Case Study

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Obbligato for SaaS in Thailand

C.L.P Engineering Co., Ltd.

Customer

- C.L.P Engineering Co., Ltd.

Industries

- Manufacturer of machinery such as cultivators and tillers

Challenges

- A large amount of engineering work involving frequent specification changes not only resulted in a nightmare for staff but also caused a considerable amount of material wastage due to miscommunication and last minute change notices.
- Need a system that is not too complicated to manage, and is easy to learn and use for typical employees because there a shortage of specialist IT staff and the company employs many short-term contract employees.
- Need an application that is not too expensive to implement, easy to use and powerful enough to handle a large volume of work.

Solution

- Obbligato for SaaS PLM Cloud Services, a product lifecycle management (PLM) product, offers manufacturers integrated management of technical information for products such as design drawings, specifications and parts lists as well as related document workflow throughout the product lifecycle.
- Obbligato uses a familiar interface, which allows users to become productive immediately with no need for further in-depth training.
- Obbligato comes complete with services including operation and maintenance.

Results

- Output wastage reduced to 0.5% from 3 to 5%, and much higher certainty that products based on latest specifications required by engineers or customers would be output.
- No need to depend on highly skilled and highly paid IT experts.
- No budget impact from expensive all-at-once deployment.
- Engineers have more time to concentrate on creating product development process innovations.
- Document workflow process manages the state of documents and flow of electronic approval and control of publication timing.

Product lifecycle management (PLM), software is an essential tool for R&D manufacturing firms who are coping with increasing complexity and engineering challenges involved in developing a new product or expanding an existing line for competitive global markets. Here in Thailand, there is a current trend toward local design and development of new products from the perspective of cultivating Asian markets and the China-plus-one strategy. This is in addition to the conventional localization of products designed and developed in Japan.

Challenges

CLP Engineering, a three-year-old company that was spun off from a very large aluminum die cast factory, is facing the dilemma of growth beyond expectations. The company is well known for the production of small rice milling machines, wood chippers, small tiller machines and recently, several types of long-tail shaft equipment used for long-tail boats.

Given the complexity of the equipment parts, a lot of document preparation and coordination were needed to realize these planned lines with numerous types of equipment and parts that were added in a short period of time. A clear line of communication was badly needed between the drawing board and the production line to communicate clearly when parts are eliminated, certain parts are modified or new parts are added. The existing manuals were a nightmare, with tens of thousands of parts specifications originally kept only on paper. Almost 3 to 5% of parts ended up being discarded from the production line and copious copies of required modifications slowed down production and design. “Yelling back and forth between the noisy factory floor and the engineer drawing room occurred almost every day and it took such a long time to communicate the changes," said Khun Kamala Leegomonchai, Executive Manager of the Production and Indirect Divisions at C.L.P Engineering. "The engineers and people in charge of overseeing the work had to repeatedly run back and forth between the drawing room and factory floor to verify they were on the right track.”

Faced with these dilemmas, management wanted to find the right tools to solve their problems. Earlier, the company had decided to implement a major ERP software product which cost them a lot of money and took a long time to implement. Six months passed and still the system was not able to be set up and run as intended.

Solution

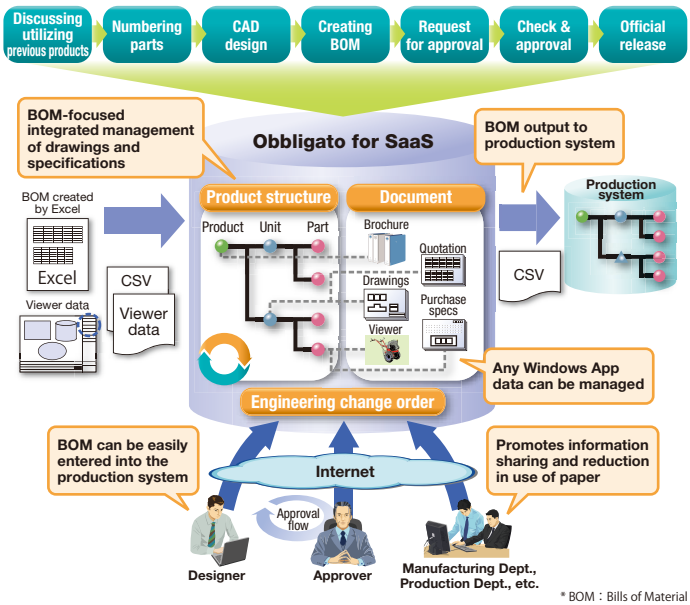
In order to address complex product lifecycle management issues and enable the expansion of product lines in the future, CLP Engineering turned their attention to product lifecycle management (PLM) solutions. PLM solutions allow manufacturers to strengthen their product development capability and enable integrated management of technical information for products such as design drawings, specifications, parts lists, and other related documents throughout the product lifecycle.

Among the many PLM solutions on the market, CLP Engineering chose NEC's Obbligato for SaaS Product Lifecycle Management Cloud Services. Because Obbligato for SaaS is suite of cloud services, it can be adopted easily and at low cost, launched quickly, and operated with minimal workload after startup. It also rates highly for making bills of materials (BOMs) easy to manage.

NEC's Obbligato for SaaS, the first PLM cloud service to be offered from data centers in Thailand, provides stability and response speed comparable with the same services in Japan. Obbligato is a ready-to-use product that can also be tailored to the customer's requirements in terms of parameter settings or workflow. Users can combine operational functions for bill of materials (BOM) management, design changes and data management in a short period of time, and implement these as services based on expertise accumulated through the Obbligato series of PLM software.

Results

Since Obbligato for SaaS incorporates not only the wealth of functions of the Obbligato III PLM software but also standard operation processes that are based on the expertise gained from NEC's extensive experience in this field, the product did not need to be customized prior to use. CLP Engineering was able to deploy Obbligato within one month, a period far shorter than the previously implemented ERP package. With a familiar user interface that required no customization, employees were able to interact with Obbligato easily, which has significantly improved collaboration between departments within CLP Engineering.



* BOM : Bills of Material

Obbligato for SaaS being a cloud-based program, CLP Engineering could increase the volume of output or productivity witho ut increasing its workforce or investing heavily in IT infrastructure. Furthermore, CLP engineering staff and their intended customers could access the program anytime, anywhere, thereby making their working lives much easier.

Different departments, including the factory floor, engineering departments, and sales and marketing units, could collaborate much more easily, which is important because in the world of business it is crucial to keep everyone on the same page. "Obbligato has eliminated the time and trouble we used to spend on modifying parts on the factory floor and/or locating parts specifications and changing configurations due to product redesigns," said Khun Kamala.

CLP Engineering not only had a better TOC than with the earlier ERP package, but, because the BOM is always up-to-date and there is no duplication of parts, material wastage has been reduced from 3 to 5% down to only 0.5%. "The fear of having the entire container shipment for export being rejected because of obsolete specifications not matching the customer's latest requirements has finally been eliminated," said Khun Kamala. Having put all these specifications in perspective using Obbligato, CLP Engineering is able to move forward in establishing a quality management system compliant with ISO 9001 and eventually ISO 14000.

As a web-based service, Obbligato not only greatly reduces implementation times and processes, but also enables the rapid deployment of new parts or modified equipment, and is expected to serve as the driving force behind market expansion policies. Programs no longer need to be downloaded and installed on local computers, allowing CLP Engineering to scale up their operations quickly to handle extra work and scale operations down just as quickly after a project has finished. Not only are drawings and documents always up to date, but Obbligato itself also remains up to date, allowing engineers to always be working with the latest version with no missing features or loss of productivity.

Numbers and available data are always up to date and the system is fully integrated with ERP and MRP products. "With up-to-date information from Obbligato, which is integrated with a leading ERP package and an MRP application, we will be able to establish meaningful KPIs which will tell us our real growth and the direction that we should be moving in," said Khun Kamala.

As a Thai R&D manufacturing company, we strive to become a locally owned manufacturing company that comes up with new and creative innovations and seeks out challenges to provide the for utmost benefits to our customers" said Khun Kamala. "And not only our domestic customers—we aim to provide excellent products to the entire AEC region and the rest of the world as well."

About

CLP Engineering produces agricultural machines, long-tail shaft equipment and multi-purpose liquid detergent. At present, the company has an R&D team that invents new machines to serve the needs of local and international customers by using simple design technology that emphasizes efficiency, economy, space saving, environment friendliness and affordability.

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