

Legacy Defence Program Production Ramp

Major Aerospace and Defence Company

1 SITUATION

A legacy defence program faced a major production ramp-up but was falling short of planned targets due to supplier constraints. Unrealised bottlenecks continued to limit output, even as known supply issues were resolved. Additionally, identifying root causes of part defects was highly manual, consuming days of effort from Manufacturing Engineers and diverting focus from core production tasks.

2 OPPORTUNITY

Deloitte was brought in to enhance production forecasting, uncover hidden supply chain risks, and automate defect resolution. The client sought a data-driven approach to improve operational visibility, streamline processes, and ensure a scalable, resilient production system ahead of the ramp-up.

3 SOLUTION

- **Capacity & Sensitivity Analysis:** Developed data-driven models to identify bottlenecks, accounting for supply fluctuations, cycle times, and resource availability.
- **Supply Chain Risk Identification:** Uncovered previously undetected supplier constraints, enabling proactive risk mitigation.
- **AI-Powered Process Automation:** Implemented Generative AI to create rework templates and automate quality notifications, reducing administrative workload by 100+ hours per defect case.
- **Supplier Performance Review:** Delivered a non-advocate supplier assessment, identifying risks and providing targeted recommendations to support production scalability.

