TAP PORTUGAL

Company
TAP

Business Challenges
- Cost overruns
- Frustrating bottlenecks
- Maintenance inefficiencies

Solution
Realization

Benefits
- Balance resources across projects
- Reduced disruptions and waiting
- Synchronized execution
- Shift resources to the right tasks at the right time
- Reduced TAT

Results
- Reduced downtime by 21%
- Increased labor hour productivity by 5.4%
- Completed supply chain tasks 32% faster
- Accelerated TAT by 9.4%

Learn How TAP Airlines Reduced Down Time by 21% Using Execution Intelligence

BUSINESS CHALLENGES

TAP (Transportation Authority of Portugal) is Portugal's leading airline — flying since 1945 and a member of the Star Alliance since 14 March 2004. The airline's lauded Lisbon hub is considered the European gateway at the crossroads of Africa, and North and South America.

It's an airline positioned well for global success; in fact, in 2014, the airline expanded routes and network to include 11 new destinations. Currently, the Portuguese airline has connections to 81 destinations in 34 countries and averages 2500 flights a week with a fleet of 77 modern aircraft: 61 Airbuses, and another 16 aircraft.

But as TAP grew in size so did its operating and maintenance challenges, and the work cards started piling up everywhere.

In the airline maintenance industry, a "work card" is a detailed description of the work to be completed for on an aircraft or specific equipment. With machinery as big as a commercial aircraft, 1000's of work cards are assigned simultaneously to different teams. In the case of TAP, there were a whopping 2,000 cards issued on a "C" check and 4,000 on a "D" check.

Unfortunately, TAP found themselves in a common situation with more work cards than mechanics to complete them. Given the variability and uncertainty that is intrinsic to aircraft MRO, it's impossible to follow any plan more than one day out. It's also humanly impossible to re-plan 1000's of work cards every day.

To increase the chances that mechanics are fully utilized and aircraft are always getting worked on, planners and managers had no other option but to release an excessive amount of work to the repair teams. But this only worsened the situation: it led to confusion about priorities and managers would often be trying to outmaneuver their colleagues to claim resources needed to complete their own individual project at the expense of the other.

The resources situation among TAP maintenance managers had become fundamentally a disaster. Instead of project managers collaborating and sharing work cards to determine maintenance synergies, a fiercely competitive culture of blame, mistrust and project failure occurred.

The situation remained critical as TAP's resource and project plans were as unstable as a house built on a deck of work cards.

SOLUTION

To improve the scheduling of resources, TAP turned to Realization's Concerto software, which can balance and schedule resources across multiple projects and provide management with the real-time information to deliver projects on time.

The implementation of Concerto started in May 2014 as a pilot project with a C3 check of a few TAP aircrafts. The result was a 30% TAT reduction that validated the decision to implement the software across all aircraft inspections.

According to TAP M&E Processes and Continuous Improvement Manager Pedro Costa, Concerto's execution management platform ensured "not only that resources were working on the right work cards at the right time but also a real-time monitoring process that helped managers respond to emerging bottlenecks and a continuous improvement process that identified the recurring constraints that limited our performance." "Concerto helped us improve control over the critical path and handle the inherent uncertainties that exist in any aircraft inspection," said Costa.

BUSINESS RESULTS

Many companies with multiple concurrent projects struggle with static project and resource management tools that only work on averages and provide backward looking reports instead of helping resources and man-agers respond to what's happening in real-time. TAP chose Realization because its software combines real-time technologies like web and cloud with algorithms to help you make most effective use of your resources in a complex and dynamic environment.

The implementation allowed TAP to induct an additional A330 wide body C-check eliminating over €330,000 of outsourcing costs; this also freed up one more narrow-body to support TAP aircraft operations due to the 21% TAT reduction of TAP fleet aircraft.

"Real-time scheduling eliminates wasted resources and inefficiencies, supports best practices and enables a dynamic solution for continuous improvement by the entire organization," said Costa. "Moreover, Realization's customer success team was instrumental in establishing operational transformation program of TAP M&E intended to enhance the business growth and sustained improvements."