

Value Delivery Report: China Petroleum Engineering Co, Ltd.

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SmartProject

China Petroleum Engineering Co., Ltd (CPE), directly under China National Petroleum Corporation (CNPC), is a large scientific and technological enterprise focusing on the engineering design for petroleum and petrochemical projects. The business scope covers engineering design, EPC, survey and supervision for domestic and foreign projects; research, development and marketing for hi-tech products; and development and transfer for new technologies and processes. The company, headquartered in Beijing with eight branches in China, as well as 12 main overseas branches and subsidiaries. It has a workforce of more than 7300 employees, with expertise covering all aspects of project execution.

What were your challenges before WRENCH?

CPE: All our processes were completely manual, which led to a chain reaction of inefficiencies. Our project team kept losing track of client submissions which in turn led to deliverables getting delayed which in turn delayed project progress. Trying to manually manage all these inefficiencies was hugely time-consuming and affected overall delivery. We were also following a paper-based process for stamping, signing and documenting everything, from scratch, which added a lot of manhour and printing-related costs, so we started looking for a solution that could digitize the whole process and that's how we found WRENCH-SmartProject.

Challenges at a glance:

- Submission delays
- Inefficient inter-discipline coordination
- No way to check or track transmittals
- No way to accurately measure progress
- Inefficient document, workflow and process management
- Lack of proper reporting
- Very high printing costs

Did implementing WRENCH resolve those challenges?

CPE: Yes. We are pleased with the outcome of the implementation.

What features did you find most useful?

CPE: WRENCH helped us centralize our engineering data and customize all our processes, so that we now have custom workflows for each deliverable and this gives us visibility in every step of every process, which helps us deliver faster to the client.

In terms of project management, our deliverables are now monitored efficiently through the WRENCH master document list which lets us track each stage down to the micro levels of schedule and progress.

Do you have any suggestions to improve the features of WRENCH?

CPE: We would like more intuitive project management features. Specifically we need an easy way to update document attributes en masse (we have about 14,000 deliverables per project) and it would be great to have more tools for Data Analytics and BI.

Apart from the challenges resolved in this implementation are there any issues you would like WRENCH to address in the future?

CPE: Enterprise-level integration with SPF would be great, also reporting templates that fit CPE requirements and parameters.

Solution highlights:

- Vendor documents tracking.
- Our drawing submissions are now faster thanks to the master list which is reported and updated in real-time.
- All engineering drawings maintained with proper revisions so teams always work on greatest and latest sets.
- The LookAhead reports which keeps track of future 'actions to be followed'.

Are you happy with the current Support which you are getting from WRENCH?

CPE: We feel that very few SME's are available locally and hence we are unable to get instant support.

Any suggestions on how we can improve support?

CPE: Local Technical Support must be provided.

How did your business improve after implementing WRENCH?

CPE: The biggest benefit is: we were able to reduce delays to such an extent that our projects are now ahead of schedule, which is amazing.

We saw Project Management efficiency jump to about 85% efficiency and were able to achieve 100% quality. (Thanks to WRENCH we managed 58 projects with just 13 people in project controls.)

We saw tremendous improvements in document and data management including correspondence, and with respect to communications and collaboration, our clients now work directly with us in WRENCH so we are all on the same page.

Overall productivity and efficiency across all our teams and processes across all disciplines has also improved significantly.

Results and ROI:

- Less delay (projects now ahead of schedule)
- All deliverables now go out on time
- 85% project management efficiency achieved
- 100% quality achieved
- 400% more efficient drawing/document management
- Significantly improved collaboration with clients
- 75% less time in reporting
- 80% less deliverable management time
- Zero printing costs
- Less manhour spend (managed 58 projects with just 13 people).

Can you give metrics for these improvements?

CPE: Yes, here are a few key ones:

- Before WRENCH we had only 100 Submissions per week, after WRENCH we achieved 400 to 800 submissions per week.
- Our review cycle went from 7 days to 1 day
- Timespend for reporting reduced by 75 %
- Deliverable management time cut by 80%
- 100 % savings on print cost as we are now completely paperless.
- Now we have 100 MR approvals in 2 months and are ahead of schedule.