Still Force-Fitting Manufacturing ERP for Aviation?

Propel ahead with Ramco Aviation ERP built from ground-up for the industry

Enterprise Resource Planning (ERP) systems have played a pivotal role in the industrialization, especially in the manufacturing sector, in integrating various departments, automating manual tasks, and bringing efficiencies to operations. Over time, many organizations in non-manufacturing industries too have adopted ERP as the core system on which operations run, albeit with customizations. And, Aviation is no different. Aviation, Aerospace, and Defense industries are highly specialized industries where safety is of paramount importance and stringent quality control mechanisms are involved in the entire value chain right from aircraft/engine/component manufacturers, aftermarket and MROs, to operators and supply chain providers.

While traditional ERPs have worked well in taking care of the manufacturing side of the aviation industry, they fell short of expectations when it came to the aftermarket/MRO side of aviation in addressing aviation-specific operations. The matter of fact is aviation organizations like MROs, CAMO, airline maintenance functions, supply chain entities have unique operations that require specialized aviation software covering the whole gamut of functions such as Configuration Management, Engineering, Maintenance, Supply Chain, Safety Compliance, MRO & Part Sales, flight operations, employee records, and finance & accounting. And, it requires an aviation-specific ERP system to address these specific functions seamlessly.

Some key benefits of using Aviation ERP built from Ground-up include:

1. One-stop-shop for all aviation needs: Unlike a manufacturing ERP system, that requires to be customized heavily to suit the requirements of aviation functions, a native aviation ERP provides the flexibility, scalability and agility that are needed to run Aviation functions from a single solution. Ramco's solution covers all the key functions such as CAMO, line, hangar, engine, component maintenance, 3rd party MRO, flight operations, manufacturing, finance & accounting in the product.

A one-stop-shop solution reduces the complexity in the IT landscape, brings in consistency and accuracy to enterprise data and acts as a catalyst to the organization's growth.

2. Native Mobile capabilities: Mobile applications help in increasing utilization rates of hangars and shops and productivity of teams. In fact, at Ramco, we have developed mobile apps for different user roles and nearly 80% of MRO functions can be done on a mobile device like line maintenance, mechanic/technician, warehouse management, crew management, flight logs, approvals, customer order tracking, etc.

Traditional ERP mobile apps lack comprehensiveness and require a lot of configurations making it a cumbersome task.

3. Advanced Supply chain capabilities: The level of complexity in managing the supply chain of Aviation varies based on the type of ownership- owned inventory, pooled inventory, loans and exchanges; and the type of aircraft – fixed-wing or rotary. The ERP system should provide inventory visibility of parts across the organization, globally, with information on the condition of parts (whether it is new, serviceable, overhauled, or unserviceable) and movement of parts. Automated quote to cash management, procure to pay, handling aviation-specific PBH scenarios and integration with suppliers through spec 2000 EDI interface for seamless and digitized supply chain transactions are some of the inbuilt benefits that Aviation ERP provides.

4. Digitization: There is a common consensus in the industry that digitization can be leveraged as a strategic tool to achieve exponential growth. Digitization is not just limited to going paperless which is, of course, a key aspect of the journey but also includes ecosystem interface such as OEM interface for seamless data exchange, augmenting the PDF task cards of AMM, EMM, CMM, or custom task cards with the skill attributes, Text Controls, Numeric controls for digitized work execution, and the ability to transform the PDF work package into digitized task card/content and many other aspects which collectively help in reducing TAT and high revenue realization.

All this is possible with an effective Aviation ERP system with native capabilities. Ramco Aviation ERP has been evolving for over 20+ years and is changing the paradigm of enterprise software with Artificial Intelligence and Machine Learning based solutions, serving all players in the Aviation ecosystem such as OEMs, MROs, Operators, Defense, UAS/Drones, Spaceflight organizations. For more information about our solutions, please do reach us at contact@ramco.com.