REALIZATION℠

From Multitasking to Synchronized Engineering

Leading glass container manufacturer improves its engineering performance, delivering project with 60% reduction in cycle times.

Client Background and Business Situation

Our client, the world's leading manufacturer and supplier of glass bottles and containers, conducts four types of projects in its plant engineering group:

- Routine furnace maintenance
- Furnace modification/expansion
- New furnace design and installation
- Machine projects generated in response to business needs of the customers

Across the board, they had the need to improve engineering performance to:

- Reduce the backlog of all four types of plant improvement projects
- Reduce expediting costs caused by engineering delays

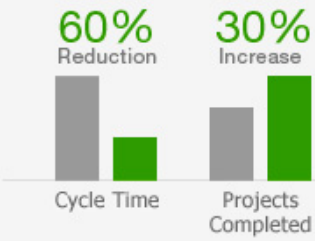
The Multitasking Problem in Engineering

Work schedules had to be synchronized for engineers and experts spread across engineering facilities in the US, Europe, South America and Australia. Working with Realization, the client identified the following opportunities to reduce multitasking and increase engineering performance.

- Priority conflicts within and across departments (mechanical, civil, electrical, furnace …) caused engineers to switch back and forth between designs, which prolonged tasks, hurt quality and reduced productivity.
- Experts were spread across too many projects and were not available when engineers needed them. The result was a vicious cycle in which engineers started even more work while waiting for experts.
- Constant rushing and firefighting left no time to fully scope and prepare before starting any project, only exacerbating the "start-and-stop" phenomenon during execution.

Results

The client reduced its cycle time by 60% (furnace projects went from 6 months to 2.5 months) and increased number of projects completed by 30%.



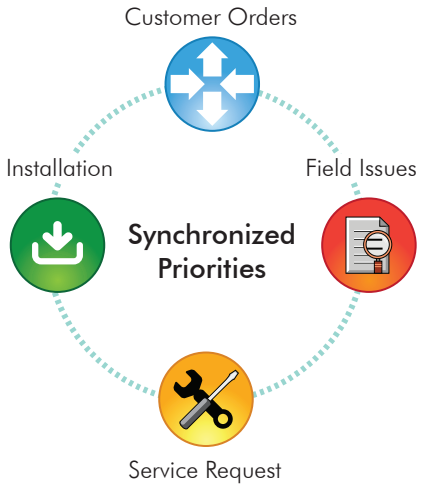
Realization Technologies, Inc. • 125 South Market Street, San Jose, CA 95113
T: 408.271.1720 • E: info@realization.com

How Engineering Was Synchronized

Realization implemented a synchronization system that replaced conflicting priorities with a single set of priorities for everyone.

- Priorities conflicts were resolved by replacing fixed start and end dates for tasks with flexible task schedules that are automatically adjusted as uncertainties happen.
- Multitasking of experts was reduced by consolidating “checklists” into higher level tasks (e.g., a set of drawings for a module), and by reducing the total number of projects in execution at any time.
- A “full-kitting” process was implemented to ensure all the necessary inputs were available before starting a project.

Engineers now finish what they start with minimal interruption, thereby improving quality and increasing speed and productivity.



Results

- 30% increase in number of projects completed.
- 60% reduction in cycle times (furnace projects went from 6 months to 2.5 months).

If doing projects 20-50% faster is vital for your organization, contact us at +1.408.271.5100 to get started.