WWW.WIPRO.COM

WIPRO
Applying Thought

ACHIEVING SUSTENANCE OF COLLABORATIVE WORK CENTRES IN THE UPSTREAM OIL & GAS INDUSTRY

Author: Kshitiz Kurrey - Upstream Oil & Gas Consultant

Table of contents

Executive Summary

Collaborative Work Centers (CWC) are being widely adopted by upstream oil & gas companies. They play a greater role in helping upstream oil & gas companies realize their goal of optimizing production, reducing cost & improving recovery.

CWC implementation requires a significant budget and a sufficiently long gestation period to go-live. Based on our involvement in implementing many CWC across organizations over a number of years, we see that there is a tendency to underestimate or ignore efforts, commitment & cost required for post-implementation sustainability of CWCs. This prevents organizations from realizing full value from their CWC implementation.

Due to high investment in terms of money, resources and time it becomes imperative that CWC, post implementation, should give tangible benefits. We believe that the sustenance aspect of a CWC implementation should be given careful attention in order to deliver value to the clients. Here, by sustenance we mean ability of business to successfully embed concepts of CWC into day to day operations & create a culture of continuous improvement.

This paper describes five critical elements that need to be present for post-implementation sustenance of any CWC program. These elements are:

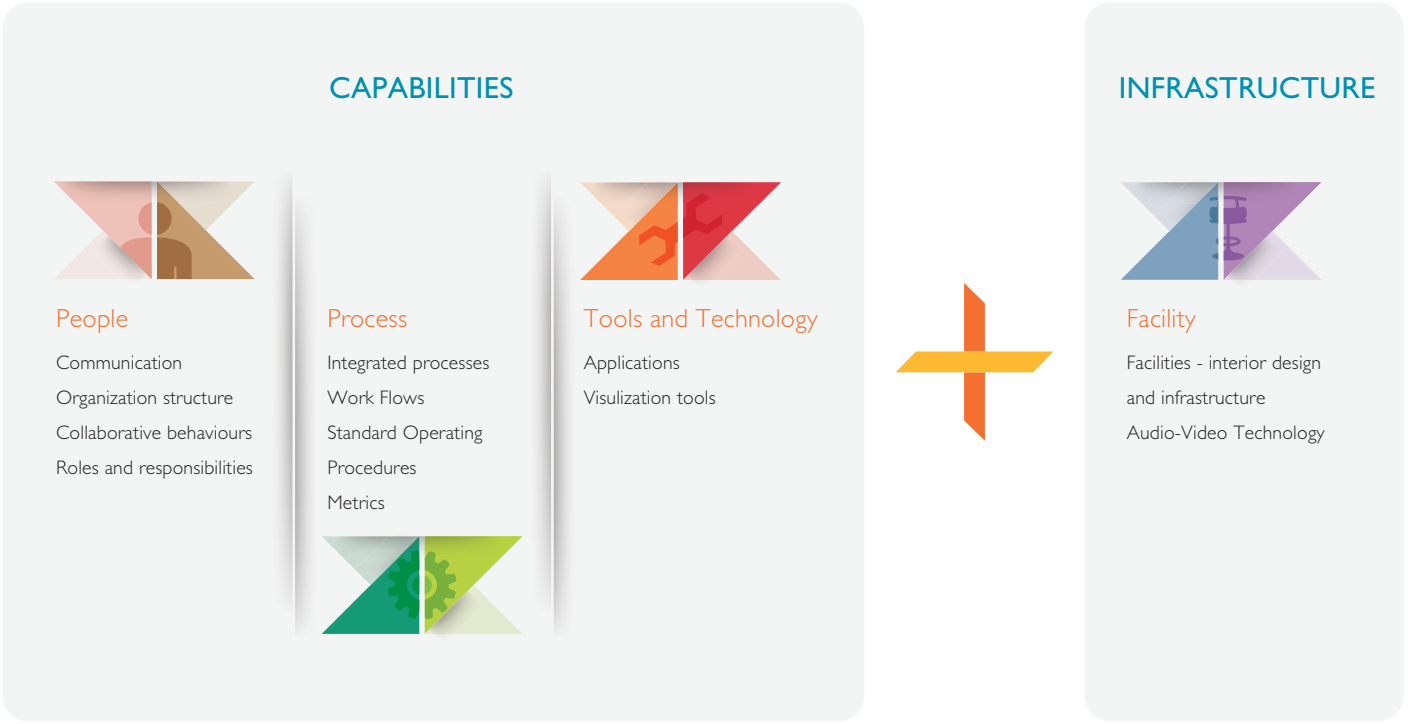
1. Develop adequate training programs to equip staff to use CWC effectively
2. Define the metrics to monitor and maximize CWC usage
3. Create a strong support system for proper maintenance and upgrade of infrastructure
4. Establish strong leadership commitment to ensure budget and direction
5. Seek regular feedback about the quality of CWC services

This paper also discusses the best practices around these key elements.

Introduction

A CWC consists of people, process and IT applications in a facility. The goal is to leverage real-time data and enhance collaboration to analyze and decide faster which allows business to perform better.

A CWC is combination of,



A CWC implementation broadly entails

- Physical structure or a CWC facility with audio-video technology
- Business process design
- Development of IT tools
- Change management

The gamut of activities involved in a CWC facility set up, right from constructing the physical brick and mortar with specific seating arrangements and audio visual equipment, to designing business process and developing of IT tools and applications with a continuous change management exercise suggests the enormity of its implementation.

Five elements discussed in this paper are concentrated towards post CWC implementation sustenance which if not practiced will result in CWC being just a very expensive office space with no significant ROI to the organization.

Achieving CWC sustenance- Key elements

Element 1: Develop adequate training programs to equip staff to use CWC effectively

Training is an integral part of CWC adoption. Following are the key areas where training is needed for working efficiently n CWC:

a. Technology

New technology tools like web enabled exception based surveillance or asset performance review dashboards are key enablers for the CWC staff to conduct their daily operations. Users have to move from legacy system/tools like excel based models. This requires dedicated training so that they can understand all the functionalities of the new system. Few common responses are that a new tool is too difficult to understand or the end-user training is not properly done. This results in running the legacy system in parallel and not using the new tools which limits the benefits of CWC.

b. Working in a collaborative team

Once CWC has been implemented, teams are seated differently and work in collaboration. If people do not buy-in to the collaborative philosophy and open plan office work culture, the benefits of CWC are lost. People should be trained to work as a cross-functional team of reservoir engineers, production technologists, geologists and geo-physicists. Field programmers should be trained to collaborate with the headquarter asset teams. If the old working practice of using mails and sporadic calls is still followed instead of video conferences and live data sharing, the collaboration principle will fail.

c. Processes

During the implementation of CWC, the business processes are aligned and standardized. These business processes detail the activities in the processes with roles and responsibilities. The collaboration in these processes are formalized and recorded. If people do not follow these realigned processes and continue to do their work in the old format, where more time is taken to come to a decision and where the decision loop takes more time to close, the advantage of business process standardization and realignment will not be leveraged.

Best Practices

After initial rounds of training, 'technology champions' should be identified for key functions or field organization. These people should carry the responsibility of imparting further training to their teams. A detailed end-user guide should be hosted within CWC which users can refer to if they have any queries. Refresher training plans should also be designed. If required an e-learning module can also be introduced.

For each process, the focal point should ensure that every activity is practiced as per the process definition. All collaboration should be electronically recorded and conducted as per the agenda.

An intranet portal should be set-up containing key documents like CWC fundamentals, site specific detailed business process, collaboration charters detailing trigger for that collaboration, roles and responsibilities, agenda of collaboration and expected outcome from the collaboration sessions. In addition to this, audio-video user guide, quick reference guide, do's and don'ts in an open plan office and helpline numbers should be displayed on the portal. Knowledge repository must be created to harvest knowledge and should be updated continuously.

Element 2: Define the metrics to monitor and maximize CWC usage

All the intended benefits of CWC cannot be realized if it is not used by the people. It is important to monitor CWC facility usage as per plan to ensure that its potential is being maximized. The management should establish a list of metrics to monitor the usage and take action in case of deviations from intended usage. One could also include a check list for any collaborative session.

Metrics should be number based to avoid names of any particular person or function. The key objective should be continuous improvement and not policing staff.

Some examples of metrics could include:

- Number of functional representatives in a collaboration session vis a vis intended ones
- Total number of collaboration sessions in a day
- Number of asset performance review meetings conducted
- Number of collaborative sessions with the field

- Number of items followed in the check-list

Periodic reports should be generated site wise and circulated to site heads and focal points. If a particular metric is below normal expectation or is showing constant degradation, a root cause analysis should be conducted and corrective measures like additional training, re-aligning business process or inclusion of additional roles or collaboration in business process should be sought.

Best Practice

Asset leadership should clearly communicate the objective of reporting to user community. Leadership should share results with the entire user community and discuss areas of improvement. This will help avoid any misunderstanding among the users and encourage them to openly share their concerns and ideas with the leadership.

Metrics, checklist and their reporting should be designed in such a way that they do not become a burden and distraction to the staff. Ideally, a SPOC should be nominated for each CWC site facility to take up the reporting task.

Care should be taken not to use a target based metrics such as 100 percent attendance of all the functions in all collaborative sessions. This would send the wrong signal to the staff and they would start looking at collaboration as a 'meet the number' exercise and this may create wrong behaviour.

Element 3: Create a strong support system for maintenance and upgrade of infrastructure

a. Facilities: The CWC is equipped with audio-video equipment such as info-channel, video conferencing facility and 3D projectors. The info-channel relays asset specific information on multiple screens within CWC. Video conferencing helps the teams at field and coast to be in constant touch. The Advanced Team Collaboration Room is used when a larger group of people are involved, which may or may not include people from both field and coast. Another example could be using a 3D projector for viewing 'asset models'.

Since these are high-end technology instruments, they require trained staff to maintain them. If equipment is not maintained and serviced regularly, they may not function to their full specification and might stop working. This will prevent the usage of CWC and force team to go back to their old ways of working.

b. IT Application and Tools: The end user software or performance dashboards should be maintained continuously and updated periodically. There should be an IT support team responsible for maintenance and upgrading the system. If this is not implemented, the end user will not be able to use the application or will stop trusting the system and start referring to the legacy system again. For example, in case of a dashboard, not seeing new well which has been added to the field or delay in the data coming from the data historian will prompt people not to use it.

Best Practice

The asset IT/Infrastructure division should have a set of people trained to troubleshoot faults in IT and physical infrastructure. These trained people should be stationed at hubs where they can provide solution with minimum turnaround time.

A functional consultant should be part of the maintenance team, who should act as a bridge between end-users and IT development team. New tools which are developed should be specific to the requirements and user friendly.

Once end users are comfortable using the tools and Infrastructure, and initial performance issues are fixed, local support can be consolidated into a hub and spoke support model with common support functions (help-desk for example) centralized and site specific support retained locally.

Element 4: Establish strong leadership commitment to manage change

Implementing CWC is a transformation program and the role of senior leadership becomes crucial in managing the change that comes along with it. Once CWC has gone live, leadership commitment and participation needs to be in place to ensure transition has happened smoothly and organizational mechanisms are in place to ensure maximum benefit from CWC.

The leadership should demonstrate their commitment to this new way of working. Regular meetings with staff, participation in team events organized by change managers should be part of the leadership agenda in early days of transition.

Constant communication is important here. The Leadership should try and foster an open communication culture to encourage people to talk

about their experience (positive or negative) with CWC and how it impacts their day-to-day work. Accessible and easy to use communication channels should be created to enable staff to register their concerns and feedback about the change. Any serious concern should be addressed in a timely manner.

Periodic reviews should be conducted with site teams to ascertain whether the CWC philosophy is being embraced and practiced.

Finally, the leadership must recognize that any change program takes time to yield results and must be patient

Best Practice

For better sustenance of change efforts, the asset leadership should work together with their respective team leads at asset sites and encourage them to take up the role of change leaders and evangelize the benefits of this new way of working.

Regular asset level communications (town-hall, all-hands meet etc.) conducted by the leadership should include CWC in their agenda and reiterate the vision and goals of the program.

Asset leadership should capture key gains and highlights and share them with the user community through periodic newsletters.

Element 5: Seek regular feedback about the quality of CWC services

Regular feedback about the quality of the CWC facility and associated services (audio-video, software etc.) should be sought from the business users. Feedback mechanisms such as online surveys, drop boxes, offline questionnaires etc., should be established. A task team should be formed to look into the suggestions and report to the end user community the follow-up action.

Best Practice

Site heads should establish a functional email to directly receive feedback from their team members, discuss them with the leadership and follow up with adequate action to address feedback.

Conclusion:

Achieving one or more of the five elements discussed in this paper would require significant commitment, resource and efforts from the management. The CWC program's overall budget should make adequate allowance for sustenance cost. Apart from the asset, the leadership should be involved throughout the post –implementation change adoption phase to ensure smooth organization transition and application of best practices in achieving the same.

This paper illustrates key sustenance elements that are critical to post implementation CWC success. Ensuring their implementation will lead to CWCs that add value, enhance the way of working and provide tangible benefits to the business.

About the Author

Kshitiz Kurrey has worked as Business Process Consultant for CWC implementation for a National Oil Company in Middle East. He has nearly 7 years of experience in business analysis and consulting. He holds a bachelor degree in Mechanical Engineering from NIT Silchar and an MBA from IIM Lucknow.

About Wipro Technologies

Wipro Technologies, the global IT business of Wipro Limited (NYSE:WIT) is a leading Information Technology, Consulting and Outsourcing company, that delivers solutions to enable its clients do business better. Wipro Technologies delivers winning business outcomes through its deep industry experience and a 360 degree view of "Business through Technology" – helping clients create successful and adaptive businesses. A company recognized globally for its comprehensive portfolio of services, a practitioner's approach to delivering innovation and an organization wide commitment to sustainability, Wipro Technologies has over 140,000 employees and clients across 54 countries.

For more information, please visit www.wipro.com or contact us at info@wipro.com

DO BUSINESS BETTER

WWW.WIPRO.COM

NYSE:WIT | OVER 140,000 EMPLOYEES | 54 COUNTRIES | CONSULTING | SYSTEM INTEGRATION | OUTSOURCING

WIPRO TECHNOLOGIES, DODDAKANNELLI, SARJAPUR ROAD, BANGALORE - 560 035, INDIA. TEL : +91 (80) 2844 0011, FAX : +91 (80) 2844 0256, email : info@wipro.com

North America South America United Kingdom Germany France Switzerland Poland Austria Sweden Finland Benelux Portugal Romania Japan Philippines Singapore Malaysia Australia China South Korea New Zealand

IND/TMPL/MAR2013-SEP2013