



DXC Red Rock

Cloud solution supports start-up success

Customer name: Container Exchange Services

Location: Brisbane, Queensland

Industry: Technology

Challenge

- Innovative start-up required end-to-end cloud solution to manage operations
- Scalable solution needed for expansion to other states and countries
- New government legislation deadline causing a tight implementation timeline

Solution

- Purpose-built digital platform/cloud solution
- Oracle ERP, finance, and portal solutions based on advanced SaaS, IaaS, and PaaS
- Web portal, back-office functionality, online auction, POS, logistics management, reporting and auditing

Results

- Modern digital platform met comprehensive back-office and customer-facing requirements
- High availability, resilience, reliability, performance, security, timeliness, scalability and accuracy
- Mission-critical analytics with ease

Queenslanders use close to three billion beverage containers every year which are sadly the second most littered item in the state, despite being easily recycled. The Container Refund Scheme (CRS) is one of the first environmental legislation to focus on the polluter pays principle, where the beverage manufacturers are responsible for funding a refund for returned drink containers.

Container Exchange Services (CES) delivers critical business systems and services for world-class recycling schemes. This includes IT, payment services, marketing, sustainability, logistics, customer service, and materials trading (auction platform). Together with its clients, CES is focused on increasing recycling, reducing litter and landfill, and creating opportunities for community groups and social enterprises.

Its client, Container Exchange (COEX), is an industry-based, not-for-profit joint venture set up to develop, maintain and run the Queensland CRS, Containers for Change. Containers for Change is a rapidly growing brand launched in Queensland where people get 10c for each eligible drink container they return, which they can either keep or donate to a charity or community group.

Challenges

As a new and innovative start-up business, CES required an end-to-end cloud solution to manage operations. The solution had to be scalable to fit its strategic vision of expanding beyond Queensland into other states and internationally, while also meeting tight mobilisation deadlines imposed by the Queensland Government's introduction of the CRS.

James Elvin, IT Director for CES, said, "We were in a fortunate position where our company didn't have a legacy system, so we could jump straight to a cloud-first solution. However, having a single Container Deposit Platform that catered to the idiosyncrasies, while leveraging the commonalities was an ambitious task. We also had the added challenge of needing to go live with a network of ~330 refund points from day one!"

CES required broad solution functionality to manage back-office operations and customer-facing scheme service providers. The solution needed to allow a container deposit to be collected from the beverage manufacturer, for containers to be received at a container refund point (CRP), and for all involved parties to be paid quickly with a clear chain of custody to improve the integrity of the lifecycle. The chain of custody covers the lifecycle as each container moves from retailer to consumer, to refund point, logistics provider, processor, recycler, auction and back again.



Essential functionality included:

- A comprehensive website providing information for a variety of different groups and the capacity for online participant registration;
- Management of payment collection points and payments;
- Chain of custody of the containers throughout the supply chain;
- A way to manage on-selling of collected containers; and
- Comprehensive reporting for stakeholders (including Queensland Government, manufacturers, service providers, collection point operators, and the public) and scheme auditing.

Solution

As part of DXC Technology, DXC Red Rock was selected by CES through a rigorous procurement process to design, build and implement a modern digital platform to handle core business processes within a cloud-based finance and ERP solution based on world leading Oracle Software as a Service (SaaS), Platform as a Service (PaaS), and Infrastructure as a Service (IaaS) technology.

Elvin said, “We chose DXC because they are passionate, they had some very capable people, and they had expertise across a full service stack of Oracle products we were looking to use.”

The full cloud solution encompasses all the necessary business processes from verifying and receiving returns, consolidating and moving the containers, payments to and from business and consumer participants, auctioning materials, chain of custody, data management and financial accounting/planning for CES and the scheme coordinators.

It fuses world-leading Oracle Cloud ERP, customer relationship management (CRM) and analytics, multiple B2B and B2C portals, identity and access management, reporting platform, point of return (POR) solution, bespoke payment engines for 330 CRPs, and a custom auction website built using PaaS. The Oracle cloud solution offered a high quality, resilient and performant solution that also ensured potential to easily scale to meet the strategic expansion vision of COEX while providing the ability to make better decisions, manage costs and increase performance. The modular architecture meant it was simpler to integrate and maintain the class-leading components.

Why DXC

Elvin said, “With no comparable platform created, this was uncharted territory and made the articulation of requirements and designs difficult. DXC Red Rock provided dynamic technology leadership and a wide range of expertise across the entire Oracle stack to deliver the solution successfully.”

Collaborating closely with CES to understand this unique industry-specific solution’s requirements, DXC managed the whole implementation from roadmaps and scoping to implementation and change management. DXC Eclipse Enterprise Platforms team was also engaged to implement the POR solution to manage all the return transactions. The biggest challenge was the requirement to complete a return transaction in under three seconds, while dealing with a wide range of network access or lack of access in hundreds of sites across Northern Queensland.

Results

DXC Red Rock delivered the most modern, digital, cloud-based solution leveraging Oracle world-leading SaaS, PaaS and IaaS technology to meet the unique, business-critical requirements for all Queensland CRS stakeholders. CES can now manage the entire CRS, with all functional back-office and customer-facing requirements met.

Elvin commented, “CES invested heavily to create a cloud first platform that meets our needs. DXC continually leveraged their exemplary product knowledge, strong delivery network, and support teams to deliver a robust, innovative, and high-quality solution.”

According to Richard James, practice director, DXC Red Rock, “The CES project is the largest consumption licence deal of its time in Australia and New Zealand. This innovative solution combined the main pillars of SaaS, PaaS and IaaS to deliver the recycling scheme-specific IP through integrated portals, POR system and auction site.”

The purpose-built cloud solution offers high availability, resilience, reliability, performance, security, timeliness, scalability and accuracy. It also makes it easy to perform mission-critical analytics, including forecasting and budgeting, based on historical trends to facilitate manufacturer invoicing.

DXC Red Rock’s robust delivery plan supported the Queensland Government’s tough deadlines to start the scheme. Elvin commented, “The DXC team was dedicated and passionate about the solution and went over and above in delivering on time for scheme commencement.”

Benefits

Recycling schemes are extremely advantageous to the community and the environment. The solution's benefits are wide-ranging and have positively impacted the community through social enterprises, donations to charities and community groups, and exceeding the strategic targets on recycling and awareness.

Since the Containers for Change scheme was launched, almost 2.5 billion containers have been recycled, and more than 330 designated CRPs rolled out in Queensland. That amounts to \$250 million back into the pockets of the public, community groups and charities.

In addition, some 3600 community groups and charities are part of the scheme, and more than 700 new jobs have been created. Once the lowest in the country, Queensland's plastics and aluminium recycling rate has increased from 35 per cent in 2015, to 55 per cent in 2020.

The Future

The partnership between the two organisations is stronger than ever with DXC Red Rock transitioning to mature service provision of ongoing system support and management.

Elvin concluded, "With the success of the project, Queensland will have one of the most ambitious recycling rates, anticipated to be 85% recycled within the first three years of operation. DXC has built a solid digital foundation addressing all the functional requirements and built-in scalability that fits with CES' vision to expand beyond Queensland into additional states of Australia and internationally."

About DXC Technology

DXC Technology (NYSE: DXC) helps global companies run their mission critical systems and operations while modernizing IT, optimizing data architectures, and ensuring security and scalability across public, private and hybrid clouds. With decades of driving innovation, the world's largest companies trust DXC to provide services across the Enterprise Technology Stack to deliver new levels of performance, competitiveness and customer experiences. Learn more about the DXC story and our focus on people, customers and operational execution at www.dxc.technology.