Key Facts

Company: WorleyParsons
Website: www.worleyparsons.com
Industry: resources, energy, and complex process
Country: Australia
Products Used: Intergraph Smart® Electrical

Key Benefits:
- Working in single database
- Easily accommodating multiple users
- Promoting consistency
- Reducing human errors
- Decreasing man hours
- Simplifying checking
- Improving efficiency
- Increasing accuracy

BOOSTING PRODUCTIVITY FOR CABLE PROJECTS

WorleyParsons achieves better management of change and greater data accuracy

IDENTIFYING GOALS

WorleyParsons, headquartered in North Sydney, Australia, is a leading provider of professional services to the resource and energy sectors, and to complex process industries. Its services cover the full asset spectrum in size and lifestyle, from small brownfield service contracts to mega greenfield projects. Its business units include hydrocarbons, minerals, metals and chemicals, and infrastructure. WorleyParsons operates 165 offices in more than 40 countries with approximately 38,000 staff members.

WorleyParsons had its own in-house tools to manage cable projects, which were challenged by the numerous Microsoft® Excel® spreadsheets utilized in tracking the amount of cable needed for projects. These spreadsheets were managed manually by numerous users across multiple offices. The management of change, especially across the different locations, was relatively impossible with the spreadsheet-type solution.

As WorleyParsons’ projects grew larger and more complex, the in-house tools were challenged. It came time for WorleyParsons to move from AutoCAD® and in-house tools to the adoption of commercially proven products with broad user bases to carry its company forward in capabilities, to be ready for the next challenge.

OVERCOMING CHALLENGES

After evaluating several options, WorleyParsons chose Intergraph Smart® Electrical, a task-specific, rule-driven, and data-centric solution. The Hexagon PPM software helps users design and maintain a safe, reliable power distribution system from load identification to plant startup.
A new software solution pushed WorleyParsons out of its comfort zone. A crucial element to implementation is overcoming individuals’ resistance to change.

Bringing the design team out of its comfort zone was one of WorleyParsons’ largest implementation challenges. WorleyParsons began by only introducing a small part of the software’s available functionality to get over the acceptance hurdle. Its designers and engineers were exposed to the solution in a test lab situation based on a portion of a previously completed project. The team worked with familiar deliverables and followed standard project workflows. By actually working with Smart Electrical, the designers and engineers gained confidence in the solution because they saw it could reliably create the deliverables. Their collective mindset changed once they saw the benefits of using the software.

When each office utilizes its own solution, cohesive consolidation of data is difficult. Data also runs the risk of getting lost. WorleyParsons provided training labs to its design and engineering teams prior to a project entering detail design. The training labs included the lead engineer, the engineering team, the design lead, and the design team. In all, the labs consisted of three engineers and three designers. By the end of the labs, the teams were able to produce the same deliverables through Smart Electrical that they were able to produce from their old solutions.

After the training labs, the tides turned, and perceptions and attitudes changed. The positive results spread, and other engineers and designers began requesting to use Smart Electrical. Clients were soon requesting to use the solution on their projects as well.

REALIZING RESULTS

The software’s data-centric approach helps create a rule-based electrical system. Smart Electrical steadily performs relational operations and can handle enormous amounts of data input by both engineers and designers on projects with sizeable cable quantities.

One of the major benefits of Smart Electrical is that the product is not home-grown or from a small company.

Instead, it is fully supported by Hexagon PPM. This gave WorleyParsons confidence that the solution will be supported in the future.

WorleyParsons projects are growing larger and are executed in multiple locations. Smart Electrical is a time-tested and proven commercial solution that is the obvious choice. It is valuable to have the support from its own WorleyParsons global Smart Electrical community along with the advantages of local and global support provided by Intergraph, a trusted international company.

Standardizing on Smart Electrical has increased WorleyParsons’ productivity. Ultimately, Smart Electrical helps the company save money, reduce errors, and increase productivity.

MOVING FORWARD

As WorleyParsons looks to future activities, it plans to expand the range of deliverables from Smart Electrical. It has goals to interface with Intergraph Smart Instrumentation, Intergraph Smart Materials, and Intergraph Smart 3D to further increase the relational exchange of data.

WorleyParsons recently began its first project that will use Smart 3D. It can use Smart 3D for a number of tasks, such as cable management.

Leveraging data to other disciplines is a great advantage to using Hexagon PPM Smart Solutions, and will increase the value of individual tools. These interfaces will offer a number of benefits, including:

- Better delivery
- Refined reporting
- Support
- Tracking to the project, client, and construction

With Smart Electrical, WorleyParsons is ready to successfully execute the projects of tomorrow.

ABOUT HEXAGON

Hexagon is a global leader in digital solutions that create Autonomous Connected Ecosystems (ACE). Our industry-specific solutions create smart digital realities that improve productivity and quality across manufacturing, infrastructure, safety and mobility applications.

Hexagon’s PPM division empowers its clients to transform unstructured information into a smart digital asset to visualize, build and manage structures and facilities of all complexities, ensuring safe and efficient operation throughout the entire lifecycle.

Hexagon (Nasdaq Stockholm: HEXA B) has approximately 19,000 employees in 50 countries and net sales of approximately 3.5bn EUR. Learn more at hexagon.com and follow us @HexagonAB.