

STEERING AGILE PLM TRANSFORMATION IN THE AEROSPACE & DEFENSE INDUSTRY

Overview

Industry: Aerospace & Defense

Region: Global

Client Challenge:

The leading aerospace and defense company wanted to roll-out a new PLM system using an agile transformation approach with many stakeholders and a demanding schedule. There was limited data continuity due to the low efficiency of reporting and a lack of real-time data for decision making.

Solution:

Capgemini Invent developed a collaborative project management platform based on a homogenous tool landscape that provide automated, real-time, and data-driven reporting and a common way of working for all project stakeholders.

Benefits:

- Real-time, automated, and data-based provision of project status updates enables efficient decision-making and the early identification of key blocking points
- Tailored key performance indicators ensure the fulfilment of stakeholder-specific reporting needs
- Homogenized tool landscape facilitates data continuity and data maintenance

- Harmonized ways of working foster collaboration among projects
- Common understanding of underlying processes leverages planning synergies between stakeholders to save money and time

As part of a project to develop and implement a global, agile product lifecycle management (PLM) system in the Aerospace and Defense sector, a leading aerospace company introduced a new backbone system to design, manufacture and operate the next generation of products. This digital transformation journey included the definition of updated processes, methods, and tools as well as new business models and ways of working. In this context, it was necessary to define and implement a central, data-driven reporting platform to monitor and steer the transformation via efficient decision-making and KPI tracking of time, quality, and cost.

The existing reporting structure was based on qualitative, ad-hoc information from decentralized data due to the absence of a consistent, central data baseline. Therefore, early identification of critical issues and efficient data-based decision making was not possible. In addition, the creation of a few standardized reports was associated with a high level of manual effort. Information was stored in various systems and processed in different departments, which led to redundancies and inconsistencies.

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Deduction of target picture and MVP setup

Leveraging information gathered during focus interviews, Capgemini Invent analyzed the existing reporting and tool landscape, including the underlying processes. Different stakeholder requirements and demands were collected and thoroughly analyzed in the context of a digital reporting setup. The results of the analysis revealed a heterogeneous tool landscape and the absence of data continuity, which blocked the establishment of efficient and consistent reporting. To overcome the stated challenges, the development of a collaborative project management platform was tackled from two perspectives.

Firstly, a high-level project management platform and KPI target picture was generated, which included eight central

KPI categories containing central dashboards. Using an agile product management approach, the team set up a minimum viable product (MVP). To accommodate the need for rapid visualization of existing data structures, the MVP was based on the derived target picture and existing underlying data baseline.

Secondly, the existing tool landscape was further analyzed and dedicated weak points were identified. To overcome the heterogeneous tool landscape, it was recommended to use Jira, an Atlassian tool, as a central data base, which ensured data continuity and established comprehensive reporting equipped with real-time data updates.

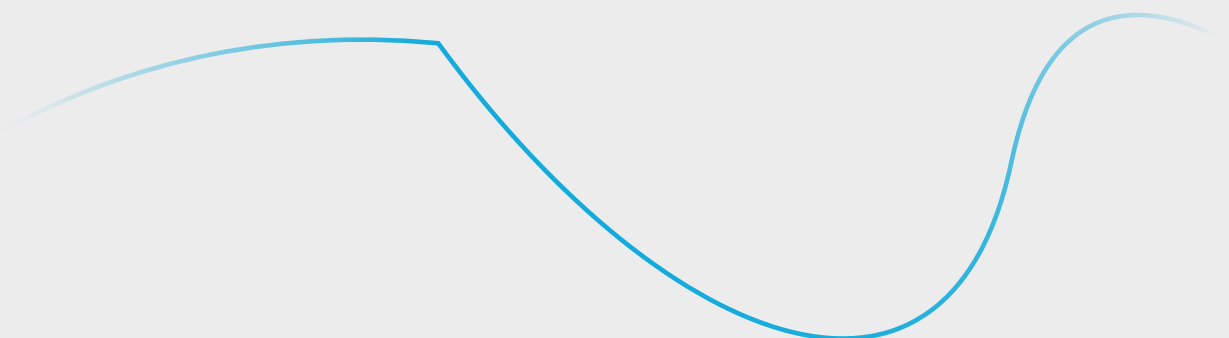
Digitalization of data structure ensures real-time reporting

The digitalization of existing reporting structures with the migration to the Jira database established a transparent data baseline with pre-defined ways of working and processes. With the creation of a coherent data structure and dependencies, KPIs on multiple organizational levels were developed. This allowed top-down KPI reporting with consistent drill-downs and ensured that stakeholders had the necessary level of visibility.

By adding new KPIs that combine key reporting dimensions, the value of the underlying data was further increased.

This was achieved with the Atlassian Business Intelligence Software EazyBI, which allows a real-time interface with Jira and a seamless integration of complex reporting charts into the Atlassian Confluence environment.

Leveraging the new digital system architecture, Capgemini Invent ensured that standardized processes were followed, a new, single-source-of-truth database established, and more sophisticated indicators were introduced.



Roll-out leverages potential

Capgemini Invent involved the key project management office (PMO) team in the design and implementation of the target picture and reporting tool solution. This unleashed the full benefits of the project management platform.

The solution has improved reporting consistency, significantly increased the data quality by harmonizing the underlying tool landscape, and reduced the overall effort needed for reporting. In order to further increase reporting transparency and tailor the presented KPIs to different stakeholder groups, Capgemini developed stakeholder specific views. These views ensure that stakeholders are presented only the most relevant indicators for their daily business, consolidated in a dashboard.

Lastly, the preparation and conduction of communication and awareness sessions for the relevant stakeholders inspired buy-in and a unified level of knowledge, which eased the transition to the new digital reporting setup. With the Awareness and Coaching Sessions, Capgemini managed to drive adoption of the platform by creating a joint understanding of the future reporting setup.

With the completion of the project, all PMOs, end users, and decision makers can now access real-time KPIs related to the project in all central categories – improving the quality of decision-making and enabling efficient progress tracking during the ongoing PLM transformation.



“Establishing the new project management platform was a huge step towards more effectively steering the project and having a real-time understanding of our project KPIs. The collaboration with Capgemini to understand the requirements for this new platform and approach, and to implement it was on a very high, professional level and achieved great results.”

Project Manager, Leading Aerospace & Defense Company

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