

CASE STUDY

Norway's leading supplier of steel and metals explores how to improve operational processes through the ongoing development of RPA and AI technology.



The organisation

Norsk Stål AS is Norway's leading supplier of steel and metals. The company has an annual turnover of around NOK 2 billion. It employs some 280 employees across 13 locations nationwide and works within several market segments, including: offshore, shipbuilding, construction, and engineering.

Norsk Stål takes pride in its ability to help its customers maximise profits and stay competitive. It achieves this by offering market-leading services in stocking and distributing steel and metals. This requires an international network of contacts, logistics and skilled staff at all levels of the organisation. Managing their seamless collaboration depends, in turn, on optimised and effective processes.

SERVICE PROVIDED BY DIGITAL WORKFORCE

Digital Workforce is the Nordics' leading provider of Intelligent Process Automation. It specialises in delivering this technology set on an industrial scale. Digital Workforce's intelligent digital workers utilise different technologies, including Robotic Process Automation (RPA) and Artificial Intelligence (AI), to automate and optimise its customers' business processes.

Digital Workforce provides Norsk Stål with digital workers via Blue Prism Robotic Process Automation (RPA) technology and Artificial Intelligence. This is delivered from a Microsoft Azure cloud environment. The service is managed according to Digital Workforce's Robot as a Service (RaaS) agreement. Through this agreement, Digital Workforce offers its customers a full solution for successful introduction and continuous utilisation of digital workers.

Robot as a Service makes it easy and inexpensive for organisations to deploy digital workers. There's no need to invest in hosting a dedicated service environment. The cloud solution can be implemented quickly and safely alongside existing IT and scaled up flexibly.

Intelligent Process Automation at Norsk Stål

THE KEY DRIVERS FOR NORSK STÅL TO INTRODUCE DIGITAL WORKERS WERE:

- **create competitive advantage, and**
- **streamline business-critical work processes.**

The company started investigating RPA technology as a potential solution for automating routine work, such as logging data on the CRM. However, it soon recognised that by integrating Robotic Process Automation with other cognitive technologies the company could harness further opportunities for process improvement.

Utilising the cloud enabled Norsk Stål to introduce an Intelligent Process Automation solution. It combined different technologies that could be implemented in an agile way and at minimal cost. Cloud delivery also enabled Norsk Stål to collect the first results quickly. **These initial results demonstrated:**



a more effective order process,



production planning with optimised utilisation of input material,



and better follow-up of deliveries.

THE INITIAL TARGET PROCESS AT NORSK STÅL

Norsk Stål began by automating a sales draft process. This involved evaluating the correct amount of steel needed to produce an order of steel beams with minimal waste. Before introducing Intelligent Process Automation, a salesperson would spend a lot of time calculating and making educated guesses to quote for the optimal amount of raw material for each order.

The intelligence of the Norsk Stål RPA robot was extended with an artificial intelligence (AI) optimisation algorithm that could mathematically single out the best way of making the steel beams while complying with company practice. The optimal amount of raw material per output was calculated based on new production process optimisation.

Together, the algorithm and RPA were used to automate the sales draft process end to end.

This freed the sales team to focus on speaking with customers and making new sales. Instead of spending a full day crunching numbers to finalise a single order, a salesperson could dedicate that time to bringing added value to the business. Customer orders could be sent directly to a robot. It registered the appropriate data in the CRM, calculated material costs, produced a pricing baseline, and a completed a schema for generating an offer.

THE SECOND PROCESS CONSIDERED

One process considered for the original project was dismissed because it lacked clear rules. However, initial success meant this process became a candidate for further RPA. The process, about production planning at the company's Horten plant, posed the question:

“How do we effectively manufacture multiple orders from different customers with different delivery times?”

Here, the AI optimisation algorithm was used to plan how production could be executed with minimal waste and maximum profit. These plans were then logged in different systems by the RPA robot.

NORSK STÅL'S FUTURE VISION

The use of future-oriented technology to develop Norsk Stål's core business is rooted in the company's long-term strategy. Being as technically efficient as possible is vital to guarantee continued market competitiveness. The company's digital strategy is designed to help deliver a winning product in terms of both price and delivery time.

Robot as a Service (RaaS) that integrates RPA with Artificial Intelligence and is delivered via the Microsoft Azure Platform is the fastest and most flexible way to deploy digital workers. Its agility means Norsk Stål sees an excellent opportunity for scaling up the solution. In the future, the company will continue to pursue the most effective way of conducting operational processes through the ongoing development of RPA and AI technology.