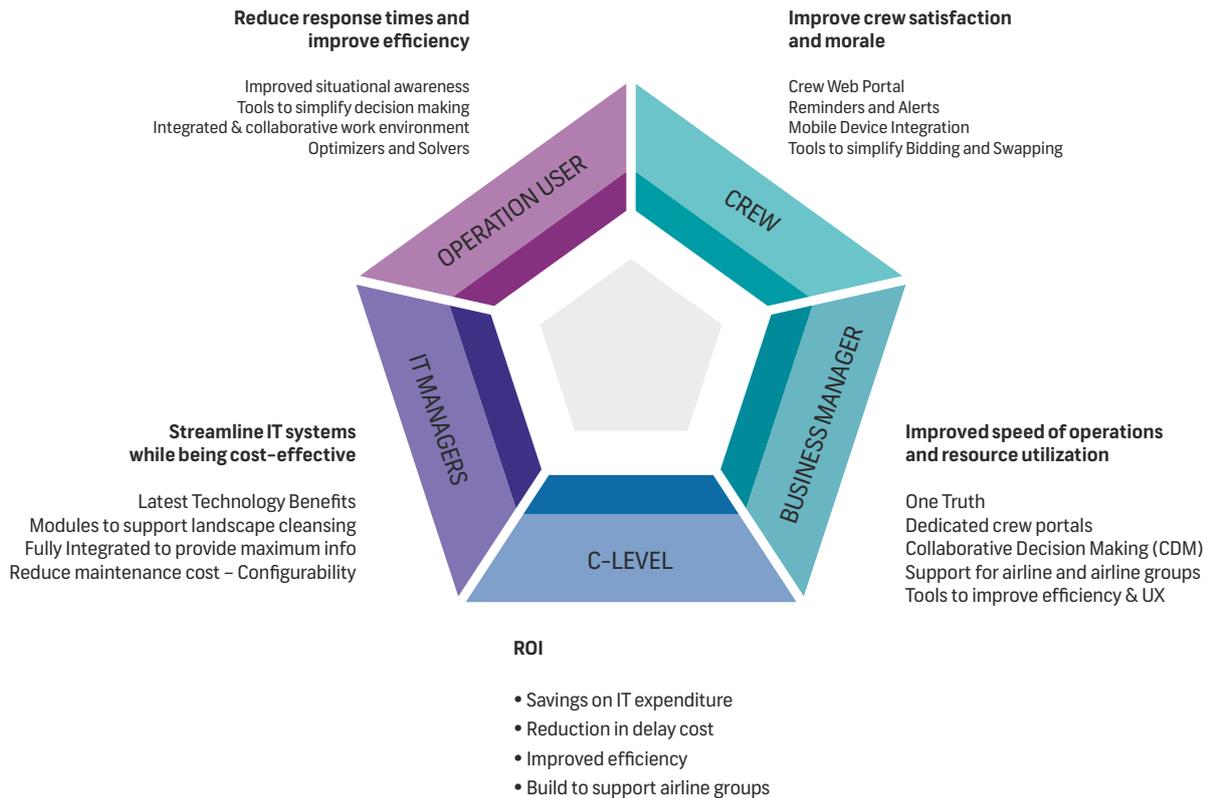
Four to six airlines can collaboratively work together on one set of data which is available in real time for each individual OCC. Every airline can see deep into the activities of the other airlines, while still protecting privacy and data security of highly confidential data. It follows the same principle as Facebook or LinkedIn where each user can define what's visible for friends and followers. This has been in vogue in all walks of life since 2004, yet seems so far away in airlines – this can easily become a reality if a digital platform is deployed.



Collaborative Disruption Management 4.0

A single operations platform for all activities on the day-of-ops enables airlines who operate as a group to flexibly respond to disruptions. What has been CDM (Collaborative Decision Making) at airports can be CDM (Collaborative Disruption Management) for airlines. Information sharing is a no-brainer if all group airlines have access to the same digital platform which is integrating all relevant operations data like reservations, load planning, flight planning, weather, maintenance, airport, passenger data, aircraft, crew, Air Traffic Control, station and hub data.

Benefits of Collaborative Disruption Management



Benefits at a glance: Single Digital Airline Operations Platform

- Speed up disruption management
- Benefit from synergies across the airline group
- Staff can support each other if necessary
- New disruptions management process for all airlines
- Modern tools enable airline resource sharing and collaborative decision and disruption management if required (e.g. aircraft, crew, staff)
- OCC Mobility (smartphone, tablets, wearables)
- Proactive information provision
- Situational Awareness
- Flexible Business and Crew Rule Management



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