REMOTE VIRTUAL OFFICE: DISTRIBUTED ENGINEERING SOLUTION

Engage Resources and Expertise Regardless of Location to Reduce Schedule, Cost and Risk

"Important company drivers for virtual teams are to reduce travel and office real estate (61%) and allow selection of employee hires without concern for where they live (59%)."

Virtual Work Environments in the Post-Recession Era
Brandman University
Forrester Consulting
Dec. 2010

What if you could...

- Access project resources and expertise regardless of where they are located in the world?
- Reduce the time and travel for people working on automation projects?
- Compress project schedules, optimize costs, and maximize capital efficiency?
- Ensure software engineering started as soon as possible, independent of procuring project hardware?

To execute automation projects, you are under pressure to reduce project cycle times and lower capital project costs in order to compete globally and reach first production as soon as possible. The worldwide shortage of skilled workers relative to demand make it imperative that you be able to gain access and secure the resources and expertise required to define project requirements, plan to mitigate risk, and execute project plans successfully.

PRESSURE TO REDUCE PROJECT CYCLE TIMES AND SCHEDULE RISK

Increased global competition puts pressure to be first to market, while maximizing production and profitability. In general, projects have grown more complex with shorter cycle times and now may involve multiple owners, engineering contractors, and suppliers in multiple locations, creating challenges for planning, communication, collaboration, and execution. Also, procuring all of the physical hardware to begin configuration and prototyping could be a significant schedule dependency and cause startup or schedule delays.The overall result is more project schedule risk with a higher cost of disruption, lower return-on-investment, and more severe consequences if project execution falters.

ABILITY TO EFFECTIVELY ENGAGE SCARCE PROJECT RESOURCES

A worldwide shortage of skilled workers relative to demand adds new challenges to securing the qualified resources to execute a project or to operate and maintain a plant. Many of our customers have either eliminated or radically reduced the size of their internal automation and control engineering departments. Add to that the imminent wave of retiring skilled workers and lack of experience in areas where plants are being built, and project resources may not be available, locally or in a common location. It may be difficult to find a partner with the qualified resources, experience, and expertise available that you need to execute your project.

CHALLENGE TO REDUCE PROJECT EXECUTION COST

The more time it takes to execute a project and startup, the longer it takes to achieve profitability, and it reduces the efficiency of capital spent on the project. Even with contracting an automation specialist to execute a project, there are tasks that must be executed by your resources including project reviews, functional reviews, and acceptance tests. These types of tasks could require significant time, travel, out-of-pocket expense, and disruption to your internal workforce from their day-to-day activities and work on other priorities. Also, hardware required to be procured early in a project could become dated and be out of warranty or even need to be replaced before going into service, resulting in higher project or earlier maintenance costs incurred.

EMERSON™
Process Management

REMOTE VIRTUAL OFFICE: A SOLUTION FOR GLOBALLY DISTRIBUTED ENGINEERING

ACCESS EXPERTISE AND RESOURCES INDEPENDENT OF LOCATION

Emerson has invested in a cost efficient, rapidly deployed and professionally supported project engineering environment, that leverages Emerson's global service capabilities and enables engineering, third party testing, and customer Factory Acceptance Tests (FAT) independent of location, all using a common infrastructure for hundreds of parallel projects. Any Emerson resource worldwide assigned to a project has access to its unique configuration database. Any of Emerson's 6800 project and service professionals distributed globally could be deployed on a project, and our Project Management Office (PMO) provides global management of Remote Virtual Office (RVO) knowledge to share best practices and processes, to ensure that the Emerson global project teams can execute projects effectively.

LEVERAGING CENTRALIZED VIRTUALIZATION TECHNOLOGY

Emerson leverages virtualization technology to provide project teams, clients, and suppliers the ability to effectively collaborate independent of location in a virtual engineering and testing environment. The architecture is based on several cooperating RVO centers with server farms that Emerson has invested in and located strategically around the world that provide intelligent redundancy and virtual engineering systems for use by all project resources. Using virtualization technology allows Emerson to configure your automation system to your projects exact specifications in a virtual environment without the need for physical project hardware. Virtualization allows faster project startup by eliminating physical hardware dependency.

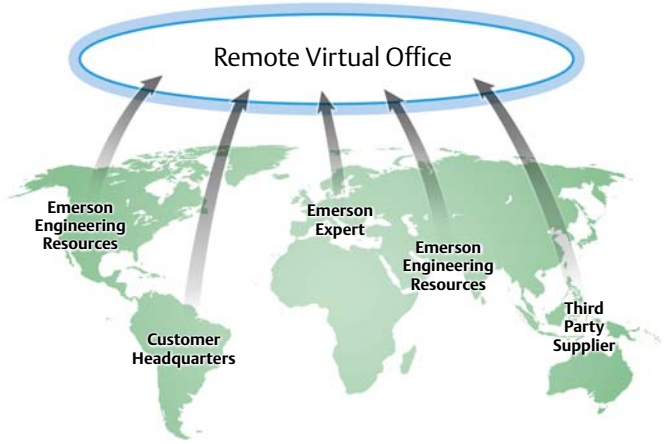
REMOTE OFFSITE PROTOTYPING AND TESTING

Since the RVO engineering infrastructure is available on demand, configuration and prototyping can start day one of a project. Emerson's RVO provides considerable design flexibility and collaboration capabilities, allowing customers or suppliers without leaving their premises to securely collaborate and cooperate in developing designs, participate in review of designs, and even conduct important testing such as FAT or integration tests with sub-systems or DeltaV controllers built into skids. External access by customers, suppliers and third parties offers the potential to reduce errors and rework, reduce design duration to shorten project schedules, provide flexibility to manage key changes throughout the design process, reduce travel and reduce overall project design costs.

Emerson's investment in our RVO infrastructure for global distributed engineering and associated support organization is a commitment to reduce your overall project risk and minimize any disruption impact to a project's schedule.

"Emerson's Remote Virtual Office allowed us to collaborate with experts and resources from multiple sites to conduct our Factory Acceptance Test (FAT). The result was less travel and site disturbance to our operations. Also, more operators could participate remotely which improved the new automation system adoption."

François Davin
Instrumentation, Electrical and Automation Manager—Engineering Service
Sanofi



For more information, contact your local sales office or visit:
www.EmersonProcess.com

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