Oil Explorers Improve Logistics Efficiency

For almost 30 years, Sydney-based drilling engineering experts Kelly Down Consultants have helped their clients explore sites around the world for oil and gas reserves.

Managing exploration and development drilling for Oil & Gas in Papua New Guinea, on behalf of ASX-listed Australian company Horizon Oil, is a key part of the company's business. Operating this drilling programme requires considerable co-ordination of logistics involving people, equipment, consumables and contractor management.

Kelly Down Consultants has built a reputation for delivering projects safely, on time and within budget. This requires ongoing evaluation of their systems and processes to ensure the optimal approach, including the way they use information technology to support the business.

Starting to do more 'sequential' projects, i.e. moving equipment from one site to the next with little break in between, added complexity to an already challenging process and required a review of the systems approach, says Ingo Weidmann, Consultant - Logistics and Projects at Kelly Down Consultants.

"It has become more complex as we do more sequential projects, while continuing to meet high standards of operational efficiency and safety for Horizon Oil. Our existing systems were getting stretched – it was hard to know where the latest documents were and track other elements of the project. Long lead time items and the nature of the drilling operation require key items to be ordered well in advance of the operation and tracked carefully - some down to serial number and condition."

Kelly Down Consultants wanted to better track what they call their "inventory" (drilling equipment, consumables and other materials required for the site). Freight costs have to be tracked carefully so they can be on-billed to clients, says Ingo, as sometimes it can exceed the cost of the actual equipment they are shipping around. Being able to store and retrieve records for accounting, insurance and tracking of items is also critical.

Business Issues

Managing increasingly complex logistics more efficiently.

Solution

The iviis™ ViisConnect supply chain management solution.

Outcome

Improved efficiency in managing projects and inventory.

Case Study

Flexibility was the other requirement, says Ingo, given they are working with a large number of contractors and sub-contractors, using items that range from $5 sacks of sand through to multi-million dollar drilling equipment. "The flexibility of using Excel was great but led to errors due to the difficulty in controlling updates in a dynamic environment," he says.

A more flexible approach

When looking for a new system Kelly Down Consultants didn't want to go through an implementation that required major business process change. An ERP-style system wasn't going to work for them, says Ingo.

"What we wanted to achieve was a system that could enable us to continue to work in the same way but more efficiently – the system we had always worked in the past but it was just getting much harder to track down documents and ensure they were accurate."

Kelly Down Consultants decided to engage iviis™ to develop a new system for them based on their proven ViisConnect collaboration solution. Apart from being able to incorporate freight costs into the value of each piece of equipment being shipped, most of the functions of the new system from iviis™ were similar to the existing one.

> "It's become a core system for our business – it was originally intended to be primarily about logistics but we are now using it for much more, such as tracking inventory costs. We are going to do asset management in it next. It provides us with a good platform for growth."

Ingo says the project was very tight – from concept to go live in eight weeks, with six months of data entered into the system to start testing it out. "The success of implementation is due to the fact that the system is so flexible allowing us to massage it as we go - nine months later I am still improving the system by adding, deleting or modifying process steps but the principle has not changed and is working well. The challenge has been to gradually roll out the system to local users in PNG overcoming IT, language, cultural and other barriers. "Our field staff are getting used to it – it forces them to close loops which takes effort, but they are getting used to it. We've been able to keep terminology the same so people can adjust more easily."

"The nature of iviis™ means we could load data, train people and test while still building other parts of the system. This modular nature is one of the real strengths, still being able to configure for some of it while using the initial parts. We could do the whole thing on the run which means we keep on improving the system and doing more."

"A real strength of iviis™ is staff stability and their investment in our business - we've had the same programmer who has really got to understand us. He's provided good advice to ensure we didn't tie ourselves in knots with the flexibility of the system. They really understand us and the scope of

what we are trying to achieve and work very well with us to achieve the desired outcome. The competency of the iviis™ staff has been a real asset to our project."

The online nature of ViisConnect was originally a concern, given the sometimes poor internet connectivity infrastructure in the places they work, says Ingo. "But it has worked very well, it is a nice thin app so we can continue working even in the hard online conditions we face. We also have good backups for peace of mind."

Going beyond expectations

The enhanced collaboration enabled by ViisConnect has helped Kelly Down Consultants become more efficient in the way they manage the drilling programmes, says Ingo. "It is really seamless now, we can see exactly what's happening on the ground, staff set the process off and the system communicates automatically with the people who need to know."

As a live online system they have good document control. "There are no longer 18 versions of a manifest or other document on various PCs or email chains - there is one final document with all attachments on the system - everyone has the same information and access as required."

Consistency has been improved. "Prior to the implementation every manifest and document was different as it was hard to get consistency in an environment with rotating roles (month on - month off). Now every document is the same with the required information in the correct place every time." Kelly Down Consultants are also clearer on exactly what is being done, and needs to be done to manage the process. "The system is easily auditable, daily reports show outstanding activities and during stocktakes movements can be tracked back to identify activity.

For management there is more confidence and clarity around their "inventory", often representing tens of millions of dollars invested, and they have the ability to keep clients very well informed of how projects are progressing, says Ingo.

iviis™ provide software solutions that help organisations know their business, now. For the manufacturing sector, the iviis™ supply chain management solution enables them to collaborate more effectively across their supply chain, helping increase efficiency, reduce costs and improve customer outcomes.

To arrange a consultation with one of our experts, visit www.iviis.com