ProjecTools Case Study

High Profile FPSO Project

The EPC contractor used ProjecTools application to manage all project information for the FPSO. The engagement began when the EPC contractor communicated that dispersed teams contributing deliverables for the complex asset was causing out of control project information management. Centralizing the data in ProjecTools cloud application:

- Allowed the EPC contractor to effectively manage data for the global team
- Allowed access to live information by providing online access via. Cloud application
- Ensured each team member had the latest project information (nobody worked with superseded data)
- Improved timeliness (Asia Pac and Gulf coast teams shared instantly updated data regardless of time zone)
- Allowed enforcement of business rules by enforcing workflows for remote teams
- Linked multi-discipline project data for cross-functional team collaboration (Documents to Engineering, Engineering to Procurement, Procurement to Cost, etc.)

Functional Uses of ProjecTools on this Project

Documents – The EPC contractor required a system to maintain and manage 80,000+ Design and Technical Documents (revision control, approval workflow, progress and status reporting, permission-based document access to globally dispersed team members, etc.)

The contractor's document controllers attributed an estimated time saving of 5-15 hours per week per document controller by using ProjecTools automated client report generation. This added the benefit of more accurate reporting of progress, status, and late actions.

The EPC contractor also previously had no reliable method for managing supplier data capture, approval or revision control. ProjecTools allowed the contractor to standardize the classification of documents required from vendors for each Purchase Order, communicate requirements to suppliers, and collect vendor document submittals directly into ProjecTools from the vendor interface. The system then enforced the automated approval and revision process, reducing vendor data processing and reporting by 2-10 hours per week, while providing unprecedented visibility and accountability.

The overall effect was a significant reduction in vendor document turnaround time and an effective data based method for tracking, measuring, and logging supplier performance.

Procurement – The EPC contractor required a system to integrate engineers, buyers, clients, and a growing global supply chain. They understood that improving organization, standardization, and communication among these groups was key to executing the 1000+ POs on the project.

ProjecTools centralized all project information

in its online application so buyers in Houston and Singapore could work together from the latest data and execute in a standard environment. This produced a more cohesive team and eliminated fragmented information and rework resulting from confusion.

ProjecTools standardized procurement lists, templates, forms, terms, and workflows by purchase order category. These standards defined and enforced repeatable processes for each procurement package by type (e.g. Capital Equipment, Services, Bulks, etc.). This allowed consistent procurement package development and processing - according to type within the application, and enforcing appropriate levels of detail and approval for each package. This standardized process resulted on a reduction of rework and after–the-fact change orders due to purchasing errors to the tune of 15+ labor hours per PO, as well as the material cost associated with such mistakes.

ProjecTools helped the EPC contractor improve communication and collaboration. The inter-discipline integration of ProjecTools allowed technical REQs to flow from engineering to procurement in a controlled, organized manner to reduce confusion between engineers and buyers. Engineers, buyers, and suppliers were able to process technical and commercial queries throughout the REQ, RFQ, and Award process within ProjecTools application. Thereby eliminating reliance on emails which had previously created problems with tracking, clarity, and accountability. ProjecTools Request Response System (RRS) allowed these groups to communicate about specific technical or commercial items with each communication automatically logged to the proper package at each stage, which paid huge dividends when the client asked for the query history for each PO.

After POs were released, ProjecTools helped the EPC contractor manage PO inspections, expediting, and receiving. The application provided onsite inspectors with the appropriate inspection sheets, correct revision of all related documents, and a method to submit inspection reports online. This reduced inspector headaches faced in previous projects, which also represented significant time and expense savings.

Cost Control – The EPC contractor needed a system that would standardize the WBS and Budget Items, and report budget performance against a fixed budget baseline. They also needed a system to push commitments to, and pull actuals from their accounting system (Microsoft Dynamics). They were pleased that ProjecTools collected activity data, and organized that data into Cost, Change Order, Man-Hour, Commitment, Overage, Cash Flow, Progress, Earned Cost, etc. reports.

Engineering & Commissioning – The EPC contractor had no formal system to manage and integrate Equipment, Construction, Commissioning, or Punchlist data. Having experienced overruns in the completions and commissioning phases in previous projects, the EPC contractors suspected they were losing money by having poorly organized data. They were right.

Executing the project using ProjecTools, all tagged equipment was logged with standard numbering formats and formal rules for TAG metadata. The EPC contractor was then able to assign engineering interns from local universities to manage TAG data rather than highly-paid engineering resources. This allowed them to save money and perform a

public good.

With all TAG Data populated in ProjecTools central register, the EPC set themselves up to gain the tremendous benefits of efficiency and precision in construction and commissioning. After loading their checksheets and populating them with live TAG data - the team then defined system enforceable progression dependencies and constraints for Certs, ITRs and Punchlists. This allowed them to efficiently assign batches of sensible inspection activities with a few clicks in the application. This contributed huge time savings over the previous Excel and Word-centric process they had outgrown. They no longer relied on a small army of clerks to organize inspections. Automated workflows ensured the critical path was followed exactly as defined.

As inspections were completed, Optical Character Recognition features in ProjecTools logged each completed ITR in the system and updated the status automatically.

ProjecTools Construction Punchlist application also allowed the EPC contractor to log punchlist items into the system and enforce predefined constraints on ITR or CERT completion according to the configurable rules in the application. This prevented the improper completion of ITRs and CERTs with outstanding critical Punchlist Items and gave supervisors and managers the ability to identify and assign them for resolution before they affected the completions schedule.

The end result of using ProjecTools Engineering & Commissioning on this FPSO was significantly fewer delays and overruns caused by rework, communication errors, and organization deficiencies. The completions team also found that the system reduced the administrative overhead for each ITR and CERT by at least two hours.