

Pöyry is a global consulting and engineering firm based in Finland that offers services related to consulting, project development and implementation, and operations management and maintenance planning in all of its business sectors. Pöyry has developed powerful tools for project management and administration, applying the most modern information management and browser-based publishing methods, which ensure effective management of even the most demanding investment projects.

Background

Oy Hartwall Ab (Hartwall) is one of Finland's biggest beverage suppliers and part of the British Scottish & Newcastle Group, the largest brewing company in Europe. Hartwall came to Pöyry for their plant engineering capabilities as it looked to build a new production plant in Lahti, Finland. The plant would eventually become the most highly automated brewery and beverage factory in the world.

Pöyry was the main engineering contractor for the project and involved seven of its worldwide offices to assist in the assignment. The project began with pre-engineering in 2000 and ended with the completion of the plant in the fall of 2003.

With a budget of \$370 million (US), Pöyry needed to execute an array of engineering services including: project management, process and plant engineering, process electrification and automation, permitting, construction and document management and structural and architectural design.

Challenges

Pöyry experienced several challenges in terms of scope changes, budget constraints and logistical problems throughout the duration of the project. An innovative and forward thinking organization, Hartwall regularly introduced new ways to enhance the project, and requested changes be made to the construction plans once the project had commenced. Introducing new ideas mid development impacted the construction of the plant, which, in turn, forced the Pöyry team to make changes and revisions throughout the project, stretching budget and timeline. Since Pöyry was tasked by Hartwall to design and build what would ultimately be the most highly automated beverage factory of its kind, the overall size and range of the project itself presented communication and organizational challenges. To aid with the vast scope of the project, Pöyry enlisted the help of seven of its offices. Coordinating the collaboration of this many offices proved to be a challenge.

Solutions

Pöyry used several processes and tools to resolve concerns with changing project plans and the massive project scope. By using *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)* and establishing a Project Management Office (PMO), the organization was able to coordinate changes and prevent cost overruns. In addition, Pöyry developed a format for the dissemination of information which alleviated concerns with interoffice communication. Pöyry also mandated that all key internal project managers participate in project management courses and adhere to the *PMBOK® Guide*.

The Pöyry team used the principles of *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)* to establish a Project Management Office (PMO) and a communications plan. The PMO served as the foundation for the project, and was held accountable for overall coordination, resource management, procurement, expediting, time and cost management. Since Hartwall made changes throughout the execution of the project, the PMO was able to prevent cost overruns and make last minute project changes as necessary without the need for additional funding. The PMO served as an organized resource for the team and turned requested client changes into manageable alterations that the team could easily and effectively control.

To ensure that all seven Pöyry offices were aligned with one another and the client's needs, the Pöyry team developed a separate communications plan for the project. The communication was carried out through a specific flow of information plan and the project leaders were clearly defined so team members knew who to involve with specific issues. As part of the communications plan, separate task groups within the large Pöyry team met regularly to ensure individual projects were running on time and within budget. The strategic communications plan solved and prevented problems and made integration among the seven Pöyry offices practically seamless.

Results

The success of the project is evident as Pöyry engineered what is now the most highly automated brewery and beverage factory in the world. Hartwall's ultra-modern production Lahti based plant was put to full use in the spring of 2003 and has since manufactured approximately 350 million liters of beverages a year.

Through the use of trusted and effective project management techniques, the Pöyry team kept the project within budget and finished on schedule. As a result, Pöyry has maintained Hartwall as a valuable and profitable client.

Key Achievements

- Through strategic planning and successful project management execution, the Lahti Hartwall plant is the largest and most efficient plant of its kind in the world.
 - The plant manufactures about 350 million liters of beverages a year and has six bottling lines, one keg line, one canning line, one Bag/in/Box line and three lines for sorting empty bottles.
 - The plant has about 36,000 pallet slots, making it the biggest of its kind in Finland, and the logistics center delivers about 400 million liters of the company's products annually.
- This project marked the first time seven Pöyry offices worked successfully together on a single project.
- Despite consistent project changes and revisions, the project team was able to complete the project on time by leveraging trusted project management techniques.



Source: *Pöyry Business Area Chemical Industry*, Finland, email: chemical@poyry.com