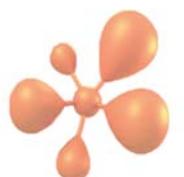




Collaborative Environments



Collaborative Environments

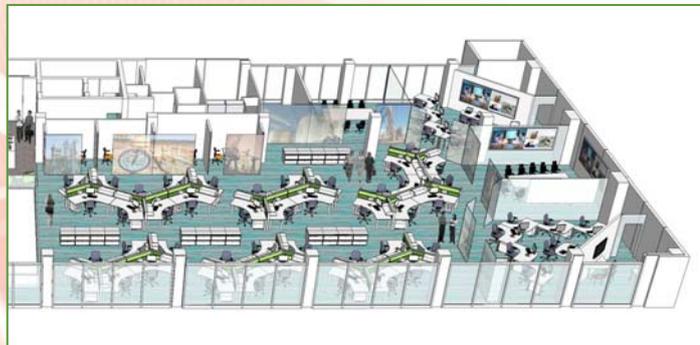
Collaborative Environments (CE) are multi-discipline decision environments, supporting drilling and production operations in real time. They are a new way of organising an operation, and typically will be a dedicated onshore environment to support one or more assets. Operations and drilling CEs are clustered to provide synergy, and technology is used to integrate operational site and office-based teams in a virtual environment. Live video and data from operational sites are streamed in real-time, 24x7, and enable collaboration between people across disciplines, companies and locations.

Collaboration is.....

- Enabling people to have better conversations
- Supporting and enhancing the decision-making of personnel
- Putting the right people into contact with each other at the right time
- Making the right decision faster
- Building shared asset and situational awareness
- Enabling clear priorities to be set and driven through
- Providing a simple mechanism to build relationships and the trust that goes with them

The kind of activities conducted in a Collaborative Environment would include:

- ✿ Well optimisation
- ✿ Production optimisation
- ✿ O&M optimisation
- ✿ Drilling performance optimisation
- ✿ Defect/fault resolution
- ✿ Gas nomination optimisation
- ✿ Oil pipeline throughput management
- ✿ Staff development



Other CEs can be built around remote expert support and may be on a regional or even global basis. A good example of this would be rotating equipment monitoring centres.

Single Asset or Corporate Wide?

Many operators use Collaborative Environments on an asset by asset basis, and we have delivered a significant number of these. There are however a number of factors that drive the move from single asset Collaboration Environments to corporate-wide, multi-asset support centres, including:



- ✿ Complex production systems
- ✿ Commonality and standardisation in and across assets
- ✿ End-to-end value chain approach
- ✿ Shortage of key technical expertise
- ✿ Desire to standardise key processes and capabilities across your company
- ✿ The opportunity to outsource non-core capabilities

Stepchange Global Consulting

is an independent consulting company delivering IO consulting services to the Energy and Natural Resources industries for over 10 years, with a proven track record in delivery aligned to the specific business objectives, circumstances and organisational model of their clients.



CE Success Factors

This new way of working is a transformation from the traditional methodology, and there are a number of factors that must be taken into consideration when looking at whether a CE programme is successful.

The ability to collaborate:

- ❁ One-to-one, one-to-many, many-to-many
- ❁ Always on VC to build situational awareness
- ❁ Full-time occupancy of the rooms – the entire asset team is involved

Modes of working:

- ❁ Planned and executed
- ❁ Synchronised way of working

Organisational alignment:

- ❁ Team organisation needs to be aligned to collaborative way of working
- ❁ Often a move to multi-discipline asset teams
- ❁ One team approach i.e. the teams in the field and the office are the same team
- ❁ Performance incentives for the teams need to be aligned

Change management and coaching to change the way of working



Remote Control Centre for Mining Operation

Stepchange Global

Stepchange Global is the recognised industry expert in the area of collaborative working, with an impressive track record for implementing a sustainable change in the way people work. Our experience in drilling, operations, facilities and subsurface has enabled us to deliver operations, drilling and expert centres:

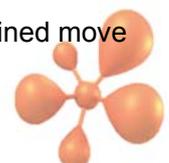
- ❁ For BP, BG Group, Statoil, Talisman, Santos, COP, BHP Billiton, KPOC and others
- ❁ In USA, UK, Norway, Azerbaijan, Angola, Trinidad, Australia, Indonesia and others

We have delivered CEs on an asset by asset basis, or corporate-wide, which involve:

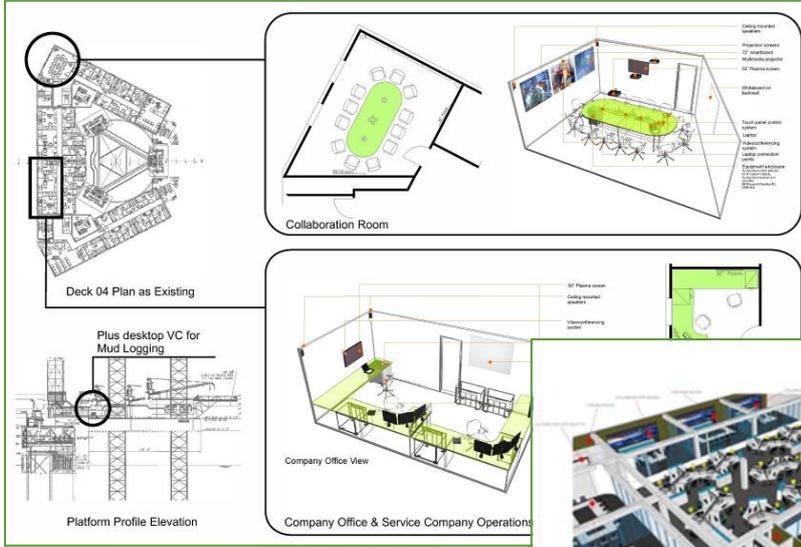
- ❁ Design around the teams and their way of working
- ❁ Business and value case generation
- ❁ People, Process, Technology and Organisational design
- ❁ Programme and project management through to installation
- ❁ Complete building design incorporating Collaborative Environments
- ❁ Physical environment specifications for procurement
- ❁ Technology selection and specification for Collaborative Environments
- ❁ Start-up and readiness assessments
- ❁ Change management before, during and after the installation to ensure a sustained move to a new way of working

Collaboration is not.....

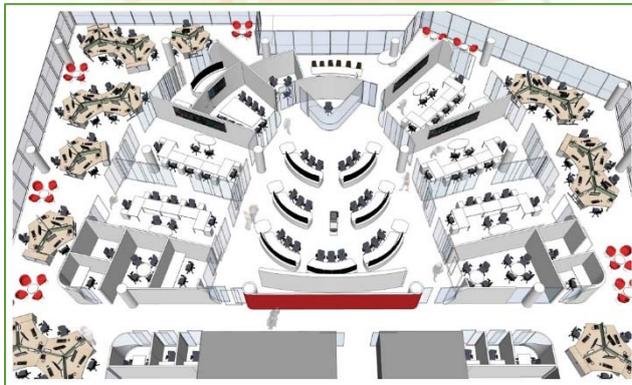
- ❑ A proposal to re-organise
- ❑ An operational control centre
- ❑ A technology project
- ❑ A head count reduction exercise
- ❑ Long-term planning (> three months)
- ❑ Going to solve every systemic process issue within organisations
- ❑ An exercise to compromise safety and circumvent existing standards



Project Examples:



Field operation centres, on drilling rigs and at operational sites



Most recently we have designed what we believe to be the largest oil and gas collaborative environment for over 500 people across 5 floors of a brand new building

We also have the capability to design entire buildings from scratch

