

# MADE SMARTER

## Ritherdon & Co

### Digital internship proves just the trick for historic manufacturer

A fourth-generation manufacturer has used digital talent to explore robotics and automation opportunities, with the support of Made Smarter.

Ritherdon & Co, based in Darwen, Lancashire, benefited from a digital internship which enabled electrical engineering student Sahil Hathi to assess the potential of robotic welding within its production processes while also improving customer-facing digital systems.

The internship proved so successful that Sahil was recruited into a permanent Technical Support Engineer role.

Ben Ritherdon, Managing Director, said: "Made Smarter has been a tremendous catalyst for improving our technology, digital skills and moving us further along our digital roadmap."

#### The Challenge

Ritherdon was founded in 1895 by an amateur magician who manufactured magicians' tricks. Over the past 130 years, the business has evolved to produce everything from electroplated products and enamelled goods to wireless radio components, sheet metal fabrications and electrical equipment.

Today, its 38-strong workforce manufactures a diverse range of products, including stainless steel and plastic electrical enclosures, fire barrier systems and highways foundation products, all from its factory.

Ritherdon was continually looking for ways to improve productivity, reduce costs and embrace new technologies, but needed support to identify the right opportunities and dedicate resources to exploring them.

This included exploring and exploiting an existing robotic welding cell that remained largely unused since it had been purchased as part of a previous innovation project.

Ben said: "We'd thought about robots in the past but never really seen them as obviously useful to us because we don't make thousands of parts at a time. We got the robot through another project, but it just sat there gathering dust."

"We're too busy making things for customers. Nobody had the time to properly assess whether the robot had a role to play in our factory."

#### The Solution

The starting point was Made Smarter's Digital Transformation Workshop, where technology and skills advisers spent time touring the factory, discussing existing technologies, operational challenges and future opportunities.

The process identified two key areas for development: assessing how an existing robotic welding cell could be deployed within the factory, and modernising the company's customer chatbot to improve online enquiries and sales support.

The resulting digital roadmap recommended a Made Smarter Digital Internship, providing dedicated resource to progress both projects.

Ritherdon was paired with Newcastle University electrical engineering student Sahil Hathi.

Initially, he focused on understanding the robot's capabilities, identifying suitable products and assessing how automation could fit within Ritherdon's manufacturing processes and cellular working environment.

Alongside the robotics project, Sahil redeveloped the company's customer chatbot to improve the way enquiries are handled through the website.

Ritherdon also accessed Made Smarter's leadership and skills support. Operations Director Brian Derbyshire completed the Leading Change for Digital Champions programme, equipping him with practical tools to help drive digital transformation across the business.

#### The Benefits

One of the biggest benefits of the support was creating the time and resource needed to move important projects forward.

The chatbot project has already delivered operational improvements by providing customers with a more structured way to submit enquiries, while reducing the administrative burden on the sales team.

The robotics project remains a work in progress, but Ben believes the learning and evaluation process has already delivered significant value.

"It's an R&D experiment in production for us," he said. "The internship allowed us to properly test the viability of robotics within our manufacturing environment, something that had not been possible previously."

"There's still more work to do, but we're progressing, learning and building a better understanding of where robotics might fit within the business. That's valuable in itself."



The internship also created a lasting impact for the company. Impressed by his contribution, Ritherdon recruited Sahil into a permanent Technical Support Engineer role, bringing new digital and engineering capability into the business.

Ben said: "It gave him an opportunity to prove himself. It didn't cost us anything apart from time, and he did a really good job."

Sahil added: "The internship was a valuable opportunity to gain first-hand experience in manufacturing, apply my knowledge and skills in a real business environment, and work on projects that could deliver genuine improvements for the company."

#### The Future

Ritherdon is continuing to explore how robotics could support its manufacturing operations, with a particular focus on flexible, cellular

production rather than traditional high-volume applications.

The company also believes the knowledge gained through the project could unlock wider automation opportunities across areas such as assembly, fabrication and press brake operations.

The programme also helped strengthen digital skills within the organisation, which remains a priority for the business.

"It's important to have people inside the business developing those skills and understanding how these technologies might fit into what we do," Ben added. "People are just as important as technology, and when you bring the two together, the possibilities are endless."



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Ben Ritherdon  
Managing Director



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