BPM Helps Stuart Wright Preserve Company Knowledge

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People • Processes

Process Management Maintains Clear Workflows for Knowledge Sharing in Oil & Gas Well Engineering Industry

The global Oil and Gas industry is facing a shortage of skilled resources to work on oil well development projects. Pressures from unwavering global demand and the depletion of old oil sources have forced producers to seek out new undeveloped reserves. This often requires new technologies and work methods to exploit wells that are difficult to tap. Newly hired employees must learn to work quickly in this knowledge-intense industry that is subject to rapid change. All this has led to a high degree of employee turnover since different companies are competing fiercely for the same employees. This results in lost money due to wasted training, constant hiring processes, and inflated salaries required to maintain a grip on existing resources. But this detriment isn't limited only to the bottom line; when resources change, they take with them valuable company knowledge gained on the job, hurting overall project progress and forcing new resources to start again from the beginning.

Stuart Wright, a global leader specializing in upfront oil well designs, has found a solution to this problem. By mapping work tasks in process flowcharts, and then sharing them in a collaborative network environment, they are insuring valuable company knowledge against resource turnover. Using the Enterprise Process Center® (EPC), Stuart Wright has created logical sequences for all important tasks, making sure that when resources change, their work knowledge stays with the company.

The Challenge
Protect company knowledge for the training of professional engineers

The upstream Oil & Gas well design consulting industry faces a set of major engineering challenges that require specific knowledge and experience in designing safe and efficient wells. The process of well design from, concept to execution planning, must be managed with a high degree of verification and standardization in order to ensure that the substantial investment of clients is maximized.

The lifecycle of a well design and construction project requires intensive management due to continuous work rotations. Resources can change on a weekly basis, due to cycling rotations offshore for either timing or work commitments. Fierce competition for limited employees also leads to a situation where resources move between different companies with increasing rapidity. The result is that projects must be undertaken by many different teams of engineers who work independently towards the same goal. In order to tackle client projects in a systematic way, the specific steps that are followed during work activities, including key tasks and knowledge, must be captured and distributed.

About The Enterprise Process Center®

The Enterprise Process Center® (EPC) focuses on motivating business users to create a process culture from the management and integration of organizational operations, content, risk, IT applications and services. The EPC offers businesses the advantage of real-time Business Process Management (BPM) in an open and collaborative environment. The EPC facilitates the understanding of your process structure along its dimensions of time, resource and ownership, making it easier to avoid common pitfalls such as the silo effect and outdated business documentation. The EPC is designed to empower business users, the real owners of business processes.

Key Benefits:

- Protection against employee knowledge loss
- The ability to capture key "How To" knowledge processes in a multi-resource environment
- Preservation of work experience
- Cost savings on training
- The ability to clearly and easily capture tasks
- Optimization and standardization of work activities
- Total process governance

STUART WRIGHT
Intelligent Well Design by Process.

"We have found the right tool to make our company a leading edge consulting engineering business; we even incorporated EPC process shapes in our logo."
-Colin Stuart

The Solution
Maintain a company knowledge database by mapping standardized processes in the Enterprise Process Center (EPC)

Because of the continuous resource change, Stuart Wright needed a solution that would preserve work methods and employee understanding regardless of who was executing a task. Their solution was to use the Enterprise Process Center to map work methods, tasks, and information flows.

The core well design process was first written on paper before being migrated to EPC as a process map. The necessary inputs and outputs were added to the processes, thereby defining a clear flow of work. Explanatory documents were attached to process activities to provide greater detail in task descriptions, and responsible persons identified and associated with each process step.

By mapping these processes in the EPC, Stuart Wright created a standardized knowledge set that will remain consistent throughout all shifts in resources and ownership. Once approved, the standardized process can be repeated in the same way, using the same basic knowledge sets, regardless of who is performing the tasks. Company knowledge becomes preserved and can be reused or implemented along multiple axes. This allowed Stuart Wright to eliminate any inefficiency that was caused by the cyclical changes in resources.

The Objectives
Train a workforce of oil & gas well engineers to develop superior technology and operations

To build a leading workforce of engineers, Stuart Wright leveraged the agility and clarity that it gained by managing company knowledge in the EPC. With this new process-oriented approach, not only was information more accessible for daily work activities, but it also allowed Stuart Wright to clearly define every job role needed to accomplish each process, making accountability and responsibility clear from the outset of a project.

By relating knowledge information to specific job roles, Stuart Wright created a system of training documentation that explained the steps for each task. Now when resources are introduced through ongoing hiring, they are trained quickly and without the needing to create independent training material. Each task is given a logical sequence, making the learning process as easy as possible while enforcing disciplined work attitudes and rapid project startup.

The Benefits
Capturing process knowledge creates logical workflows that can be easily understood by key resources and trainees

EPC gave Stuart Wright the ability to capture their key "How To" process knowledge in a logical task progression, within a multi-resource environment, thereby enabling the accelerated training of new employees. This reduced the time management spent in explaining basic concepts, tasks and methods, translating into savings in time and costs.

"In the midst of working on a project any of us well engineers may require replacement for a number of reasons. The replacement engineer will be thrown in the middle of a project, and may not be able to understand the project state. However, with the help of the EPC process maps, the replacement will be able to quickly gain a clear understanding of the project. He just has to know where the work left off and look in the EPC to follow-up on the next step.

As such, it doesn't matter who the person is doing the work; as long as the process is mapped out, the skills are there, and any relevant person can follow through on the entire project."
- Senior Well Engineer

About Stuart Wright

Stuart Wright is an independent consulting company specializing in upfront well designs. The two founders, Mr. Colin Stuart and Mr. John Wright, are widely known as leading well engineers. Together, based on their collective 55 years' experience in the industry, they pooled their expertise and set up 'Stuart Wright', based in Singapore. The company has captured the sequential process of well design from a level 1 concept stage to execution planning, level 4 stage. The step by step process is accomplished using the latest BPM techniques, and enables our new graduates to quickly absorb the principles and correct sequence of well design.

About Interfacing

Based in Montreal, Canada, Interfacing Technologies Corporation is a pioneer in process management solutions. Interfacing has provided valuable process-knowledge solutions to hundreds of Global Fortune 1000 enterprises over the last decade. Interfacing's BPM solutions are designed to bring the value of Business Process Management to all levels of company operations, from strategy to execution. Among the most notable benefits are the standardization and alignment of operations (ISO, ITIL), clarification of ownership, and adherence to compliance (SOX, Basel II, C-198). Interfacing provides its customers with the tools necessary to leverage company knowledge through the integration of sustainable process solutions.