

Saku Metall: a better overview of production thanks to IT

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Saku Metall was founded in 1991 and has been producing metal doors and other metal products for 28 years. The company employs about 300 people. Since 2012, Saku Metall's production has been divided into two departments – Saku Metall Uksetehas (door factory) and Saku Metall Allhanke Tehas (outsourcing factory). Saku Metall Uksetehas manufactures metal doors, profile and sliding doors with large glass surfaces, as well as overhead garage and industrial doors. Other significant products are interior and exterior firewall doors, security doors, exterior doors and intermediate doors between technical rooms. Saku Metall Allhanke Tehas specializes in sheet metal subcontracting works and its target customers are first and foremost international corporations and other large companies.

The Challenge

How do you deal with a situation where there are stacks of paper comprised of work orders, important instructions for production and piecework orders, all which have to be entered into a central system by data capturers by the end of the workday? This workflow created a delay of about a week and was not sustainable – even more so since all this paperwork also included information necessary for payroll. So, Saku Metall looked for opportunities to get an improved overview of its production, including a cross-section of its different work centres, production phases, and their overseers. A solution was needed which would allow an online overview of every work centre's production orders according to the work centre's production plan in order to create a clear picture of its work capacity at any given moment. Reducing paper and labour costs were also an objective.



Solutions

Saku Metall's processes are managed by an ERP program, for which Net Group built a desktop application with the primary goal of ensuring a smooth production flow. Role-based aspects have also been integrated into the interface: production workers have a so-called Ticket system that helps them determine which phases of production have been completed or if anything has gone wrong. Since several people work on one product simultaneously, an overview of that was important for each worker to know exactly what they should be doing at any given time. The foremen who oversee the work process can get a numerical summary to analyse the production and promptly intervene, if necessary, to prevent delays and interruptions.

Thanks to this application, the order information has been digitized and assembly instructions, schematics, and work sequence can all be displayed on a screen, allowing production to be managed more effectively. In short, thanks to the updates:

- Paper costs have been minimized;
- Whereas earlier data was entered with a delay of a couple of weeks, now information on production, materials, and more is available in real time;
- Labourers' use of time is more efficient;
- Labour costs have decreased;

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- The product descriptions of the products are more precise and give a better overview;
- Responsiveness and feedback on production is quick, allowing an online overview of order fulfilment and planning.

Implementation process

The first stage of the new developments were ready to test in production within six months. Since it only progressed in stages, constantly tracking user feedback and the effects of the changes, it was a well-controlled investment with ongoing evaluation of what the financial investment was accomplishing and whether the changes were being adopted by the users.

Understanding the functional logic of an industrial company was also, of course, crucial: all applications of this kind must have a very good user interface and usability in production environments. To streamline the work, the employees at Saku Metall were offered a so-called Ticket system which is characterized by simple easy-to-use buttons.

At this point, it is critically important that all the employees at Saku Metall should understand the need for updates: although it might mean additional movements for production employees (due to metallic dust, not every work centre has a computer, which means that people have to walk to a computer booth to report on the progress), the updated processes are significantly smoother. Thus the workers must be ready to adapt to the new process.

Results and benefits

Currently, the solution has been in effect for a couple of years and new developments are already in the pipeline. The initial investment paid for itself in a year: labour costs have been curbed significantly and thanks to the desktop application, work assignments can be divided up between workers, production processes can be tracked, and input for rearranging and planning can be given, making production smoother and more effective. Earlier, the production process was planned in the ERP system, but thanks to the knowledge gleaned from the production line, now improvements are implemented in the base system, making production smoother – one-way movement between the different systems has become two-way movement. As a result of this, planning is significantly more accurate, which in turn increases assurance of delivery.

In order to stay competitive today, new foundations are needed, and digital solutions can offer fantastic opportunities in that area. The goal is to reduce production costs to a minimum while maximizing output. Saku Metall's focus is special orders: this means the company must make an even greater effort to stay competitive in pricing and quality with companies that only make standard products. Thus, the market largely dictates future development needs:

- Today Saku Metall is implementing additional reporting systems to achieve a quick overview of material use in production;
- With the use of foreign labour, the application may require additional languages;
- Tracking the workers' use of time would reveal the need, for example, for additional training;
- Adding management roles, where data can be displayed in a different view;
- Adding functionality needed for servicing special orders;
- Developing a quality module to get a better overview of the reasons that a product gets scrapped.

Photo: Meeli Küttim