

DIGITAL LEAN IMPLEMENTATION

– Oil & Gas Sector

CLIENT CHALLENGE

The Engineering operations of a major UK-based Oil & Gas Fabrication facility was unhappy with the performance and governance of their operational System. The business recently purchased as a long-established business, was trapped in an archaic manufacturing culture with poor management and operational processes. OPEX Digital were engaged to support improvement of the Production Management System in terms of Functionality, Process and Governance, thereby transforming the company image and systems into a world class operation.

OPEX DIGITAL SOLUTION

OPEX Digital deployed the application across a multi-functional management team to ensure all departments were aligned to support the Engineering Operations.

The OPEX Digital solution was introduced to the operations teams and linked together via 5 interactive smart boards. Twelve key management personnel were trained and supported to establish the following digital functionality:

- Shop Floor Management Digital KPI Dashboards
- Planning and Control
- Escalation Process
- Defect Reporting and Problem Solving
- Lean Operational Excellence

Particular attention was paid to culture and change management techniques.

PROJECT REALISATION

OPEX Digital supported this client remotely as requested over a twelve-month programme of Process Alignment and System Enhancement activities aimed at realising the full benefits potential of a digital Operational Excellence Management System.

Potential Enhancements to the digital solution were prioritised based on an assessment of cost, benefit & feasibility, conducted jointly with client Senior Management Team.

A Governance Structure was implemented, involving a newly created Operational Excellence Manager, supported by a Super User, to provide for Client ownership and sustainability of the improvements. A regular Opex Digital Health Check activity was instigated as part of this function.

In addition OPEX Digital supported these initiatives through a rolling online training programme and a feedback forum for all users to communicate project progress.

Some specific activities were:

- Development of a pilot Shop Floor Data Collection System, based on real time touch screen technology. When fully implemented this will eliminate considerable paper based administrative processes and improve the quality of engineering information.
- Developed an enhanced Operational Reporting functionality and processes, including standardised defect reporting and a consolidation of maintenance planning and competency management within the Shop-floor environment.
- Developing a proposed Whole Life Cost Model, which when fully implemented will provide real time critical KPIs (e.g. cost / Utilisation), with full drill down capability to specific cost drivers and engineering activities.

OPEX DIGITAL PROJECT IMPACT

As with all OPEX Digital interventions, the overall programme was designed to leave a legacy of self-sustaining improvement. Therefore, as well as delivering outstanding operational performance improvement we leave behind:

- A strong Governance and support structure (Opex Manager, Super User);
- An integrated, company-wide, rather than plant-based, engineering culture, supported by relevant standardised process documentation.
- Greater visibility of the extended enterprise (suppliers, subcontractors) within the system, and recognition of their importance in the Engineering function.

SUMMARY

OPEX Digital have an ongoing relationship with this important client. The parent group has decided at a board level to utilise this project as a model for future rollouts, and a differentiator in upcoming franchise bids within the Oil & Gas sector. Further assignments are thereby anticipated within both the immediate client and the broader parent group.

OPEX Digital engagements look to enhance the effectiveness of:

- Integration of business system and operating process
- Non value added activity elimination

The Oil & Gas Sector project achieved this.