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CASE STUDY – AEROSPACE AND DEFENSE CASE STUDY

Streamlining Avionics Repair

Process Mining Implementation in a Multi-national Aerospace Corporation

40%
improvement in data accuracy and availability for decision-making

30%
reduction in repair turnaround times

35%
reduction in duplicate and partial billing

OVERVIEW

Client: Multi-national Aerospace Corporation

Industry: Aerospace & Defense

Geography: Europe

Employees: 60,000+

Revenue: $20 billion

Challenges

This multi-national aerospace corporation faced several challenges in managing their avionics repair request process:

- **Process Frictions:** Inefficiencies and delays in the repair request process led to extended turnaround times and increased costs.
- **Geographic Variability:** Variations across different geographies caused inconsistencies in service delivery and customer satisfaction.
- **Product Type Variations:** Different aircrafts required specific repair processes and spare parts, adding complexity and variability.
- **Compliance:** Partial and duplicate billing issues, and production times for spare parts violating the delivery SLAs.
- **Data Integration:** Integrating data from multiple sources to gain a comprehensive view of the process was complex and time-consuming.

Solution

Apromore was utilized to address these challenges through its advanced process mining capabilities.

- **Data Extraction:** Apromore extracted event data from the corporation's ERP and maintenance systems, providing an integrated view of the avionics repair request process.
- **Process Mapping:** Using Apromore, the corporation mapped end-to-end repair processes across different customers, geographies, and product types, revealing inefficiencies and areas for improvement.
- **Geographic and Product Type Variability:** Apromore identified process variations across different geographies and product types, enabling the corporation to standardize best practices and reduce inconsistencies in service delivery.
- **Simulation and Scenario Testing:** Apromore's integrated simulation engine allowed the corporation to simulate different what-if scenarios to assess the impact of several process interventions aimed at rectifying frictions and reducing variability.
- **Operational Excellence:** Apromore automated the discovery of repair request processes, creating accurate models supported by operational data. This foundation allowed for predictive monitoring, helping prevent delays and optimize repair workflows.

Results

Operational Excellence

30% reduction in repair turnaround times.

Enhanced process visibility and reporting, leading to better decision-making.

Geographic and Product Type Variability

25% improvement in process consistency across different geographies.

Standardized repair processes for different product types, reducing variability by **20%**

Compliance

32% decrease in overall billing issues.

Significantly less violations of committed delivery date for spare materials.

Data Integration and Analysis

40% improvement in data accuracy and availability for decision-making.

Enhanced ability to identify and address process inefficiencies through integrated data analysis.

Conclusion

By leveraging Apromore's process mining capabilities, the multi-national aerospace corporation was able to drive operational efficiency, standardize repair processes, and improve service consistency across different geographies and product types. These strategic initiatives not only enhanced repair turnaround times and customer satisfaction but also streamlined operations, positioning the corporation as a leader in aerospace and defense services.

About Apromore

The Apromore™ platform is an easy-to-use, fast-to-deploy AI-driven process mining solution that enables business and technology teams to quickly visualize and analyze their business processes, and simulate proposed changes prior to implementation in order to measure impact and risk.

The result of over a decade of extensive research and innovation from leading universities, the Apromore platform includes no-code features and a simple UI that continuously delivers new insights into operational performance and compliance.
For more information, visit https://apromore.com/product