IMPLEMENTING DIGITAL THREAD FOR EUROPEAN AERO STRUCTURES OEM CASE STUDY.
In the aerospace industry, digitalization, notably digital threads, allows customers to face complexity front-on, allowing for improved efficiency and innovation. Digital thread-based solutions can enable multi-disciplinary processes and weave essential data together to offer a complete perspective of the product, production, and process in an effective way.

Tech Mahindra has improved the flexibility, efficiency, and stability of the digital IT infrastructure and related services, reducing transition risks. The customer wanted to leverage the digital services platform to optimize supply chain operations, product development, production, and aftermarket services while remaining compliant with aviation regulations. We outsourced data center operations, network, service desk, and end-user compute services, allowing us to save money while improving business and end-user satisfaction.

The client, situated in Augsburg, Germany, is one of the world's leading providers of commercial and military aircraft structures. The major challenges that the customer was experiencing were siloed product development, manufacturing, and aftermarket services activities, which resulted in higher time and effort for new product introduction. The customer chose Tech Mahindra as a trusted partner of choice because of its significant domain expertise combined with technology along with substantial digital transformation experience. The client wanted a trusted Partner who can not only address the current challenges but also align with the company’s vision.

Tech Mahindra submitted a multi-tower concept with a transformative strategy that may lower TCO by 30% while remaining compliant with ITAR, EAR, DFAR, and GDPR.

Tech Mahindra’s TransIT framework, which consists of three parallel tracks, was designed to ensure that all delivery towers’ activities are coordinated and that dependencies are addressed when necessary.

Implement six techniques to achieve the transformation: IT as a product organization, application portfolio optimization, hybrid cloud adoption, telemetry IoT for business, analytics-based command centers, and future methods (DevOps, SRE).

The Tech Mahindra strategy includes four transformational outcomes:

- End-to-end reliable IT
- Digitally enabled business
- Agility in aerospace contextualization
- Commercial value adds
Reduction in new product introduction (NPI) effort

Reduction in new product introduction (NPI) time

Integration of the shop floor to top floor (IT/OT integration)

Developed a digital twin and thread solution that connects the product-production-performance value chain.

Improve customer experience by enabling product servitization

SOLUTION

BUSINESS AND COMMUNITY IMPACT

30%

30%

15%

UP TO

Reduction in new product introduction (NPI) effort

Reduction in new product introduction (NPI) time

Reduction in rework and scrap