WorkTech

BP Texas City Saves $20 Million in 2008 with WorkTech's Contractor Cost Tracking System

"In its role as the single major collector of cost data and hours executed, WorkTech's Contractor Cost Tracking System (CCTS) is an integral, mission critical part of the maintenance and capital programs at Texas City."

"Giving both BP and non-BP personnel access to the same system serves as a very effective communication vehicle between BP and its contractors. CCTS is integrally woven into the fabric of daily life at BP."

BP Texas City is the third largest petroleum refinery in the United States, with the capacity to produce 10 million gallons of premium and unleaded gasoline daily at 29 oil refining units. Sitting on more than 1,200 acres close to Galveston, TX the Texas City operation operates continuously, employing 2,000 BP personnel and more than 4,000 contractors from 400 third party companies.

Keeping track of more than $1 billion of contractor costs each year for turnarounds (the scheduled shutdown of a plant for major maintenance), capital projects, and general maintenance is no easy feat. More than 200 BP employees are engaged in supervising, reviewing, and approving contractor spend, processing nearly 3 million transactions annually for labor, material usage, and equipment rental. A turnaround (TAR) is a complex process involving large amounts of resources and spending compressed into a short time period. Every day that a plant is non-operational means lost revenue. But the original cost and scheduling plans almost never remain unchanged due to discoveries that may take place during the actual work. For example, one may find that a major piece of equipment is beyond repair, resulting in the need for an unexpected capital expense and a revised completion schedule. Any unforeseen disruption can have a multiplier effect, making the best laid plans obsolete. With thousands of interrelated moving parts involved in a TAR on a daily basis, managing the process can be a nightmare unless management has the right information and tools at its disposal. Key questions that must be answered: What is my progress against schedule? What is my spending compared to budget? What adjustments need to be made? What effect will these adjustments have on the schedule and budget?

Improved Contractor Cost Control and Prediction with CCTS

Prior to the implementation of WorkTech's Contractor Cost Tracking System (CCTS) at BP Texas City, it took BP 3-18 days to gather critical information such as field conditions, scope additions, schedule changes, and revised budgets. CCTS, which allows unparalleled visibility into contractor activities and expenses, allowed BP to reduce the elapsed time to 24 hours or even less. Such a dramatic reduction in the time needed to obtain real-time feedback on a turnaround enabled BP to react to developments and changes far quicker than before. As Doris Prewitt, Supervisor, Information and Data Control, says, "The goal is for all of the cost information for a given shift to be entered within a few hours after the end of each shift." By getting better visibility and control of contractor billing and payment, Prewitt estimates that BP was able to save $20 million in 2008. This dramatic savings was due largely to rejected invoices that were not resubmitted.

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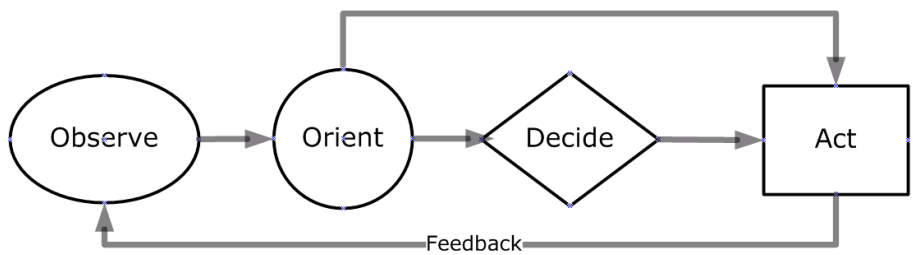
The faster management has necessary information, the faster management can make an informed decision. The OODA Loop, introduced by USAF fighter pilot and military strategist John Boyd in the 1970's, is a continuous feedback loop based on four steps:

1 - Observe – collect data
2 - Orient – analyze and synthesize data
3 - Decide – determine a course of action
4 - Act – put decisions into physical action

Source: http://en.wikipedia.org/wiki/John_Boyd_(military_strategist)

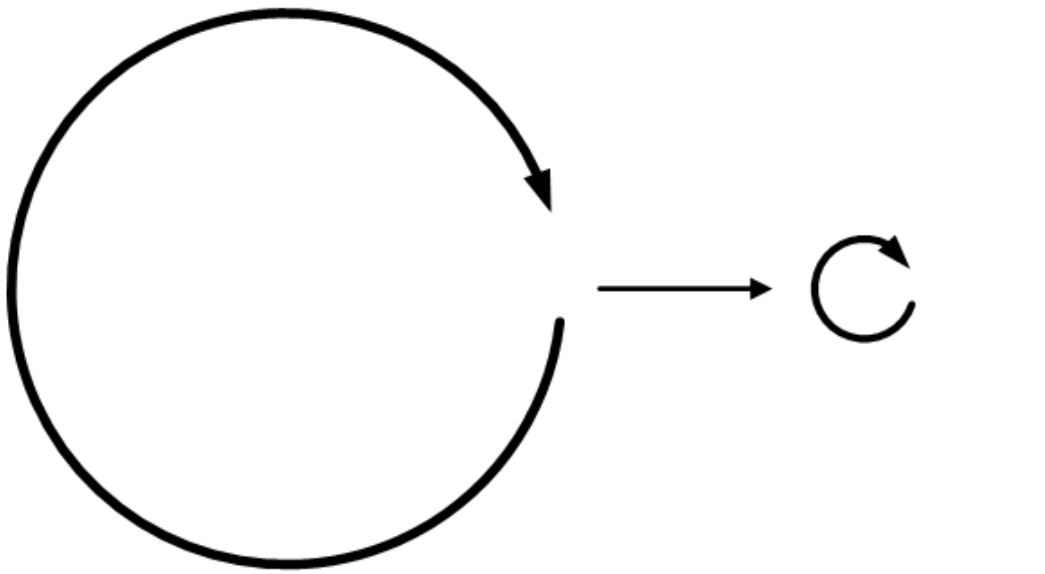
Figure 1 – OODA Loop



Each step is made up of several components depending on the environment and surrounding conditions. For example, there may be numerous sources of data that need to be evaluated during Step 1–Observe, and the data may change as circumstances unfold. The data may need to be integrated and validated according to pre-established rules before it can be consolidated and analyzed. Step 2–Orient is undertaken within the framework of previous experience, company heritage, cultural traditions, and analysis and synthesis in order to arrive at Step 3–Decide. The four steps progress sequentially in an orderly fashion, and the major feedback loop is from Step 4–Act to Step 1–Observe, but feedback can also take place within the four steps as well. Step 3–Decision may be influenced by new information from additional observations prior to an action being taken in Step 4–Act. Taking into account the new information might necessitate a reworking of Step 2–Observe, changing the action going forward.

The success of a turnaround, like the success of any undertaking involving many interdependent parts in motion, depends on a fast response to continually changing conditions. Time becomes a critical measurement. The shorter it takes to complete the OODA Loop, the more effective the decision-making process will be. Companies that take too long to collect the necessary information to make key decisions will be at a competitive disadvantage. Accelerating the process in order to act faster than the competition is key. If the time needed to complete a turnaround can be reduced by even a single day, less cost will be incurred and more revenue can be generated. The old saying "time is money" is entirely applicable here.

Figure 2 – Time to Obtain Critical Turnaround Data



Result – Faster Decisions and Quicker Response to Changing Conditions

As the above figure indicates, BP was able to accelerate turnaround decisions by having critical metrics at its fingertips in hours instead of weeks. After implementing CCTS, critical data could be obtained and processed faster, enabling key decisions to be made soon after a shift ended. Anyone familiar with complex projects knows that they can go off course due to the slightest of disruptions, and getting them back on track can be extremely difficult. Plant turnarounds are large and enormously complex undertakings that need to be managed and adjusted on a continuous basis. Having information available quickly allows management to stay on top of a potentially unwieldy situation. Having accurate and near-real-time access to contractor billing information allowed BP to save $20 million in 2008.

Unexpected Benefits from CCTS

In addition, the use of CCTS has been of benefit to BP in some unexpected ways. As Prewitt explains, "Our original reasons for implementation of CCTS were primarily administrative in nature, but we discovered that the timeliness and detail of cost information from CCTS has a profound impact on our ability to execute other strategies for cost control in all areas. We also find that there is great advantage to the use of CCTS to capture cost for work during not just turnarounds, but for all phases of plant operation."

In addition to saving on contractor costs, BP has improved predictability by using CCTS. The time-sensitive feedback loop is now able to keep up with the rapidly-changing dynamics of the turnaround itself, and management can forecast possible outcomes proactively instead of reacting to events that took place a week ago. BP has as close to real-time information as possible and can make the necessary adjustments accordingly.

BP's use of WorkTech's CCTS has allowed the company to use a single unified support mechanism to enable performance gains not obtained through prior improvements in planning, teamwork, and team composition. Besides giving the company unprecedented visibility into turnarounds on a timely basis, millions of dollars in contractor expenses were saved. The company hopes to extend use of CCTS to feed other information systems with critical information, further improving BP's ability to manage its operations.

About WorkTech and CCTS

WorkTech has been helping organizations reduce their costs and increase their efficiency with flexible time and attendance software since its founding in 1993. WorkTech's Contractor Cost Tracking System (CCTS) helps management keep track of the contractors within their workforce. Contractors have direct access to a system configured to validate their contract. Contractor employees directly enter time and attendance information as well as equipment usage, equipment rentals, and materials. Contract managers can immediately review submissions, approve time entries, request clarification, or reject the submission. Real-time reporting helps supervisors uncover inefficiencies in the operation and quickly make the necessary adjustments. Key benefits of CCTS include:

- Provides a single point of entry for all contractor costs
- Provides systematic electronic means to establish unit charges for labor, materials and rental equipment
- Validates all charges for contract compliance
- Simplifies approvals by contractor, and by approving vendor
- Eliminates invoice submission and processing (cost charges are entered directly into the system)
- Expedites payment to contractors (rejections only affect the individual rejected cost item)
- Provides immediate access for all with need to know the current costs of any unit of work
- Provides clear view of overall costs and atomic detail of all charges as they are occurring
- Provides audit trail of all charges and approvals to greatly simplify SOX compliance
- Provides means of reconciliation of contractor charged time to gate access time
- Eliminates lost revenue from contractor overcharges due to limited review of invoices

For more information about WorkTech and CCTS, call 1-617-625-5888 or visit us on the Web at www.WorkTech.com. For additional information on how BP Texas City is using CCTS to better control its spend and increase management visibility, see the related white paper titled ***How BP Texas City Increases Predictability and Controls Spend on Operations, Capital Projects, and Turnarounds***.

For more information

For more information on how WorkTech Time and Contractor Cost Tracking System can help you, please contact WorkTech at 617-625-5888 or visit us on the Web at www.WorkTech.com