



CUSTOMER STORY

How Leaders in the Oil and Gas Industry are Saving Time and Money with Jama Connect®



Opportunities for Efficiency Across the Industry Lead to Formation of JIP33

Over the past decade, projects across the oil and gas industry have been plagued by cost and schedule overruns, exacerbating underlying cost escalation. Things came to a head around 2014, when the overwhelming majority of large exploration and production (E&P) projects were exceeding budgets by 50%, according to Valve Magazine. Not only that, but 55% of projects were not finishing on time and scheduling overruns were hitting nearly 40%.

The alarming statistics prompted the World Economic Forum (WEF) to team up with the industry's main trade organization, the International Association of Oil & Gas Producers (IOGP), to initiate a study examining the causes of these issues.

The eventual outcome of that study was the 2016 creation of a project called the Joint Industry Program 33 (JIP33), which is in the process of standardizing the requirements used for procuring equipment throughout the oil and gas industry. JIP33 is now handling this process with the help of Jama Connect™.

Call for Standardization

CATALYSTS FOR JIP33 PROJECT

- Unsustainable waste threatening industry
- Consolidating certain requirements could curtail losses
- Companies and suppliers stand to benefit most

One of the culprits IOGP found in its initial study was that all the major oil and gas companies were creating their own extensive requirements or specifications for each project.

This created a lot of inefficiency, not just in the amount of time and resources each company spent designing their own equipment, but within the supply chain as well.

Suppliers would create bespoke designs to meet each company's requirements requests. In turn, this would force suppliers to maintain a large inventory of spare parts to accommodate all the requested versions. Plus, the variances in quality procedures and information requirements for different customers would often cause confusion.

“If you looked at the companies that were interviewed for the study, they all had, on average, around 400 different specifications on top of industry standards, and all of these specifications were about 30 to 40 pages long,” says Adri Postema, Director of the JIP33 program for IOGP. “If you do the math, it means that on a daily basis we flood the supply chain with something like 15,000 pages of additional requirements on top of industry standards.”

If JIP33 can get the industry to agree upon standardization for basic requirements, it would have significant benefits that would reverberate across organizations. Each oil and gas company, for instance, would have less upfront planning work, which would improve efficiency, quality, and schedules while reducing costs.

Suppliers would also gain more streamlined processes, so they can focus on quality and manufacturing. Plus, since all companies would be using the same standardized requirements, the bidding and proposal process would be simplified with less need for clarification meetings.

Scoping the JIP33 Project

JIP33 INITIAL FINDINGS

- Opportunities for efficiency are uncovered
- Questions around project's feasibility
- Collaboration emerges as a central focus

IOGP has around 80 members that comprise the world's largest oil and gas companies. Getting them all to come together to agree on exactly how to standardize equipment would be impractical.

To that point, IOGP has intentionally kept the number of companies participating in the JIP33 program relatively small — around 12 organizations — but that doesn't diminish the amount of collaboration required. Other operators have the opportunity to comment on draft JIP33 specifications during the public review cycle.

JIP33 began in a pilot phase around 2016, and back then the focus was very much on figuring out a way to get all these companies working together on a common purpose.

“Can we actually have experts from the different companies sitting in a room together and coming up with what is essential from a safety and operability point of view?” Adri says. “We're basically saying, ‘You need to all open up and share your deep technical know-how and experience.’ The point isn't fighting for your own requirements; but it's really stepping back and asking yourself what is essential for the industry? And debating the different viewpoints together in order to come to a consensus.”



If you talk about a certain standard, let's say a standard on a pump. Having 10 or 12 subject matter experts (SMEs) in the room debating how the standards should look is already a challenge in its own right. If you make that 50 SMEs, then it will be almost impossible.”

Adri Postema, Director of the JIP33 Program, IOGP

Initial Logistical Headaches

JIP33 HITS EARLY ROADBLOCKS

- Difficult collaboration process
- Lengthy review cycles
- Trouble with document version control
- Tedious feedback consolidation

JIP33 began with the SMEs from various companies collaborating on standardization for very simple equipment, such as line pipes and ball valves. Spreadsheets with requirements were emailed out to SMEs, who would usually pass them on to other engineers in their organization. Subsequently, all those comments from the various engineers and SMEs would need to be consolidated to narrow down details as small as the color and shade of a piece of equipment.

“Whenever these spreadsheets went out for a review cycle, there was always this pause in the development while that consolidation happened,” says Philip Machin, Project Engineer for JIP33. “But, of course, if we received any late responses, fitting those

into the development caused no end of problems. Often you’d find that the reviewers were commenting on a version of the specification that was maybe two revisions old. So, there was a loss of version control there.”

Things seemed to be going well, but IOGP wanted to open up their specifications for public review, so the rest of the industry could essentially see what they’d come up with and weigh in. Draft requirements for different equipment were posted on the JIP33 website, with an open invitation for other companies within IOGP, as well as suppliers and the general public, to provide feedback. The response the team received was overwhelming, as Adri points to an example of the line pipe specification, receiving some 1,300 comments.

The JIP33 team then had to go line item by line item through the thousands of comments and figure out a way to consolidate and resolve all the feedback.

“That consolidation work was almost a full-time job for myself and my colleague on phase two of the project, which didn’t leave very much time for our other responsibilities,” Philip says.

At the time, that meant getting all the information into a spreadsheet, gathering the SMEs back into a room, discussing the feedback, voting on changes, and beyond.

Suppliers, who had spent a lot of time reviewing the draft specifications, sent back hundreds of comments and then wondered whether or not their feedback had been addressed. In truth, the team would weigh the supplier feedback heavily, but had no efficient way of communicating the outcomes.

“That was just a nightmare,” Adri says.

“And that’s when we said, ‘Well, we need to look for a much better collaboration tool.’ Recognizing the fact that the whole world is moving into digital and that more and more oil and gas companies are using digital software — not only for developing specification but also for using the specifications in capital project development — it just made a lot of sense for us to head in that direction.”

Searching for a Solution

JIP33 CHOOSES JAMA CONNECT

- Jama Connect wins over legacy solutions
- Fast implementation
- Jama Software support team earns high marks

The JIP33 team knew it needed a cloud-based solution built for remote collaboration on requirements, and one that would easily allow for exporting into other companies' tools. It also needed the solution to be intuitive and easy to use, because JIP33 didn't have the resources to train people. Timing was also of the essence, as the team didn't have much runway to get phase three of the project up and running.

JIP33 reached out to IOGP members to see what technology they use for developing specifications. However, the team soon learned that many of the tools in use were far more sophisticated than what they needed, difficult to operate, and that they would take months and months to configure.

The JIP33 team discovered Jama Connect through some online research and was intrigued by its simplicity. After speaking with Jama Software representatives, the JIP33 team was excited about what it heard.

While many competitors were giving timelines of three to six months to get JIP33 up and running on their platforms, Jama Software estimated it would take only two weeks to get going with Jama Connect.

"It was hard to believe," Adri says. In fact, the JIP33 team was so skeptical of the claims that Adri and Philip took a trip to Jama Software's European headquarters in the Netherlands to vet the company and its solution. Luckily, they were pleased with what they found.



From the start, Jama Software's engineers came across as being very professional, knowledgeable, thinking along with us and up front on some of the challenges that they saw. Their team was excited about the JIP33 program, very responsive, and willing to help us. That sort of culture and mindset just helped us enormously."

Adri Postema, Director of the JIP33 Program, IOGP

The Impact of Jama Connect

JAMA CONNECT ACCELERATES JIP33

- Jama Connect quadruples productivity on specification development
- Functionality to facilitate collaboration across the globe in real time
- Version control issues eliminated
- Full transparency for reviews
- High adoption through ease of use

Currently the JIP33 program delivers specifications at a rate four times faster than in its original approach. This efficiency improvement is enabled by Jama Software.

Part of that dramatic shift can be credited to the way the JIP33 team has been able to streamline its collaboration for its range of stakeholders. Now, all feedback from SMEs, suppliers, and third parties is contained directly within Jama Connect Review Center — the platform’s central review feature — and requirements can be updated as things progress.



That’s almost like an insurance policy for us. I think we now have a lot more transparency. It’s not possible now for the participants to kind of slip under the radar.”

Philip Machin, Project Engineer, JIP33

For the JIP33 project, experts from around the globe — the United Kingdom, Malaysia, India, Norway, France, Saudi Arabia, Australia, Brazil, the US, and beyond — need an efficient way to collaborate together on the same requirements, and Jama Connect delivers. And since so many oil and gas companies have strict IT protocols, JIP33 needed a solution that wasn’t going to interfere with their corporate software, and Jama Connect allows for that as well.

Swapping spreadsheets and Word documents around via email — and all the issues inherent with that process, such as version control problems and heavy feedback consolidation — is no longer a part of the JIP33 teams’ process.

By using Jama Connect Review Center, JIP33 is ensuring every reviewer is seeing the same content in real time, so there are no worries someone is looking at an out-of-date version of the specifications.

Additionally, the tracking feature within Jama Connect Review Center can tell administrators who has actively been reviewing requirements, as well as how much work they've completed, versus those who haven't. So now if JIP33 presents new requirements to a partner and there is a misunderstanding, the team can show whether or not that organization's experts provided feedback on that specific area.

Jama Connect's ease of use has also helped onboard new reviewers quickly. JIP33 doesn't have the resources to provide extensive training to new users, so it handles most of that work with oil company experts in about two hours now.



The people that were a little bit more skeptical about adopting Jama Connect were kind of pulled along by the more eager people.”

Philip Machin, Project Engineer, JIP33

“That seems to be enough for the experts to go back to their home office and interact with the development of these requirements remotely,” Philip says. “Jama Connect is pretty simple and intuitive to use.”

The team admits probably the most difficult part of implementing Jama Connect was getting engineers that were familiar with conventional tools and processes to switch to a new way of doing things. Those who questioned Jama Connect eventually became converts.

A Future Without Documents

The JIP33 team originally had some trepidation about introducing a new solution, especially considering it was on a tight schedule for facilitating feedback from experts. For instance, if the tool caused any amount of significant delays, it could derail the whole program.

In fact, when JIP33 was running an initial assessment on the business and technical risks that could emerge during the project, the move to a digital tool was near the top of the list. Now, Jama Software's team and development platform erased those worries.



Jama Software has not disappointed us at all. Any calculated risk is totally gone.”

Adri Postema, Director of the JIP33 Program, IOGP

Looking ahead, the future for the oil and gas industry appears to be one of collaboration, efficiency, and higher margins thanks to JIP33's standardization of procurement specifications — which can be downloaded right now at iogp-jip33.org/library.

It also seems like the years ahead will be defined by universal, digital environments created by platforms like Jama Connect, which help companies gain an edge in their processes.

“Hopefully we move to a world where we don't need the documents anymore,” Postema says. “The potential for having all our information in a digital environment like Jama Connect is just huge, and that's fully recognized by all the participants in our program.”

ABOUT JAMA SOFTWARE

Jama Software® is focused on maximizing innovation success in multidisciplinary engineering organizations. Numerous firsts for humanity in fields such as fuel cells, electrification, space, software-defined vehicles, surgical robotics, and more all rely on Jama Connect® requirements management software to minimize the risk of defects, rework, cost overruns, and recalls. Using Jama Connect, engineering organizations can now intelligently manage the development process by leveraging Live Traceability™ across best-of-breed tools to measurably improve outcomes. Our rapidly growing customer base spans the automotive, medical device, life sciences, semiconductor, aerospace & defense, industrial manufacturing, consumer electronics, financial services, and insurance industries.