

Digitise production? Start by simplifying!

18 October 2023, 10:14

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Stay competitive, digitise your production - tips & tricks (Part 1)

Digitising can help you manage the rising complexity in your production. On the other hand, launching a digitisation project also brings new challenges. Before digitising, simplification and optimisation can be a first step in the right direction.

The competitiveness of the manufacturing industry in Flanders has been under pressure for years. Due to the shift from mass production to smaller batches of customer-specific products, high labour costs, the geopolitical situation and the requirements imposed by the Green Deal, manufacturing companies have to continuously adapt to a changing situation. For many companies, this translates into increased complexity in production.

Under the umbrella of Industry 4.0, a tsunami of new technologies and applications have – and will continue to - become available, allowing production to be digitised aimed at better managing this complexity. However, digitising production is easier said than done. For example, how can you start up a digitisation project? How can you assess which technologies add value? What impact can you realistically expect? In a three-part blog series, we take a closer look at some aspects

which will help you see the forest for the trees again.

Simplification first …

Many manufacturing companies have historically evolved towards the efficient production of larger batches. However, the changing market situation (customisation) requires a different approach. Companies looking to transform their production typically run into a number of problems, including a lot of manual work, regular planning and rescheduling, a lot of WIP, an increasing number of rush orders, a lot of internal transports, chaos and nervousness on the floor, etc. For each of these challenges, a digital technology can be found that may offer a solution, although many companies make the mistake of trying to mould chaos into a structure and then digitise it. While digitising the production can (if properly scoped) offer clear added value, it is important to take a step back first. The credo ‘simplify first, then digitise’ certainly applies here. We’ll share some simplification processes that you can start before embarking on the actual digitisation.

Optimising the layout of the production floor is a first exercise that can be started to reduce chaos in production. It will typically provide some clear benefits, such as smoother flow, less running around and searching, better use of available space, etc. In an earlier article (in Dutch), we already compiled a number of tips & tricks to critically review and optimise the current flow.

Critically re-examining office processes can also yield clear benefits. The importance of office processes such as quotation preparation, order processing, engineering, work preparation and planning is often underestimated in manufacturing companies. However, turnaround time in office processes represents up to 50 per cent of the total turnaround time and up to 25 per cent of the cost. Revisiting these processes, from a lead-time reduction perspective, certainly makes sense before moving on to investing in digital tools such as ERP, CAD/CAM and PLM to support these internal processes. Sirris can support you in these challenges, which we can show you through several business cases, such as the case of Houtbuigerij G. Desmet (in Dutch).

In addition to the two examples above, there are of course numerous other improvements that can be rolled out before fully embarking on digitisation. We gathered a comprehensive list of tips & tricks and quick-wins for you.

Come to Manufacturing Day!

Meanwhile, there are many examples of companies that have successfully transformed and digitised their production. Many of them started by first simplifying and structuring their processes. During our Manufacturing Day on 23 November 2023, you can come and hear some inspiring case studies. Make sure to register

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