



redeye.co

Available Usable Valuable

Ok Tedi Mining Case Study



"RedEye's platform has helped us modernise how we deliver engineering solutions. We're excited by the possibilities and continuing to work with RedEye."

Mark Thompson,
General Manager, Ok Tedi



Key Takeaways

- Cloud solutions like RedEye DMS, which have been purpose built to be deployed on low bandwidth or satellite connections, ensure network visibility in all conditions.
- The cost of upfront, and ongoing, data management is often overlooked when building business cases for new software.
- Continuous engagement, via a customer success function, proves the long-term viability of any software rollout.
- Collaboration and company culture change is crucial to the adoption of new systems.

Challenges

Ok Tedi Mining Limited operates the longest running open-pit copper, gold, and silver mine in Papua New Guinea (PNG). A major producer of copper concentrate for the world smelting and refinery market in Germany, India, Japan, South Korea and the Philippines, Ok Tedi contributes around 7.4% to PNG's Gross Domestic Product (GDP). The mine is located at Mt. Fubilan, 2,000m above sea level in an area of dense rainforest where rainfall can reach up to 10,000mm per annum.

Following a long legacy of overcoming the logistical and communications issues associated with continuous operations in one of the world's most remote areas, the Ok Tedi team realised it was time to gain more control of their engineering and capital projects.

"It became clear that we needed to get the foundations of our engineering business processes right. That meant getting our drawing management right and regaining control of the documentation," said Engineering Manager Brendan Gowdie.



Solution

Ok Tedi chose RedEye's cloud-based solution, RedEye DMS to do the job. Several pilot projects were initiated to validate that RedEye would work in Mt. Fubilan's challenging conditions. Ok Tedi's crews were able to operate and work without interruption by using the low bandwidth and offline features of RedEye DMS.

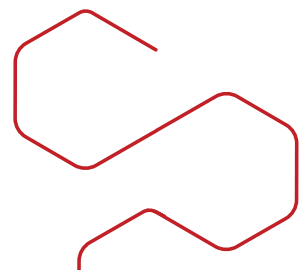
These features allow an operator to download relevant drawings from RedEye to a mobile device when they are connected to the Internet. They can then move to a low or zero-bandwidth area and mark up changes on the digital image. Once they have Internet access again, RedEye automatically synchronises the updated drawing into the system.

These pilot programs gave the Ok Tedi team the confidence to proceed with their first cloud-based solution. "The cloud-based platform performs as well in the remote mountains of PNG as it does from our Brisbane office," said Mr Gowdie.

The Ok Tedi team's initial plan to drive drawing change management was to locate, improve, and upload their legacy drawing library through a manual process, whilst incorporating a new platform into any new activities (such as new capital projects and brownfield maintenance upgrades).

"We realised manual processing wasn't an option after we identified more than 900,000 digital files to process in our legacy drawing library," said Senior Draftsman Mark Kelly.

"We took advantage of RedEye DMS bulk data management tools to automatically remove duplicate files, quickly add metadata, and 'fold' multiple versions into single identifiable drawings."



Outcomes

During the project establishment and data improvement phase, RedEye de-duplicated and reduced the number of files from 900,000 to 165,000 – a reduction of 82%. More importantly, Ok Tedi was able to increase the speed of their data management activities from 50 to 800 artefacts a week. They continue to use RedEye for uploading new project drawings and maintaining a reliable, up to date, duplicate-free dataset.

“We saved a large amount of time using RedEye DMS’s built-in tools. When we look back and see how far we’ve come, the benefits of RedEye are clear,” said Mr Kelly.

“We needed a solution that would meet our unique operating conditions, including our limited access to telecommunications infrastructure, our extensive library of legacy drawings and collaboration across our multiple remote sites.”

Brendan Gowdie,
Engineering Manager, Ok Tedi

900K

Drawing files
reduced to

160K

Drawing files

82%

Reduction in
duplicates

Continual Improvement

After initial work improved the quality of their drawing database, the Ok Tedi team now has simple and clear processes for managing engineering change. “It’s been important for us that RedEye realised this was a journey of improvement,” said Mr Kelly.

“RedEye’s Customer Success Manager is regularly in touch, supporting us as we continue to invite contractors into the system, and ensuring our new projects are set up correctly.”

“After initial processing and upload, we have continued to reduce our file count by folding in and ordering revisions,” said Mr Kelly.

Business Transformation

Ok Tedi management used a number of technology solutions to encourage a cultural shift across their business. Quick and easy access to engineering drawings, using the RedEye DMS platform, is an example of a simple technology change that can improve process, encouraging a shift in thinking. The team is also looking to the future, finding productivity benefits as they move to a more mobile workforce.

“As we continue to improve our network onsite, my goal is to introduce tablets to my team,” said Mr Gowdie.

“Having the RedEye DMS mobile app installed will have a positive impact on productivity.”

Where to From Here?

The Ok Tedi team recognises the productivity boost from controlling their drawings and making them accessible. Staff are coming to realise that technology can, and should, play a more significant role in day-to-day operations. “We have a long history of global collaboration and practical, onsite engineering up here,” said General Manager Mark Thompson.

Available
Usable
Valuable



About RedEye

RedEye is a technology company founded in Australia in 2012. Our vision is to make the world's critical infrastructure safer, easier and more efficient to operate and maintain. Today RedEye has six offices globally and helps our clients manage over \$250 Billion in large complex assets and critical infrastructure.

Our Software as a Service (SaaS) solutions including our engineering data management, asset and work management, bushfire risk management and digital twin solutions and our technology, process optimisation and change management consulting services are purpose-built for asset owners.

RedEye partners with the world's leading asset owners in utilities, resources, government, defence, healthcare and infrastructure to enable digital transformation in digital engineering, digital twin, asset management, analytics and bushfire risk management by making their asset data more available, usable and valuable.

RedEye's cloud and mobile based technology platforms integrate with, complement and extend our clients existing ERP, EAM, GIS, Safety and other core business systems. RedEye partners with leading technology companies including Microsoft, IBM, ESRI and AWS. We also partner with global and specialist systems integrators and consulting firms including KPMG to extend our reach and value globally.

RedEye's team and partners have developed deep domain and subject matter expertise working with numerous asset owners and critical infrastructure operators and are available to share best practice solutions, knowledge and processes.

To find out more about digital asset data management solutions visit www.redeye.co/mining.

**RedEye, helping to manage and protect
over \$250 Billion in assets globally**

 Transurban

 Seattle
Public
Utilities

 UrbanUtilities

 alintaenergy

 SOUTHERN NEVADA
WATER AUTHORITY

 SA
Power
Networks

 BMA
BHP Billiton Mitsubishi Alliance

 Children's
Hospital+

 Sunshine Coast
Hospital and Health Service
Exceptional people. Exceptional healthcare.

redeye.co/mining

Available Usable Valuable

Copyright © 2021 RedEye Apps

