

## SAP Customer Success Story

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Tony Craner, IS Superintendent, Queensland Alumina Limited



QUEENSLAND ALUMINA  
LIMITED

### AT A GLANCE

#### Company Name

Queensland Alumina Limited (QAL), Australia  
www.qal.com.au

#### Industry

Mineral refining

#### Key Challenges

- Reduce costs by improving operating efficiency
- Enhance health and safety programs
- Provide simplified, relevant information to employees
- Provide managers with an improved perspective on business performance and processes

#### Implementation Partners

- Accenture
- SAP® Consulting

#### Solutions and Services

- SAP NetWeaver™ platform, including the SAP Enterprise Portal and SAP Business Intelligence (SAP BI) components
- SAP R/3® software for financials, HR, maintenance, supply, project management, production planning, environmental health and safety, and document management (functionality now available in the mySAP™ ERP solution)
- InfoPak

#### Existing Environment

- Prior to March 2003, mainframe with customized programs
- Multiple databases

#### Implementation Highlights

- Deployment of SAP Enterprise Portal and SAP BI was part of large-scale conversion to SAP solutions
- Training supplied to 900+ users
- Six-month overall implementation period, with go-live in March 2003

#### Key Benefits

- Improved quality and yield of information
- Employees gain a single point of access to relevant information
- Managers gain real-time view of financial performance

#### Hardware

- HP
- Compaq

#### Operating System

Microsoft Windows 2000



## QUEENSLAND ALUMINA LIMITED

### SAP NetWeaver™ HELPS AUSTRALIAN ALUMINA COMPANY REFINE THE FLOW OF INFORMATION

Queensland Alumina Limited (QAL), based on Australia’s Central Queensland coast, is the world’s largest single alumina refinery, producing 3.77 million tons of smelter-grade alumina per year. The production of alumina is the necessary intermediate stage between mining bauxite and producing aluminum. Owned by a consortium of three international aluminum producers, QAL has a workforce of approximately 1,030 employees, supported by an additional 300 contractors.

### GOALS INCLUDE SAFETY AND REDUCING COSTS

Extracting alumina from bauxite is a complicated, energy-intensive business. The ore is first ground into a powder, then placed in vessels and treated by high-pressure steam and caustic agents to dissolve the compound out of the ore. QAL focuses on producing a world-class, competitively priced product – at the same time ensuring employee safety and minimal environmental impact.

QAL does not sell its alumina on the open market; however, the company measures itself constantly by industry standards for quality, cost, and productivity. Reducing the cost of converting bauxite to alumina is a major objective; the company works constantly to enhance the efficiency of its processes in order to lower expenses for its owner-customers.

## **BUILDING A NEW IT PLATFORM**

As part of the drive to improve efficiency, QAL's senior management recently undertook a complete revamp of the company's legacy IT systems. The custom-built mainframe system, with applications over 20 years old, was difficult to maintain and had limited capacity for reporting. Accounts reports were distributed as hard copies at month's end; other reports were prepared by individual departments, keyed into spreadsheets, and collated into individual reports.

According to Tony Craner, IS superintendent for QAL, the system was heavily dependent on paper copies and it was far too hard to retrieve key documents. "A lot of important information was held only in people's heads or in their own personal systems," Craner notes. "There were many opportunities to lose knowledge."

## **THE NEED FOR BETTER INFORMATION**

The lack of clear, real-time information was a hindrance for almost everybody who worked at QAL. Maintenance supervisors, for example, had trouble determining the impact on costs of the decisions they made about replacing or servicing valves, pumps, and vessels. Since business accounts were only produced at month's end, it was hard to determine whether actual costs were in line with budgeted figures and whether a specific maintenance decision resulted in improved efficiency. In addition, departmental managers had difficulty extracting human resources information from the system because there was no user-friendly repository of data on, for example, skills, shifts, and availability.

## **MAKING THE MOVE TO SAP® SOLUTIONS**

To fix these and other problems, QAL launched an IT-enhancement project known as "Information Made Simple." Working closely with SAP® Consulting and Accenture, a member of the SAP NetWeaver™ partner program, QAL selected solutions from SAP to replace its disparate legacy systems. QAL's senior managers were impressed by SAP's technology leadership and by Accenture's track record in helping clients transform business

processes. Both companies demonstrated a solid understanding of the refinery industry, according to Craner. "We selected SAP because of the integration capabilities of their solutions," he says, "and because we felt that their applications would support the key areas that were important to us – like maintenance, operations, safety, and HR. We selected Accenture because of their experience in SAP implementations and their ability to fit in with our people and organization."

In March 2003 QAL wrapped up a six-month implementation period and went live with SAP R/3® – software that contains much of the functionality now offered in the mySAP™ ERP solution. QAL also deployed SAP Enterprise Portal and SAP Business Intelligence (SAP BI) – key components of the SAP NetWeaver platform, the underlying technology platform that supports SAP applications.

## **PUTTING THE SAP PORTAL TO WORK**

QAL now runs most of its business processes (including human resources, financials, production, procurement, maintenance, warehousing, and project management) on SAP software. But

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getting full value from these solutions depends on adapting the capabilities of the applications to the skills of the people who use them.

QAL has some people who are extremely computer literate and some who have hardly ever touched a PC. For at least 50% of the workforce, QAL decided it would have been counterproductive to offer training in the various transactions and hierarchies of core SAP applications. But by using the portal, the company can present only those transactions that people really need and they can make the screens as user-friendly as possible.

#### **MAKING INFORMATION SIMPLE**

Two examples of how the portal has boosted efficiency at QAL include streamlining the way employees apply for leave or fill out requisition forms. The “Create Leave Request” page, accessed within the employee self-service section of the portal, contains prepopulated information in many fields. With just a few mouse clicks, employees can view, enter, and manage their leave time – without having to fill out paper forms and pass them along to supervisors. Similarly, the screens for submitting requisitions – for protective clothing, safety gear, and so on – are also exceptionally easy to use, with user ID, employee name, cost center codes, and delivery information already filled out as the screen comes up.

#### **FUTURE GOALS FOR THE PORTAL**

The portal solution is still relatively new to QAL. Management is rolling out portal-based functionality gradually, with the aim of ultimately making it the sole point of entry for almost all end users. The company is still collecting quantifiable data on actual benefits, but the response from both managers and employees has been positive. As cumbersome, paper-based transactions give way to electronic alternatives, employee productivity has improved while managers are gaining a better view of the information and intelligence they need to manage processes more adroitly.

One key initiative for the future includes deploying the knowledge management capabilities of SAP Enterprise Portal, which would allow QAL to use its portal to transform a daunting mass of structured and unstructured information (including documents, e-mail, Web content, and slide presentations) into usable knowledge. In fact, QAL has just released knowledge management functionality at the site. The knowledge management capabilities of SAP NetWeaver allow users to find, share, and store documents from a trove of more than a million documents. Initial feedback has been positive and further benefits are expected as users become familiar with the available functionality.

#### **POWERING THE PORTAL WITH SAP BI**

QAL has opted to enhance the value of its portal with reports created in SAP BI, an SAP NetWeaver component that helps companies identify, integrate, and analyze data from many different sources. Prior to deploying the SAP solution, QAL had been having trouble gathering widely dispersed information and putting it into coherent reports. “We had good information,” says Craner, “but it was lodged in many different places – including databases, legacy applications, spreadsheets, and printouts. When we attempted to consolidate all this, we’d end up with different versions of the truth, so to speak.”

Today, as QAL moves toward a single version of “the truth,” the company is using SAP BI in a number of ways. Standard reports on costs, maintenance, and safety are now available to all users. Previously, because of the difficulty in creating reports, this information was available to only a restricted number of people. The availability of such reports helps to “open up” the culture and gives everyone the ability to contribute to improved performance.

## A CLOSER LOOK AT THE BENEFITS

In the health and safety area, SAP BI has helped managers develop new programs aimed at reducing injuries and raising awareness about safety precautions. Using data feeds from daily incident reports, safety managers can act on the integrated statistical and graphic information contained in SAP BI reports to develop new prevention programs. In the pre-SAP environment, this process would have required significantly more legwork, with managers compelled to comb through spreadsheets and databases in order to identify trends.

SAP BI is also helping senior management get a clearer, more up-to-date view of company performance. Prior to the deployment of the SAP solution, month-end financial reports were published five days after the monthly close; now, processing time has been reduced to less than two days. And production managers who want to know the accounting impact of a specific decision relating to operations or maintenance no longer have to wait until month's end to get an accounting perspective on their activities. "We're putting an end to using a rear-view mirror for accounting costs," says Craner. "Using SAP solutions, our managers can see – in real time – what their current costs are and how these figures compare with what's in their budgets."

## FUTURE PLANS: BETTER ASSET MANAGEMENT

One way QAL intends to leverage SAP software to reduce costs is using real-time key performance indicator (KPI) reports to give managers an improved gauge of operational efficiency. The company has made good progress here, arming process owners with more accessible, more insightful data. But the real benefit will come from integrating analytics and financial data with performance data on plant and equipment in order to achieve better asset management over time.

The QAL team is working with SAP, Accenture, and other providers to investigate methods that will identify optimal service intervals and predict the useful life of a pump or tank. A key enabler supporting these analytics is the unification feature of SAP Enterprise Portal, which allows companies to transparently navigate data from legacy systems, third-party systems, and SAP applications.

Asked to assess the value that SAP Enterprise Portal and SAP BI provide for QAL, Craner talks about these SAP NetWeaver components as a way of "bringing things together" for a small company in a rural area of Australia. "I believe we're just getting started with SAP NetWeaver," he says. "This technology will give us a better picture of our operations. Whether it's maintenance, costs, or people – we're building a system that provides simplified, understandable information that can be accessed at a single point of entry."