

Cloud modernisation future proofs Guam Waterworks Authority

CUSTOMER
Guam Waterworks Authority

LOCATION
Guam

INDUSTRY
Public Sector



Challenge

- Need to modernise the 21-year-old Oracle JD Edwards solution and migrate to the Cloud
- Siloed solutions and manual workarounds required consolidation into a single ERP platform
- Productivity, data accuracy and other field maintenance issues

Solution

- Oracle JD Edwards EnterpriseOne solution on Oracle Cloud Infrastructure (OCI)
- DXC Red Asset for Oracle® — a ready-to-deploy Cloud solution specifically designed for GWA's industry
- DXC industry and ERP expertise with managed services for cloud migration and post-go-live support

Results

- GWA's 21-year-old on-premise ERP system modernised and migrated to the Cloud
- DXC enabled innovation for GWA through digital transformation
- Significant productivity, efficiency, data accuracy, and employee/customer experience benefits



Cloud modernisation future proofs Guam Waterworks Authority

Guam Waterworks Authority (GWA) is a public corporation delivering water and wastewater services in a safe, reliable, responsible and cost-effective manner to the island's population.

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Assistant general manager
of Administration and Support
for GWA

GWA provides potable water service to 43,000 customers comprising most of the island's civilian population of approximately 164,900 residents.

GWA also provides wastewater service to approximately 30,000 wastewater customers including civilian accounts island-wide and Andersen Air Force Base (AAFB) and other military installations in northern Guam.

With a large transient component (tourists) and a growing American defence presence placing additional pressure on the water and wastewater systems, the island needs infrastructure that can reliably accommodate growth and system renewals. GWA has undertaken considerable work in recent years to improve management and operations. Focus areas include decreasing operational expenditures,

reducing water leak repair times, implementing a meter replacement program, and launching a computerised maintenance management system (CMMS). GWA also has an aggressive capital improvement program, with significant investment being made in both water and wastewater system assets to enhance reliability, efficiency and regulatory compliance.

DXC Technology Australia and New Zealand collaborated with GWA to implement DXC Red Rock Asset for Oracle®. Red Asset is a preconfigured Oracle cloud solution designed for asset-intensive industries, to improve productivity, streamline operations, and ensure timely decision-making support.



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Business challenge

GWA used Oracle JD Edwards World as its core enterprise resource planning (ERP) platform for 20+ years and required a transformational upgrade to automate and integrate business systems and processes while facilitating operational excellence. The existing on-premise solution posed substantial challenges and was nearing end of life, with vendor support due to cease. Over time, upgrades were implemented, but significant configuration issues meant individuals implemented their own manual 'work arounds.'

Chris Budasi, assistant general manager of Administration and Support for GWA explained, "Instead of a single source of truth, we had multiple silos. By the time we were ready for this project, many work processes were performed outside the core system. It was extraordinarily inefficient and error-prone, with timely access to data almost impossible."

Budasi also knew that Oracle JD Edwards EnterpriseOne offered new capabilities and features that could significantly improve operations. For example, recruitment and other human resources (HR) processes took longer than necessary because of siloed information. Also, with no dedicated asset management solution and a CMMS not linked to financials, there was limited visibility of asset installation and maintenance costs. Running an

intensely capital heavy organisation with hundreds of millions of dollars' worth of equipment and infrastructure using spreadsheets was not sustainable.

Water loss poses a significant challenge for GWA, with an audit several years ago estimating up to 40% of water produced annually as real losses (leakage), the largest component of their 52% unaccounted water loss (not contributing to GWA's revenue). As part of the ERP modernisation project, a digitised asset management system would offer greater data capture, visibility and reporting over maintenance and repair activities, including water leak repairs; with a field mobility solution offering proactive oversight in reducing water loss.

As part of the 2018 Water Resources Master Plan, GWA committed to aggressive capital improvements over the next 20 years, with US\$1.2 billion budgeted expenditure, so the solution also needed to offer end-to-end management of projects from a cost, procurement and supply chain perspective.

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The selection process

GWA evaluated several systems and determined Oracle JD Edwards EnterpriseOne as a state of the art ERP providing the necessary tools to transform the organisation into a paperless digital business.

After numerous meetings and discovery sessions with several service providers, GWA selected DXC as implementation partner. DXC conducted a series of on-island workshops showcasing how GWA could modernise, automate, and integrate its business systems and processes across finance, HR, supply chain and asset management.

Red Asset was chosen to provide a prebuilt and tested ready-to-deploy cloud solution. As part of DXC's industry solutions, Red Asset is designed and preconfigured for GWA's industry, with implementations typically taking half the time of traditional ERP system implementations. It is optimised to provide all the functionality and capabilities needed, with best-practice compliance and governance in mind. This accelerated path to value appealed to GWA, with the in-house ERP and engineering and construction-specific solution offered by DXC considered invaluable.

The DXC team collaborated with GWA's leadership team to shape a business case for a Red Asset implementation to deliver speed to value and future proof the organisation. Budasi commented, "We wanted to ensure we addressed all of today's needs while also considering future needs."

Budasi was nominated as executive sponsor by Miguel Bordallo, GWA's general manager, and tasked with working closely with Taling Taitano, chief financial officer, to keep all divisions of the organisation on-track with implementation activities since the project touched all business areas. Budasi explained, "DXC did their homework and provided as much information as we needed on the best options to make informed and cost-effective decisions. When we compared our interactions with DXC to others, we were more comfortable that it would be a good partnership — and that DXC would deliver what was promised."

43,000

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Solution and implementation

The initiative had GWA executive endorsement and went through an extensive approval process for sign off by the Authority's governance, the Consolidated Commission on Utilities (CCU) and the regulatory oversight body, the Public Utilities Commission (PUC) – a requirement for projects of this size and scope.

With asset management a driver of GWA's success, the expertise DXC offered in this area was critical. Budasi explained, "Having the DXC expert take the lead while sharing his extensive knowledge and experience was crucial for success, and made for a very smooth transition."

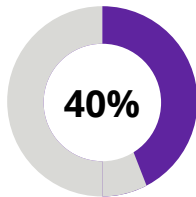
GWA also integrated its existing Oracle Customer Care and Billing (CC&B) CRM solution offering seamless interaction between customer service, field activity/mobility and finance. Some challenges with this integration were encountered, but DXC worked hand in hand with GWA and its CC&B partner, Prithibi Consulting Services, to resolve and achieve the short implementation time frame.

While the on-premise version of Oracle JD Edwards was initially considered, the more the cloud was discussed, the more it made sense. The on-premise infrastructure required for JD Edwards EnterpriseOne is considerably different to Oracle JD Edwards World. GWA worked with the DXC infrastructure team to agree on the optimum infrastructure approach for the solution and, based on performance, flexibility, scalability, security and cost, GWA selected Oracle Cloud Infrastructure and engaged DXC as the managed services partner. "A complete Oracle cloud solution just made more sense," Budasi concluded.

Despite the pandemic hitting just as implementation began, execution was relatively seamless. Run remotely using Microsoft Teams as the primary communication method, implementation was entirely virtual.



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Results and benefits

GWA now has a modern ERP solution with automated and integrated business processes. The entire GWA workforce, almost 400 employees, will use the solution across finance, warehousing/supply chain, field operations, HR, asset management, and procurement.

For Budasi, his expectations are for substantially increased efficiency and accuracy across all areas of the business, with specific examples including:

Finance — potentially thousands of hours were previously spent trying to manage fixed assets via spreadsheets. Now that asset management is integrated with finance, that effort is eliminated. The ERP system performs all the calculations and disposal estimates, with automatic report compilation for insight.

Field operations and enterprise mobility — up to 200 field and meter service team members will benefit from improved crew efficiency. Previously, hundreds of field orders were printed and circulated manually by supervisors visiting the field. Field teams will also no longer need to complete paperwork at the end of each day since jobs are allocated digitally, and work completion recorded automatically. GWA customers will benefit from faster work order distribution and maintenance response times.

Asset management — the modern solution will improve visibility and help GWA save millions of dollars by having precise visibility into the condition of thousands of assets to determine necessary preventative and corrective maintenance.

Procurement — previously, when a purchase order was processed, a hard copy was printed and routed to four different places for approval signatures. One purchase order approval might take one week. Once it's digitised, it is expected to take less than an hour.

HR — estimating that recruitment, performance appraisal, and other processes took longer than necessary because of manual paper driven processes, it should now move much faster since it's automated.

Customer satisfaction — an integral part of digital transformation for GWA, reaction times will reduce since urgent work orders and service requests flagged as critical are automatically assigned and immediately dispatched to field teams.

Employee satisfaction — all employees will access the self-service module, providing managers with tools to efficiently perform routine employee administration and information to help employees improve performance and enhance their skills. It will help improve business efficiency and employee satisfaction. Budasi also sees digitisation of business processes as a critical component in recruiting and retaining employees, driving increased satisfaction and engagement with their job.

A value-add not envisioned was with the implementation of Oracle Content and Experience Cloud. This cloud-based content hub enabled development of a company intranet, providing powerful collaboration and workflow management capabilities to improve customer and employee engagement. The launch of this solution coincided with JD Edwards EnterpriseOne and provides training materials to help support employee transition.

Budasi commented, “The expertise provided on our project far exceeded my expectations with the professionalism shown during the sales process carried through to every member of DXC’s implementation team. It was a true partnership from start to finish with tremendous commitment and dedication from both sides. Any project has problems, but together we just figured it out.”

GWA now has the transformational foundation for success with end-to-end modernisation of ERP replacing a previously constrained solution.

Budasi said, “GWA’s employees are excited about this project. It’s a game-changer with a lot of pride attached — a high profile project locally, which we expect will establish GWA as a leader in modernising how large public organisations work on Guam.”

DXC took the time upfront to ensure a truly modern digital system across all business areas, considering the next 15 years and designing it with that in mind, so ongoing enhancement and future change is part of the plan. Budasi concluded, “I would recommend DXC to anyone looking to modernise their ERP. We squeezed every dollar of value we could out of this project and then a little more. That was possible due to DXC’s expertise and the time taken in planning and design. We achieved a solution that will work for us now and into the future — all within our limited budget.”



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Looking to the future

With up to 160 separate projects required as part of the US\$1.2 billion capital program, Phase 2 of this project will implement Oracle Procurement Cloud to manage large projects more efficiently. From start to finish, bids to contract management and correspondence — everything will be digitised. A far cry from today, where everything is manual. Budasi estimated it could previously take a day or more for an individual to assemble a file

for a large project. Involving searches through manual archives, hundreds or thousands of emails, and essential files stored on different networks, once the procurement component is implemented and integrated with the Oracle Content and Experience Cloud, a file could be assembled at the touch of a button.

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