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Collaboration systems - keeping the users in charge

Perhaps the most important factor when implementing oil and gas collaboration environments is to keep the users involved in development of the system – and avoid the IT department taking over the project, says Wipro's Matt Graves

One of the most critical issues when implementing oil and gas collaboration environments is making sure that the people who are going to use it have control over how the system is developed, says Matt Graves, Managing Consultant for Integrated Operations with the Energy, Natural Resources and Utilities (ENU) division of Wipro.

“Often [collaboration system] projects start with good intent, you find the right business sponsor, you start to gather business level requirements, it all starts off really well,” Mr Graves says.

But “as things develop and the project moves into design and delivery, more and more you get involvement of the IT department in some of the technical enabling aspects of the project.”

“The delivery of IT and technology can be quite complex, there's lots of things to consider. For example, [the questions of] how to integrate the technology into the existing platforms, is it going to work, which products do you select, how is it going to be displayed on screen. It can get complicated and expensive.”

“Often what happens is, after the good intent, things get over-run by the IT department. It starts to block out the true original intention of the project. You start making changes, not based on user requirements but based on the IT constraints and IT budget. “The people side of things get forgotten.”

“Your project management must be very strong in not allowing the IT monster, the IT side of things, to take over,” he says. “That is often what can happen. Make sure all decision making goes back to the business.”

There have also been quite a few examples of projects which haven't delivered the expected results, or where the technology was developed but never used. “We often go into assets and see the same issues and problems which collaborative environments,” he says. “We've had a few projects which got into great difficulties.”

You need leaders within each of the teams who will act as ‘change agents’ to get the project moving, he says. “It is very important to get the offshore folks involved –

that's often forgotten.” When everything is built, “these guys will be owning the solution.”

Wipro

For the past four years Mr. Graves has been working in the Digital Oilfields (DOF) environment for an oil and gas super major as part of global program to deliver Collaborative Work Environments (CWE) to the upstream producing assets.

This includes projects in the UK (Aberdeen), Norway, the Netherlands, Malaysia, Australia, the Gulf of Mexico, Canada (Calgary), Gabon and Nigeria.

Having an external company (like Wipro) acting as an ‘agent for change’ can be very helpful, he says, in making sure that the users' views get taken into account, and trying to keep them engaged with the project. “We often try to identify a champion who is a spokesperson – at the user level,” he said.

Collaboration environments

Collaboration environments are physical places where people from different oil and gas disciplines can work together, and share the same data, to make sure that production operations are as safe and effective as possible.

The aim is that people in different company departments, and working in different physical places, should be able to work together more easily and share the same data, not in isolation as they often did in the past.

The collaboration environment can bring together onshore and offshore staff, and people in different departments, for example reservoirs, production, chemistry, maintenance and logistics.

The large majority of the Collaborative working environments are focussed on production operations, monitoring operations continuously as production comes through the well, through the facility and onto despatch, Mr Graves says.

Sometimes decisions need to be made quickly, for example if pressures at the bottom of the well start going out of a safe op-

erating range.

Often a number of people might need to be involved in a decision. “In this environment, minutes cost thousands of dollars,” he says. It is good “if you can cut that decision making time by connecting the right people.”

Re-organising

If you are re-organising work so people work in collaborative teams, then there will be some team re-organisation required, he says, which is never very popular.

Sometimes the restructuring can be done before the technology is introduced.

Getting it done requires a mixture of ‘mandate’ (when people are told what to do) and ‘participation’ – where you encourage people to get involved, he says.

To encourage people to work in a different way, you need to do more than just rewrite the company's Standard Operating Procedures (SOPs), he says.

Customised for the asset

Another important factor for success is to focus on something which works for the specific asset, rather than trying to fix the whole company at once, he said. “Every asset thinks differently.”

The software must show the information and metrics which the team actually needs, shown to the right people in the right way.

A good system might (for example) have all the data ready prepared for staff to discuss in their morning meeting, with a visualisation of the previous day's activity.

A visualisation might need information about your wells, how the topsides are performing, the daily and weekly plan, a messaging board, and the production data.

It is too common for a company to decide at a high level to implement a certain software system, and when it appears in the collaborative work environment, no-one knows how to use it or what it is telling them, Mr Graves says.