

Automation set for national service for the MOD

RPA solution passes early tests with flying colours as MOD seeks maximum value from defence spending

Keeping UK Armed Forces equipped and ready for action

Defence Equipment and Support (DE&S) plays a vital role in keeping the British Army, Royal Navy, and Royal Air Force (RAF) fully operational. Attached to the Ministry of Defence (MOD), DE&S manages the complex arrangements required to buy and support the equipment and services the UK Armed Forces need to operate effectively around the world. This includes everything from ships and aircraft to food, clothing, medical supplies, and accommodation.

Historically, the scope and scale of inventory management has required significant resources, with large teams inputting data and carrying out multiple repetitive and time-consuming administrative tasks. Each has the potential for delays and human error and requires significant investment and maintenance of infrastructure, office space, supplies, and human resources. At times of high demand or limited resources, bottlenecks could develop quickly, often triggering duplicate requests and further delaying the processing of inventory items.

As part of its responsibilities and priorities, DE&S was keen to embrace new technology as part of a transformation of its organisation to enable it to better support the armed forces as cost-effectively as possible.

UK Centre of Excellence sets the standard

In October 2018, Capgemini was commissioned by DE&S to help support its transformation objectives and, in particular, to investigate how automation could contribute to the development of faster, more efficient, and cost-effective end-to-end systems and processes.

Overview

Client: Defence Equipment and Support (DE&S), within the MOD

Sector: Government & Public Sector

Region: UK

Client Challenge:

With UK defence spending under constant scrutiny, the MOD's DE&S organisation is constantly looking for new and innovative ways to improve efficiencies, cut costs, and maximise the value of its assets

Solution:

Developed in a strategic partnership with the Cabinet Office, Capgemini's Robotic Process Automation (RPA) skills and experience, coupled with DE&S's business change team and project delivery is replacing labour-intensive manual tasks with robots working within defined business rules

Benefits:

- 500 hours of human processing saved within 30 days
- Improved ability to define precise operational metrics
- Project annual savings of more than £500,000
- Identify diverse additional processes that can benefit from RPA



Defence Equipment & Support's RPA has the potential to transform a huge variety of processes and deliver substantial savings and efficiencies. Early indications are already very exciting, and our task now is to capitalise on these opportunities and develop strong business cases for the use of automation, where appropriate, elsewhere in our organisation and within the MOD as a whole."

David Redshaw

Chief Technology Officer, Defence Equipment and Support, Ministry of Defence

Capgemini deployed a team combining business analysts, solution architects, and developers, and in July 2019 its efforts began to bear fruit. Logistics robots were used for the first time in an element of the RAF's inventory, referred to as Air Commodities dispositions.

LAURA makes immediate impact

The first solution, christened LAURA – Logistics Assistance Using Robot Automation – immediately delivered an impressive range of financial, operational, and reputational benefits. Using an agreed upon, pre-set range of business rules and parameters, the robots now perform a range of simple, administrative tasks.

By operating within those rules and parameters, the solution is able to distinguish between those tasks that can be performed by robots and those that require human intervention. LAURA then provides that information to human operators, enabling them to make specific decisions or trigger other actions, further speeding up the process.

Within just three days, the RPA solution, operating at just 50% of potential capacity, saved 28 hours of human processing time. After 30 days, it enabled the MOD to redirect nearly 500 hours of human processing time to more value-added tasks.

LAURA has expanded the MOD's ability to define precise operational metrics, including the volume and type of items being processed, sped up the completion of each task, and helped to determine which tasks require human intervention as well as the result of that intervention. This granular detail provides invaluable business intelligence with which to make informed planning, resourcing, and budgeting decisions – and to enhance the robot's overall performance.

Strong business case for automation

The wider, longer-term benefits of automating key elements of inventory management are still being calculated, but there can be little doubt that faster, more streamlined, accurate, and efficient inventory processing and management has the potential to recover many millions of pounds to be redistributed into defence spending priority areas.

"We are going to be doing some more detailed analysis of this data in the coming weeks when we have processed more requests," said David Redshaw, Chief Technology Officer at DE&S, "which will give us a much bigger dataset that we can derive more in-depth trends from."

"Not only does this give us the ability to automate even more processes, it also helps to refine our thinking around future RPA business cases across DE&S and the wider MOD. For me, this is almost as big a benefit as automating the process itself."

"This is an exciting time - we have a rich pool of candidate processes that we are working through now, both in the wider inventory space and in some enterprise DE&S processes that could benefit from automation."

Impressive early results

A limited application of the DE&S and Capgemini's RPA solution – for just three days – enabled DE&S to:

- Save 28 hours of human processing time
- Confirm projected annual savings of more than £500,000
- Acquire fresh business intelligence to inform decision making
- Identify diverse additional processes that can benefit from RPA

About Capgemini

Capgemini is a global leader in consulting, digital transformation, technology and engineering services. The Group is at the forefront of innovation to address the entire breadth of clients' opportunities in the evolving world of cloud, digital and platforms. Building on its strong 50-year+ heritage and deep industry-specific expertise, Capgemini enables organizations to realize their business ambitions through an array of services from strategy to operations. Capgemini is driven by the conviction that the business value of technology comes from and through people. Today, it is a multicultural company of 270,000 team members in almost 50 countries. With Altran, the Group reported 2019 combined revenues of €17billion.

www.capgemini.com