Cognizant®

Case Study: Manufacturing

Orica modernizes IT with new SAP® S/4 HANA Digital Core

Orica turned to Cognizant to undertake a comprehensive modernization of their IT infrastructure. The new system now helps Orica achieve higher levels of efficiency, agility and business impact, and optimizes their capital investments and operating costs.

Founded in 1874, Orica is the world's largest provider of commercial explosives and innovative blasting systems for the mining, quarrying, oil and gas and construction markets. Every day, its staff helps mobilize resources that are essential to progress in 57+ countries.

The challenge

Orica realized that to better serve its customers and employees, they needed to implement automated, integrated IT systems that could process sales orders, contracts and financial models to supply goods, and improve Material Requirements Planning (MRP) forecasting. The process would require the company to migrate its users from legacy SAP and non-SAP Enterprise Resource Planning (ERP) systems, to a new, single and global SAP S/4 HANA system deployed on Microsoft's Azure public cloud. Users included subject matter experts, business executives and owners, and supply chain employees among others.

At a glance

Four years ago, Orica realized they wanted to create simple, standard and modern IT systems that could be used anywhere, any time and on any device by their users around the world. Their current approach was discrete and complex, required manual processing of items, and overall was untailored to meet evolving demands of the mining industry. This meant they were unable to align their offerings with the needs of their customers in a fast-changing market.

Implementing a single SAP S/4 HANA system offered an automated, integrated approach of their innovative products and sales on a global scale. As a result, Orica:

▍ Saved $2M+ over three years by periodically analyzing cloud capacity utilization

ORICA

April 2021

The need for a scalable, integrated enterprise solution was evident, as Orica teams in multiple countries had to rely on disparate processes across the major mining markets.

A key goal of the project was to make it simple for users to access the system at any time and from any device over the internet, so they could order stock, register the use of stock or explosives, and perform other necessary tasks. However, implementing change of this size required strong leadership support.

"We knew that without the support of our executive management, an endeavor of this scale would be very difficult. Fortunately, we were all aligned on the importance of this transformation," says Sascha Wenninger, Technology Lead for the 4S program at Orica.

Orica's directors and executives were committed to solving the challenges they faced every day. For this reason, they decided to reevaluate their IT Systems including infrastructure and hosting programs by addressing a number of obstacles such as:

▌ Low visibility into company performance due to a lack of standardized business processes

▌ Poor data cleanliness and business intelligence

▌ A lack of consistency across the organization for product identifiers, actual costs, sales pricing and discounts

▌ Frustration caused by irregularities with customer and contact data

High complexity and maintenance were also challenges, calling for the current systems to be standardized, automated, integrated and simplified to improve business agility. Users also needed easy access via the internet to maximize productivity, limit complications and comply with General Data Protection Regulation (GDPR).

Wenninger adds, "The transformation wasn't just an IT initiative to upgrade the system and change the infrastructure, but an overall change in how the organization operated."

▌ Automated 80% of system infrastructure

▌ Increased system availability to 99.8% with four hours recovery time and near zero data loss in case of a disaster

▌ Architected the world's first SAP High Availability (HA) solution on Microsoft Azure

The approach

Believing in our technology leadership and delivery capabilities, Orica engaged Cognizant to design, implement and manage a global ERP system based on SAP S/4 HANA. The new system would support operations for customers in 100+ countries and standardize processes for industry operations, create transparency for decision-making and increase business agility.

"Cognizant leveraged its deep cloud technology and platforms capabilities to architect, design and build SAP systems on HANA, deployed on Microsoft Azure. The team built business critical SAP systems to kick-start the program right on schedule and implemented automation processes in operations to keep infrastructure costs under control throughout the engagement," says Gabriela Azzali, 4S Program Director, Orica.

Creating a SAP-first solution

The Orica project, codenamed "4S", was a nod to the solution's design, which would be simple, standard, single and SAP-first. It would generate data-driven, real-time decisions and actions that the company and its customers could put to work. To increase overall utilization and efficiency, the SAP technical operations were simplified, requiring limited customization for workflow and matrices approvals, information lookups, self-service tasks and fewer workarounds.

"The transformation wasn't just an IT initiative to upgrade the system and change the infrastructure, but an overall change in how the organization operated."

— **Sascha Wenninger, Technology Lead, Orica**

Operating continuously without failing

To vet the design of the system, Cognizant collaborated with Microsoft and SUSE to architect the world's first High Availability (HA) solution on Azure with a multi-node iSCSI interface. This gave Orica the ability to automatically switch to a reliable second node without any business disruptions. Additionally, Business Continuity was ensured with automated Disaster Recovery, which allows less than 4 hours of switch over to a new site and less than 1 minute of data loss in the process of switch over via multiple POCs and by choosing the best-suited product and solution.

Cost effective preservation of legacy SAP Systems

With the SAP S/4 HANA Transformation, Orica's On-Premise Legacy SAP systems migration to cloud was executed by keeping in mind its touchpoints with S/4 HANA system Go-live. This migration has enabled Orica to enjoy the cloud benefits for their read-only and on-demand nature of operations.

A true consumption-based pricing model

The new system operations based on managed Platform as a Service (mPaaS), now enables Orica to choose from a pay-per-use pricing model categorized by three unit-based tiers: Platinum, Gold and Silver for their Cloud Infrastructure and SAP Administration Services. Orica can increase or decrease their workload on a monthly basis. The model not only helps Orica, but also creates transparency, business agility and cost savings for the company.

Simple, easy-to-use access across platforms

When the program went live, end-users gained access to a modern intelligent enterprise application that provides a responsive user interface with 1400+ Fiori applications for business transactions in the SAP S/HANA system. They now have simple, easy-to-use access across desktops, tablets and smartphones over the internet.

mPaaS Automations

Cognizant has implemented its mPaaS automation use cases such as Disaster Recovery Failover, Scheduled Start/Stop, SAP application and Infrastructure monitoring automation, OS Maintenance Automations, Azure Security Firewalls deployment and maintenance automations. These automations resulted in error-free, reliable and cost effective implementations and operations.

Business outcomes

Over the 36-month implementation, Cognizant provided a smooth, high-quality execution of the new SAP S/4 HANA solution to boost efficiency, agility and business impact, while optimizing operating costs and capital investments. Following the implementation, Orica gained a number of benefits across the business.

The upgraded architecture for SAP S/HANA enables Orica to quickly adapt to business changes in computed demand. This high degree of process automation has increased Orica's operational efficiency, repeatability and scalability.

Users can now access the new system from anywhere, any time and on any device—all possible through the 1400+ Fiori applications that are securely exposed to the internet using Azure Application Proxy and Multi-Factor Authentication.

The new disaster recovery SLA for the recovery time objective (RTO) is now four hours, with near-zero data loss thanks to the Azure platform features that safeguard backups against physical infrastructure failure and manual mistakes, such as accidental overwrites or deletions.

Increased cost optimization let Orica terminate colocation agreements with data centers that offered little value and were expensive to use on a monthly basis. Because of new recommendations to use reserved instances and automatically shut down unproductive systems on the weekends, Orica is saving on operating costs.

A reshaped internal supply chain can now better procure and produce supply by determining

and comparing the cost effectiveness of manufactured products in different countries, while increasing the efficiencies of different manufacturing plants. As a result, Orica makes more effective decisions for internal operations and when forecasting supply and demand.

Orica continues to pioneer innovative technology for commercial explosives by actively finding solutions for the challenges they face every day.

About Orica

Orica is the world's largest provider of commercial explosives and innovative blasting systems to the mining, quarrying, oil and gas, and construction markets, a leading supplier of sodium cyanide for gold extraction, and a specialist provider of ground support services in mining and tunnelling. For more information, visit www.orica.com.

About Cognizant

Cognizant (Nasdaq-100: CTSH) is one of the world's leading professional services companies, transforming clients' business, operating and technology models for the digital era. Our unique industry-based, consultative approach helps clients envision, build and run more innovative and efficient businesses. Headquartered in the U.S., Cognizant is ranked 194 on the Fortune 500 and is consistently listed among the most admired companies in the world. Learn how Cognizant helps clients lead with digital at www.cognizant.com or follow us @Cognizant.

Cognizant

World Headquarters	European Headquarters	India Operations Headquarters	APAC Headquarters
300 Frank W. Burr Blvd. Suite 36, 6th Floor Teaneck, NJ 07666 USA Phone: +1 201 801 0233 Fax: +1 201 801 0243 Toll Free: +1 888 937 3277	1 Kingdom Street Paddington Central London W2 6BD England Phone: +44 (0) 20 7297 7600 Fax: +44 (0) 20 7121 0102	#5/535 Old Mahabalipuram Road Okkiyam Pettai, Thoraipakkam Chennai, 600 096 India Phone: +91 (0) 44 4209 6000 Fax: +91 (0) 44 4209 6060	1 Changi Business Park Crescent Plaza 8@CBP # 07-04/05/06 Tower A, Singapore 486025 Phone: + 65 6812 4051 Fax: + 65 6324 4051