



Integrated Solution for Managed Maintenance Services

Abstract

In order to provide a new service offering to its airline customers enabling improvements in efficiency and quality of aircraft maintenance planning and execution, the aerospace manufacturing client instituted a program within their services and support organization to integrate a suite of over 15 software applications and tools. The suite is a combination of existing and new software solutions from internal development, subsidiaries and 3rd party suppliers. The overall solution enables real-time visibility into maintenance and operational data allowing the program to maintain and offer various levels of support, as well as gain efficiencies and lower operating costs.

The Challenge

- Business units maintained independent initiatives leading to competing functional requirements priorities and sub-optimal knowledge sharing across teams.
- Inconsistent communication and reporting policies and processes were exacerbated by highly variable development and testing methodologies.
- The client's team had limited experience with large scale systems development and integration initiatives.
- The client's teams were dispersed over several locations.
- Delays in development by external, 3rd party products negatively impacted the over-all program's schedule.
- The integrated product contained new solutions sets which had not yet been fully validated with all external customer segments. This led to: product management challenges; significant priority shifts; incomplete initial requirements; highly variable estimates; and scope creep issues.
- The cyclical nature of the client's budgeting process combined with the program spanning multiple annual budgeting cycles caused resource constraints and funding challenges.

How We Helped

- We helped define a cross-organization program structure to unify and prioritize business objectives across 22 work streams and 16 products.
- We implemented an integrated cross-organization program management office that developed best practices for: integrated schedules, communication, change management, risk management and performance metrics.
- We created the program-level processes to govern the software development lifecycle and led the over-all software development implementation.
- We defined and developed system requirements, interface specifications, business data requirements and developed data synchronization processes across the end-to-end value chain.
- We helped define and execute functional as well as system scalability and performance testing across the integrated system.

End Result

- Reduced over-all program risk by successfully unifying organizational initiatives and drove increased knowledge sharing and IP reuse across teams.
- Achieved aggressive business and financial goals by implementing program management best practices and system integration processes across the program, improving visibility and reducing the cycle time of the overall development process.

- Improved over-all quality and timeliness of the decision support process through increased system performance and increased data analytics accuracy.
- Simplified and improved the customer experience through seamless integration of multiple disparate software applications.