Navantia revamps its plant management systems

This project unrolled by Capgemini from start to finish consisted of implementing SAP in the Navantia’s key areas

The Situation

Navantia is the publically-owned company which came into being in 2005 as the heir to long years of experience in military shipbuilding for Spain’s historic military arsenals over centuries. Its main activity is based on building and maintaining military vessels and is carried out at the Bahía de Cádiz, Ferrol and Cartagena shipyards. This Group’s industrial network also includes the design and manufacture of control and combat systems, transfer of technology, the repair and overhaul of military and civil vessels, support for the life cycle of their vessels and systems, as well as diesel engine and turbine manufacture.

The systems plan developed by Navantia has entailed, among other actions, implementing SAP at the Engines and FABA plants located respectively in Cartagena and San Fernando. The first high and medium-speed engine plan for sea and land applications, whilst the FABA production unit is a center of excellence devoted to the integration of complex high-tech systems possessing great experience in defining, developing, producing and integrating combat systems for use in any type of ship.

To improve and update the Engine and FABA plants, the Company decided to get a strategic technology revamping project under way based on the implementation of the SAP tool. The scope of this project encompasses a number of business processes: engineering, sales and distribution, project management, production planning, product costing, plant maintenance, customer service and quality management. Similarly, it included the integration with the purchasing and
warehousing areas, which were, in turn, came under a project for implementing SAP throughout the Navantia Group, which was also carried out by Capgemini.

The Solution

The Capgemini team designed an innovative solution setting itself apart from all others which had all the makings to become a reference point nationwide and internationally. The SAP implementation integrated the Company’s production chain from the design and engineering up to maintenance with a high degree of integration among areas.

Some of the most outstanding aspects of the solution implemented of which mention might be made are:

- The implementation of the SAP iPPE module for covering the product engineering process and structure. This is a highly innovative initiative, even at the European level.
- The creation of one single inspection process for systems and engine maintenance. This afforded the possibility of providing an integrated solution for the Engine and FABA requirements to standardize processes, shorten the implementation time frames and to do away with any possibly transitory situations due to the existence of different systems in the two production units.
- The integration with the Spanish Navy in the spare parts sales and customer service process, meeting the demanding Navantia requirements: control, verification, evaluation and execution of the product configuration for the units in the design and development stages; management and integration of all of the technical documentation connected to the product to be configured; and generation of the master data necessary for production.
- The use of a proven methodology for meeting the requirements resulting from the large-volume data migration.

The Result

On March 1, 2010, the new management system was set into operation at the Engine and FABA plants in conjunction with the integration with the Company’s unified purchasing system.

In addition to being a major technological innovation, this new system has provided for a major increase in functionalities in comparison to the prior starting situation, adapting to the industrial and management-related evolution which the plant units have undergone over the past few years. For example, processes such as planning, sales, document management and product configuration which were previously being managed by way of obsolete applications, with a high degree of manual work and a low degree of integration among them have now been incorporated.

Also worthy of special note is the high degree of internal integration of the system data, not only among the different SAP modules but also with other modules which had already been functioning, such as human resources and finances.

This project, within the framework of the Navantia systems plan, has meant definitively shutting down the prior applications (PPT in the Engine production plant, CIMA in the FABA plant), which had been in operation for over twenty years, plus a considerable number of small applications.
How Navantia and Capgemini worked together

This project was carried out by a team comprised of more than 20 Capgemini professionals along with the active involvement of more than 40 key users among between the two plants. Capgemini deployed an implementation team spread out among different locations (Valencia, Cartagena, San Fernando and Madrid) with the support of our offshore development center located in Buenos Aires.

While the project was being carried out, each one of the project benchmarks strictly meeting the required degree of quality further bolstered the confidence Navantia has placed in Capgemini. The final outcome has decisively met all expectations, both plants having begun operation within the agreed time frames.

Special mention may be made of the importance of the involvement of the Navantia team, from the implementation teams to the future users, for which the training and know-how transfer process has been key, having made it possible to assure the proper transition from the extant systems to SAP.

The results of this project were the result of the excellent work done by a team of consultants totally dedicated to a project which has entailed a continual effort over the last two years, their values of commitment, teamwork, dedication, integration, ability to overcome difficulties and relations with customers, as well as their functional and technical skills being worthy of special mention. Nor would this success have been possible without the active involvement of the plant employees proper, the major degree to which the management of both plants were involved, as well as the constant support of the Navantia information technologies management.

For more information on this project, please contact: success.story@capgemini.com

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