

Case Study

Microsoft Partner Application Development Project and Portfolio Management



Enterprise Project Management for Research & Development

At the Vaillant Group, the R&D department forms the heart of the business - and it has highly qualified teams around the globe to ensure that the company upholds its track record in innovation. With a range of different brands in Europe and beyond, the company found it a challenge to manage planning for new products, prioritize the projects, and assign multi-location development teams to each one. Today, the Vaillant Group has a centralized, enterprise-wide project management system for R&D that is shared by all its offices and integrated with core business systems like SAP. The solution delivers a deep level of insight that has significantly increased project management efficiency throughout the company. It also provides a wide range of customizable reports at the click of a button, so anyone can check how a project is progressing with just the right level of information for their needs. Everyone in R&D agrees that the Microsoft PPM system delivers the information they need to avoid bottlenecks and ensure smooth and accurate resource allocation as a result.



When Johann Vaillant - an ambitious, 23-year-old tailor's son from Remscheid in Germany - started his company in 1874, he was determined to bring the convenience of on-tap hot water to millions of ordinary families. With his "closed-system" gas boiler, he launched a groundbreaking new technology that kept the combustion gases separate from the water they were heating, making the whole system much safer. Later on, one of his company's most successful inventions was central heating. Until then, each room had to be equipped with its own oven or fireplace - but engineers at the Vaillant Group thought it would be far more efficient to have a boiler in one central location and pump hot water into simple radiators in the rest of the house. These were just the start

of an astonishing range of inventions in the years and decades that followed, and the pioneering spirit and commitment to customer satisfaction is still very much alive in the company today. With some € 2.3 bn in sales and more than 12,000 employees, the Vaillant Group maintains production and R&D facilities in many European countries and in China

No man is an island

The Vaillant Group has been using SAP as its central business system for many years and - like many other companies - thought that the logical solution to the need for a project management system would be to go down the SAP route as well. However, Vaillant Group staff soon found that there was only limited scope for operational project planning and monitoring in the systems and decided to look at standalone systems instead.

The company did have a mixture of isolated instances of Microsoft Project 2003, other standalone project management tools as well as Excel in use within certain teams, but the information in these systems was limited to the workgroups involved and was not shared with the rest of the R&D department. As a result, the resource planning process for a new project meant contacting or visiting each R&D team in each country, then consolidating all the information into a resource allocation plan. In addition, the Vaillant

Industry

Heating Ventilation Air-conditioning

Solution Components

- Microsoft PPM 2010
- Microsoft SharePoint 2010
- TPG PSLink
- TPG ProjectLink
- -TPG ResourceLink
- TPG MTA Server

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Group's existing systems could not keep pace with the increasing complexity of development requirements, particularly with regard to components to be used in multiple product lines.

SAP integration a must-have

"It was at that point in 2009 – that we sat down with the project managers and asked them what their requirements for a project management system would be," says Jörn Fritsche, Project Manager in Vaillant Group R&D Support. "One of their first comments was that they wanted the look and feel of the system to closely resemble Microsoft Project."



Jörn Fritsche, Project Manager in Vaillant Group R&D Support

A further requirement was that the system should be integrated with SAP to automate data sharing and minimize the need for project staff to work with SAP themselves. Fritsche and a crossfunctional validation team took a close look at Microsoft Project and confirmed that it would meet most of the requirements – but not all. As it does not offer integration with SAP as standard, Fritsche talked to TPG and one other company as both provide a proven integration solution.

Putting the systems through their paces

"We installed and ran the two solutions for a week each," notes Jörn Fritsche. "We wanted to put the systems through their paces in a real-life environment and be sure that the two companies really understood our requirements." A multi-disciplinary group comprising staff from R&D project management, IT and R&D Controlling recorded the results of their tests in a detailed evaluation matrix. Aside from TPG PSLink, the interface between SAP and Microsoft Project, Jörn Fritsche had noted that TPG

had a number of other add-on products that would extend the functionality of the Microsoft Project system and improve productivity at the Vaillant Group. These included TPG ProjectLink, which enables project managers to share information about schedules between different projects. The Vaillant Group tested the two products simultaneously.

Proof-of-Concept followed by go-live

"Together with specialists from TPG, we implemented the proof-of-concept system with TPG PSLink and TPG ProjectLink during summer 2010," comments Fritsche. "We wanted to verify that project managers and other project-related staff would be able to work with the system with no problem and ensure that acceptance levels would be as high as possible." Each project worker entered his or her hours into the timesheet and this information was exported to SAP. Since the Vaillant Group runs projects with mixed teams across various R&D sites, the hours needed to be posted to the appropriate country-code. The correct distribution of actual work from the EPM into SAP company codes was handled by TPG PSLink automatically, in accordance with country specific accounting rules. The Vaillant Group then validated what had become a much more streamlined process. It also added two further TPG products to the system -TPG ResourceLink, which imports resource data from SAP and other sources and populates the Microsoft Project Server enterprise resource pool, and TPG MTA Server, a milestone trend analysis solution that lets project managers see how milestones are progressing over time.

Centralized solution reaching out to all offices

Following training courses in all locations in December 2010 the grand day arrived on 1.1.2011 with the whole system going into production – Microsoft Project, TPG PSLink, TPG ResourceLink, TPG ProjectLink, TPG MTA Server and a number of tailored reports. The Microsoft PPM solution went live in all of Vaillant's R&D sites simultaneously. These include the Remscheid headquarters as well as France, Spain, Slovakia and Turkey, followed by China in spring 2011.

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The Company: The Vaillant Group is an international heating, ventilation and air-conditioning technology concern based in Remscheid, Germany. As one of the world's market and technology leaders, it develops and produces tailor-made products, systems and services for domestic comfort. The product portfolio ranges from efficient heating appliances based on customary fuels to system solutions for using regenerative energy sources. In financial year 2011 the company, which has been family-owned since its founding in 1874, achieved with about 12,000 employees sales totaling €2.3 billion.

The Challenge: The Vaillant Group is an innovation-driven company and its R&D department forms the core of the business. With R&D facilities in many European countries and in China, the company was using isolated project management systems that were not interconnected. The company initially worked with SAP project management, which proved a challenge for R&D staff. The Vaillant Group required a centralized project man-

agement system that would streamline resource planning and management throughout the group and deliver insight about project status and risks at any time.

The Solution: The enterprise management solution is based on Microsoft Project Server with the addition of several TPG products to extend the functionality of the system. Notably, the Vaillant Group is using TPG PSLink for integrating SAP with Microsoft Project; TPG ResourceLink to populate the enterprise resource pool with data from any source, including SAP; TPG ProjectLink for sharing information about schedules, across projects; and TPG MTA Server for on-demand milestone trend analysis.

The Benefits: Significant increase in insight into resource availability and workloads, ensuring that projects are completed on time and on budget. Flexible reporting with different levels of detail depending on the recipient. Increased transparency across multiple projects and R&D locations.



In summer 2011, the PPM system was extended to the Industrial Manufacturing department throughout the group. At the Vaillant Group, there is a close link between R&D and Industrial Manufacturing. This area needs to be able to plan production lines and test benches in advance, requiring a seamless hand-over of developed products from R&D. The Vaillant Group uses TPG ProjectLink in this area to provide crucial transparency between projects and departments.

Glitches resolved with great teamwork

One of the hallmarks of a successful business partnership is that the supplier is on hand with tangible help and advice when unforeseen issues arise. This was the case after go-live at the Vaillant Group due to some undetected glitches in Microsoft PPM. One of these had a critical impact on the entire system, as it failed to log any actual-hours data. TPG's specialists reacted immediately and supported the Vaillant Group's IT staff throughout the entire escalation process with Microsoft to resolve the bug. The exemplary teamwork between Microsoft technical support, TPG's specialists and the customer's IT staff made it possible to apply a workaround quickly, followed by the implementation of permanent bug-fix from Microsoft as soon as it became available.

Results: "The deep level of insight improves our project management efficiency"

The Vaillant Group now finds that its whole R&D project planning process is more efficient. "We can see at a glance which people or teams are becoming overloaded," comments Dr. Rainer Lang, Group R&D Manager Heat Pumps".

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able!" Senior management, for example, may only want a one-page report on a couple of strategic projects or KPIs, while project managers and others need much more detail.

"It's the detail that makes the difference." adds Fritsche. "The system gives us a very deep level of insight that improves project management efficiency throughout the company. It supports our modular product development approach, where the product is a master project that is comprised of a number of sub-projects. This multi-project management solution, which is based on TPG ProjectLink, gives us the required transparency, pinpoints the dependencies between projects and illustrates the impact that a delay in one module will have on the master project."

"Our PPM system enables us to synchronize projects that are running in parallel," comments Markus Hiegemann, Project Manager for Heat Pumps at the Vaillant Group. "We can foresee if there is likely to be a delay or a potential bottleneck and act quickly to prevent it. This helps us to ensure that even very complex international R&D projects are completed on time and on budget." Overall, the system has significantly improved resource availability and management.

Jörn Fritsche is also keeping a keen eye on ways to extend the system to leverage its full potential. "For example, we're currently testing the functionality of the Portfolio Server to support the strategic selection process," he says.

More departments and functionality

He is also testing a new TPG product - the TPG PortfolioPlanner. This lets project managers aggregate the data from new and current projects and show each one as a task in Microsoft Project, producing a clear and comprehensive overview of all projects in a single chart. Managers can then simply drag and drop the graphic within the portfolio, helping them to decide when to start a new project. They can optimize the plan depending on what resources are available when, enabling them to pinpoint an accurate start date without overloading their teams.

In addition, the success - and almost 100% user acceptance level - of the R&D department's PPM system has been making waves within the Vaillant Group. Other departments have expressed an interest in trying it out to improve the management of their own projects. That's what makes it like an efficient central heating system - a centralized solution whose beneficial effects are felt throughout the organization.

Reference Customer

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