

# CASE STUDY

Window wall manufacturer

200 employees

## PROBLEM

Purchasing single-use materials necessary to manufacture a product is a process requiring great precision and accuracy considering that it is impossible to return the material. This challenge becomes even more complex when the company's production department operates with the just-in-time methodology.

In the case of our client, the silos that have taken place over time in their organizational structure have had the effect of slowing down the company's operating cycle. The lack of communication between the different departments caused recurring errors, mainly relating to purchasing and production. These errors translate into substantial sums of wasted resources time and material costs.

Regarding purchases, the list of materials to be purchased by this department is generated following the filing of a technical plan. Depending on the evolution of the different versions of a plan, the list of purchases to be made could change. Communication delays often made these various changes not being communicated in time to the buyers. More often than not, the material orders were already confirmed by the suppliers, making cancellation impossible and increasing inventory storage costs. In other cases, the buyer had to make urgent purchases, thus slowing down the production schedule.

On the production side, the absence of an order and delivery management system made it difficult to maintain a reliable and achievable production schedule. It was not uncommon to realize during production that the materials received, as well as their quantity, no longer corresponded to what was on the technical plan. The schedule would fall behind and the profit margins were severely impacted.

It was also difficult for the company to keep track of estimated assembly modules versus produced assembly modules. For example, during phase 1 of a project that could contain 80 assembly modules, it was not possible to know, in real-time, the number of modules completed in relation to the total of the order.

# + INTEGRATED SOLUTION

Implement an ERP to interconnect data from all departments and automate low-value tasks.

In order to overcome all of the problems experienced by the company, BWT created and implemented a solution merging the native Odoo modules for project management and purchasing. The BWT team then added a layer of custom modules to meet the client's specific needs.

All the information relating to the projects is now available for consultation by project, by phase status and by task, allowing optimal and precise planning of all stages by project. This planning is therefore carried out according to the delivery dates as well as the capacity of the company, for purchasing, manufacturing and installations. In the event of schedule changes by the project manager, both the purchases and production teams will be notified instantly allowing your products to be ready on the right dates. The solution offers buyers the possibility of making purchases in anticipation of deliverable dates, facilitating just-in-time, but also, grouping purchases to benefit from economies of scale.

BWT then developed a module automatically generating the products and quantities necessary to manufacture the products, as soon as the technical plan is imported. The engineers and technicians now import the plans directly into the project based on the phase. Any modification to the version of the plan is communicated in real-time to all the parties involved in the project, reducing the risk of error when purchasing the materials.

The integrated solution also includes the BWT Importation Order and Cart modules, in addition to those offered natively by Odoo;

- Importation Order (BWT): Allows importing technical plans according to its different versions and determines the products necessary for manufacturing. This module adds, among other things, a mandatory approval step by the technical director before being able to make purchases and launch the production;
- Cart (BWT): Offers a centralized and grouped view of needs in terms of purchases to be made and prioritise based based on deliverables;
- Project: Enables efficient project management by centralizing orders and inventory information, for purchases and production;
- Purchases: Facilitates the management of group purchasing based on production needs;
- Inventory: Count and locate the products in inventory in the various warehouses;
- Manufacturing: Generate manufacturing orders and follow production progress. This module generates the manufacturing orders based on the BOM of the product, the work orders, assigns the manufacturing routes through the workstations and follows the progress of production in real-time;

# + RESULTS

**-15**

monthly errors avoided

**-2**

salaries to purchases

**\$30K**

monthly savings

**1.8X**

more efficient in production

**15%**

more annual profit margin