

Croda applies intelligent automation to upgrade SAP in the cloud

CUSTOMER

Croda International plc

LOCATION

Cowick, East Yorkshire, UK

INDUSTRY

Manufacturing



This leading specialty chemicals manufacturer needed faster access to data across its global organization and modernized systems that could take full advantage of cloud.



Challenge

- Reduce IT infrastructure costs and streamline databases to lower costs while improving performance
- Achieve agility and scalability to meet changing demands
- Introduce automation that will boost SAP systems to support the business more effectively



Solution

- DXC's cloud and application services incorporating DXC Platform as a Service for SAP on Microsoft Azure
- SAP intelligent automation through smartShift for rapid migration and deployment
- Advanced SAP HANA code compliance and performance optimization solutions



Results

- Moved to an agile public cloud, enabling the business to introduce new services quickly and compete more effectively
- Modernized systems to improve operations, sales and business performance
- Accelerated application response times nearly 40% to reduce costs and enhance the user experience



Competing effectively in a global market

For Croda International plc, a major global manufacturer in the specialty chemicals market, efficiently managing large amounts of enterprise data is essential. To compete effectively, the company wanted to modernize its data systems and tap into the agility of cloud.

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— **Neil Stamp,**
Cloud Services Manager,
Croda International

Choosing the best-fit public cloud environment

Based in the United Kingdom, Croda competes in the marketplace with a host of players to supply a variety of ingredients for personal care products, agrochemicals, pharmaceuticals and many other industries. Global manufacturing is a data-centric industry, and at Croda, data management challenges include managing a global supply chain and having detailed compliance information in place to meet country-specific product safety regulations.

Croda’s digital transformation journey to modernize and improve its IT systems has been supported by DXC Technology for many years. DXC supports the company’s SAP financial, manufacturing and executive reporting functions, and played an integral role in Croda’s migration to the Microsoft Azure cloud and global SAP modernization initiatives.

Croda’s plan was to take full advantage of the on-demand capabilities of the public cloud and increase IT agility in responding to the business.

“As SAP is a core application for our business, we developed a strategy for moving to the public cloud in anticipation of a major upgrade to SAP S/4HANA,” says Neil Stamp, cloud services manager, Croda International. “This modernization plan will support operations, sales and the global executive dashboards of business performance.”

To run these mission-critical SAP applications, DXC recommended deploying DXC Platform as a Service for SAP on Microsoft Azure as the first step in a low-risk, phased approach to upgrade to SAP HANA and S/4.

12 weeks

time needed to complete a low-risk, low-impact cloud migration without disruption

40%

reduction in application response times to improve the user experience

By hosting SAP as a platform as a service on Azure, DXC provides a full-stack, managed platform with improved performance, on-demand capacity and guaranteed high-availability SLAs for both business applications and infrastructure. In addition, non-SAP applications were migrated to Azure. DXC now manages the Azure subscriptions as an Azure Cloud Service Provider.

To accelerate the migration and ensure that the Azure environment was agile, trusted and cost-effective, DXC's Azure professionals architected the landing zone in an existing Azure tenant cloud operated by Croda International, ensuring future flexibility and easier API integration with third-party applications through Palo Alto Networks' firewalls. DXC accelerated the project by taking advantage of existing Azure ExpressRoute connections and bringing in a multidisciplinary team of Azure experts across multiple regions.

According to Stamp, the Azure reference architecture approach minimized project, operational and performance risks. The migration also enabled Croda to invest in an environment with high-availability clustering in Availability Zones for SAP Enterprise Central Component (ECC) and other services to improve infrastructure and application SLAs. Supporting the main Azure hosting in Microsoft's Europe-North data center, DXC created a Disaster Recovery setup, including database replication, in Europe-West, giving Croda improved SLAs for Recovery Time Objective (RTO) and Recovery Point Objective (RPO). In addition, Windows OS upgrades and some database changes were made during the re-platforming.

Once the high- and lower-level designs were approved, DXC migrated 106 workloads to Azure in just 12 weeks without business disruption. This included the full support stack of sandbox, development, quality assurance, pre-production and production environments, and covered the SAP modules of ERP Central Component (ECC), Business Information Warehouse; Environment, Health and Safety; Governance, Risk Management and Compliance; Solution Manager and others.

Saving costs with custom coding

With the migration to Azure complete, the next phase of digital modernization was Croda's move to SAP Business Suite on HANA 2.0 database and the implementation of SAP Information Lifecycle Management. One of Croda's main requirements for implementation of HANA 2.0 was to achieve the transformation with minimum business disruption.

SAP modernizations can be made easier by using an intelligent automation approach, which can save costs and lower risk by automating key processes such as checking and remediating custom code. Another way costs can be saved is to reduce the need for labor-intensive user testing, which can often be performed via automation.

As a global leader in IT services and systems integration, DXC tapped into its extensive partner ecosystem to choose the right technology to fit Croda's specific needs.



70% reduction in database size to lower overall IT costs and improve performance



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Croda International

In this case, DXC proposed working in conjunction with DXC partner smartShift, a leader in SAP intelligent automation.

Working with DXC, smartShift optimized Croda’s custom SAP code for HANA performance and supported upgrades from Oracle to HANA 2.0 databases for SAP ECC 6.0 SAP Business Warehouse 7.52.

“The project team used proven automation and tools to advise, identify and remediate any SAP code items that needed remediation for the HANA upgrade,” Stamp says. “This experience was especially critical in areas such making sure the SAP custom code was in compliance with HANA 2.0.”

In addition, Croda wanted to ensure that the increased costs of maintaining HANA-compliant servers in Azure were minimized by reducing HANA database sizes. This meant that Croda had to implement data archiving on SAP for the first time. Croda selected SAP Information Lifecycle Management as the solution, and DXC’s SAP organization was engaged to store the archived data in a low-cost SAP IQ database.

Faster, lower-cost application environment

DXC, one of SAP’s largest partners with more than 10,000 SAP professionals supporting 5 million users, leveraged its expertise to create an SAP system landscape, with sandbox and development assessments. DXC then continued with unit and acceptance testing through the quality assurance and pre-production phases.

“Once the first round of smartShift remediation was successfully demonstrated and DXC successfully completed the required unit tests, our team had great confidence in the effectiveness of the smartShift changes,” Stamp adds. “This meant we were able to significantly minimize our user acceptance testing efforts.”

The SAP upgrades are producing numerous positive business outcomes for Croda. The goal of saving costs by having smaller databases was met as the combination of data archiving and data compression in HANA 2.0 resulted in an SAP ECC database size reduction of over 70 percent.

In addition, the upgrade resulted in improved database performance and a better user experience, with average response time reduced nearly 40 percent.

A key to the success of the project was automating as much of the coding efforts as possible.

“Automating the transformation of custom code clearly replaced costly manual efforts by both DXC and Croda,” Stamp says. “This enabled us to meet an aggressive timeline of just 5 months for all cycles of remediation and testing from sandbox to go-live in production.”

DXC maintains support of Croda’s enterprise modernization as the company looks to continue enhancing its SAP capabilities.

“We’ve been able to create a more agile, cost-effective IT program that supports higher levels of business performance,” Stamp says. “We are fortunate to have the experienced team from DXC help us on our transformation journey. Their experience with SAP and ability to integrate are extremely valuable, and we look forward to working with them on the next phase of modernization.”

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