## SMARTFACTORY

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EFFICIENCY THROUGH INNOVATION

**Source / Link: Personal interview & https://smartfactory.ie/**

**Technology area:**
- ☒ Artificial Intelligence
- ☐ Big Data
- ☐ Digital Twins
- ☒ IoT and IIoT
- ☐ Cybersecurity
- ☐ VR/AR
- ☐ Robotics
- ☒ Automation
- ☒ System Integration
- ☒ Smart Sensors
- ☐ Additive Manufacturing
- ☐ Other

**Type of good practice:**
- ☒ Company
- ☐ Project
- ☐ Initiative
- ☐ Programme
- ☐ Other

**Target group:**
- ☒ Discrete (smart) manufacturing
- ☒ Automotive
- ☒ Aerospace
- ☒ Metal processing
- ☒ Consumer goods
- ☒ Pharmaceuticals and chemistry
- ☒ Food and agriculture
- ☒ Health
- ☒ Textiles
- ☐ Others

**Summary:**

SmartFactory helps accelerate smart manufacturing initiatives to drive continuous improvement, knowledge transfer and data-based decision making. The company assists organizations move away from paper and spreadsheets – and guides them digitally through their work processes. SmartFactory uses wireless sensors and cutting-edge IIoT technology to capture, analyse and visualise KPIs in real-time, so that manufacturing companies can spend more time fixing losses than finding them. Using digital workflows, pick-to-light solutions, video downtime analysis and digital daily management systems, SmartFactory improves organizations' efficiency through innovation and helps bridge the IT/OT convergence in manufacturing.

**Detailed description**

SmartFactory's smart solutions reduce the amount of time and resources required to capture and communicate critical information across organisations and dynamically translate this data into actionable intelligence. The company empowers employees to take the appropriate corrective action to help eliminate losses and promotes a sense of ownership and collaboration. Their secure OPC architecture can communicate to virtually every type or brand of PLC. Smart wireless sensors facilitate the capturing of data from non-networked machines or semi-manual/manual processes. Intuitive mobile touch screen devices convert manual paperwork into lean digital workflows. Interactive smart digital displays eliminate

the wasteful effort of preparing and printing paper reports and help to digitise the daily management process. Continuous product and process improvement and the elimination of waste is a fundamental principle of lean manufacturing. Capturing and visualising data to highlight losses in real-time has been proven to change behaviour, improve throughput and quality and has been shown to improve overall productivity by 5-10%.

Recently, SmartFactory implemented their solutions in a manufacturing company, which initially wanted to build a new production line in order to expand their current capacity (already around 35 machines). By implementing their solution, SmartFactory was able to increase the company's output by 40% and this ultimately eliminated the need for buying new machinery and building a new production line. The main operator of the machines has been working with the company for the past 12 years and although he knew everything like the palm of his hand, he could not have increased the capacity on his own because he lacked the necessary data. SmartFactory put sensors on all machines and connected them to a dashboard that was shown every morning on a 75″ TV to the whole team. By having this data, the operator and his team were then able step by step to increase the production of the machines.

Ultimately, by implementing their solution, SmartFactory saved the company more than a million euros by not having to buy additional machines and the manufacturing company actually discovered that they had plenty of capacity that they did not know they have.

## Beneficial Results

The project turned out to be very successful and beneficial for the manufacturing company and some of the achievements that were accomplished along the way are:

- Increased productivity and OEE (overall equipment effectiveness),
- Enabled automatic gathering of critical data from the manufacturer's equipment,
- Significant cost savings,
- Shift to a paperless office.

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