

CASE STUDY

Multinational Aerospace & Defense Company transforms legacy architecture for 720x faster parts ordering



Company name:

Multinational Aerospace and Defense Company

Industry:

Manufacturing & Retail

Location:

United Kingdom

A globally-renowned multinational aerospace and defense company, was looking to upgrade its legacy ERP system and transform its complex underlying IT architecture. They wanted to establish a central, secure repository of information while optimizing business processes. Due to the nature of their industry, they had a very specific set of requirements and needed to create a customized solution that would meet their high regulatory standards. Their solution was to combine their legacy ERP and Bizagi, avoiding ERP customisation by using Bizagi to run the processes and integrate the data. Bizagi enabled legacy applications to pass and receive information from the ERP system to over 150 satellite applications. This enhanced the functionality of the system, provided an authorization layer, and has eliminated manual tasks so individuals can spend more time applying their knowledge and adding value to the business. This has seen a 2.5x reduction in overall manual effort and transformed processes across procurement, finance, manufacturing, maintenance, and supply. The spare parts order process has seen particular success, with 300 parts automatically validated in five minutes, making the process 720x faster.

720x faster spare parts order process

300 parts automatically validated in 5 minutes

2.5x reduction in employee manual effort

250,000 cases created per week

"We can't make plans without Bizagi."

Objectives

- 🎯 Replace legacy ERP to create single system of record for easy audit and accessibility
- 🎯 Automate spare parts order process, averaging four hours to check 20 parts
- 🎯 Free up time of employees who have to manually enter data into multiple systems
- 🎯 Transform core operational capabilities across procurement, finance, manufacturing, maintenance & supply
- 🎯 Reduce duplicate case issues to improve system performance

Achievements

- ✔️ Established new, custom centralized solution combining ERP and Bizagi
- ✔️ 2.5x reduction in overall manual effort
- ✔️ Spare parts order now 720x faster with 300 parts automatically validated in 5 minutes
- ✔️ Ability to react quicker, be more cost effective and reduce overheads
- ✔️ Single source of information provides more accurate decision making and audit compliance
- ✔️ 50% of cases identified as duplicates removed to improve system performance
- ✔️ 250,000 cases created per week in Bizagi across purchasing and stock management

Overview

A multinational aerospace and defense company, was looking to reconfigure its legacy IT architecture, which comprised of an ERP system as its backbone, integrated with over 150 satellite applications. Updating their architecture would create a single system to record for easy audit and accessibility, with the additional benefit of optimizing and automating processes to improve business efficiency.

By taking a BPM-led approach, they were able to combine a new, off the shelf ERP solution with Bizagi acting as an authorization layer to integrate and optimize associated business processes while also providing agility to adapt processes when necessary. This enabled them to avoid customizing the ERP which would create issues with maintenance and upgrades in the future. The project transformed the way they operated across multiple departments, including procurement, finance, manufacturing, maintenance, and supply.

Challenge

Multinational Aerospace & Defense Company were looking to drive efficiency in their business processes, so needed to upgrade their IT infrastructure, beginning with their aging ERP system. However, this was a big challenge as their ERP integrated with multiple systems and essentially acted as the backbone of the business. As the organization grew, they used 150 legacy satellite applications to support their IT operations, so they wanted to consolidate this into a single solution.

They had a very specific set of requirements and processes that the ERP needed to deliver. It very quickly became clear that they couldn't simply buy an ERP system off-the-shelf. Customizing the ERP solution was expensive to implement and maintain. Standard vendor patches still have to be built upon not to break customizations, which increases development and testing efforts and made ERP upgrades difficult and expensive.

As part of this migration, the company also underwent a digital transformation project to optimize their processes and overhaul manual inefficiencies. They began with a pilot project within their Military Air and Information division by automating the spare parts order process, which previously took an average of four hours to check 20 parts.

Solution

As it was difficult to find an exact fit for their business needs, they found an innovative solution to deploying a new ERP: they took a BPM-led approach and used Bizagi to build custom processes around an off-the-shelf ERP solution.

Integrating Bizagi with the ERP, allows the two systems to be very closely aligned: the system of records is stored in the ERP and Bizagi extracts the data, manages the business processes and integrates with their other applications to form a single authorization layer. All customization is enabled through Bizagi, providing an agile and compliant approach to business.

"We have a vanilla ERP and Bizagi provides the processes to implement the business requirements where they can't be met by the COTS [consumer off-the-shelf] solution. They seamlessly integrate and that, as a logical entity, integrates with a wealth of legacy systems."

Head of Technical Delivery & Support.

Results

The Multinational Aerospace & Defense Company have now been using Bizagi for ten years and the platform continues to work in harmony with their ERP. The two combine to create a single source of information which helps them make accurate decisions and effectively manage data. The single system has identified that 50% of case types in the system were duplicated or never used, so these have been removed to improve system performance. Bizagi's secure authorization layer eliminates manual tasks within core business processes to reduce overall manual effort by 2.5x, with over 250,000 cases created per week, so employees can now focus on engineering and pricing validations.

"Implementing custom processes within Bizagi provided our business customer with a set of processes that allowed them to optimise their business operations."

Head of Technical Delivery & Support.

They have implemented processes across procurement, finance, manufacturing, maintenance, and supply. The spare parts order process has been automated to make it 720x faster, with 300 parts now automatically validated in five minutes, making it more efficient and cost effective.

Due to the nature of their industry, the company has strict regulations around their procurement process, so they had to create custom processes in Bizagi to support this. Users cannot authorize a purchase order (PO) in the ERP solution. A PO is created in the ERP, but then handed off to Bizagi and the PO management happens in the platform to ensure audit trails and proper authorization. At the point of approval, it's sent back to the ERP so there is a complete PO record entity. Bizagi is the single point for purchase order approval.

"The Bizagi element is critical because we simply do not have an ERP solution without Bizagi."

Head of Technical Delivery & Support.

The company also have to be extra vigilant with their data management, as some of the data that resides within Bizagi and their ERP is classified information belonging to NATO and the UK Ministry of Defence. They are currently migrating their Bizagi platform to the cloud to accelerate their innovation while still adhering to the strict security requirements laid out by their partners. Bizagi's private, secure cloud offering is ensuring they are compliant with their commercial contracts by monitoring access and proving an audit trail to show how the data is handled.