Lean water tools:
• Lean Utilities Programme

Before:
Untapped staff potential was developed as part of the Lean Utilities Programme with 10 participants from Vistakon taking place in the Lean Utilities Programme. The participants were each challenged to identify and implement a project to improve resource efficiency at the firm, which represented at least €50,000 in cost avoidance for each project.

After:
The participants returned to the firm to develop and present their projects, using Lean tools & methodologies. Upon completion, each participant presented their findings to management. According to the latest review, the projects presented by the participants represented approximately €400,000 in verified savings, with potential savings for the firm in excess of €1.2m.

Benefits:
• The firm makes significant yearly savings at minimal expense
• A culture of greater resource awareness is developed among the staff
• The participants become more actively involved in the improvement of the firm and receive a Green Belt award upon successful completion of the course
• Other staff members are encouraged to participate in the Lean Utilities Programme and develop their ideas on implementing more effective resource management within the firm
Before:
As part of its major production lines, the firm uses large amounts of deionised water (DI) in the production and cleaning of products, such as contact lenses. This DI water is produced on-site by the processing of well-sourced water, increasing the water-related cost of the product. Despite this, DI water usage had not been thoroughly analysed or reported on.

After:
As part of a corporate-wide initiative to improve efficiency, a participant in the Lean Utilities Programme decided to investigate deionised water consumption as a potential reduction opportunity. To begin, an analysis of base DI water consumption was carried out on all production lines using DI water and a project charter was drawn up, outlining the preliminary findings and the various parameters of the project.

Benefits:
- The discrepancies found between the different lines of DI water usage provided greater insight into the consumption and efficiency of each process
- Adjustments were made to certain DI water configurations to produce verified savings of over €150,000
- When the initial investigation was carried out, a number of flow meters where discovered to not be relaying DI water usage readings to the central monitoring system, which highlighted a data gap in the firm’s resource management infrastructure
Lean water tools:
- Cost Analytics

Before:
Johnson & Johnson’s Limerick site is a highly automated facility utilising state-of-the-art technologies. However, when it came to water and energy usage, the firm was data rich but information poor with limited actionable insight. Data was held across a variety of systems with no unified tracking or reporting of critical water and energy KPIs that integrated volume, quality and cost parameters.

After:
Central-Solutions took real-time data from multiple systems (LIMS, RMT and SCADA), then consolidated it into a single cloud-database. Resource consumption data was integrated into a central dashboard, which displayed agreed KPIs and metrics and allowed for automated reporting. The database is accessible to other J&J sites, enabling convenient comparison of efficiency between multiple sites. Cutting edge data technologies are employed e.g. Amazon Redshift, Hadoop, Tableau.

Benefits:
- Real-time data consolidation provided actionable information and streamlined reporting activities
- Improvement areas identified that were addressed resulted in cost reductions of €120,000 per year
- The dashboard will play a key role in measuring the effectiveness of future improvement projects
- Best-in-class utilities data management infrastructure was achieved while still adhering to Corporate IT roadmaps, cloud policies and site specific needs
- The centrally supported shared infrastructure for all Irish J&J sites will further reduce sites’ costs and improve the competitiveness of Irish sites

“...accessibility to necessary information via cloud network facilitates Best-In-Class methods and management.”

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