

Logs Direct Technology adoption to fuel growth and innovation.

“By leveraging Made Smarter’s expertise in technology and skills we have the confidence to pursue the next steps of our digital transformation.”

Stephen Talbot,
Sales Director at Logs Direct



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A manufacturer of winter fuel products has doubled productivity, boosted profits, and created new jobs after taking a data-led approach to operations.

Logs Direct, based in Lancaster, has become a UK leader in the production of kiln dried wood.

With the support of Made Smarter it invested £40,000 in a real-time kiln monitoring and heat-recovery system.

Real time access to live data from the kiln has improved control of the process, cutting down drying times by half, doubling capacity and producing a superior product.

The project has supported turnover growth of 15%, created five new jobs, upskilled two roles, and reduced energy bills by a third.

The Challenge

Established 20 years ago, the family-run business has grown to meet the demand for log burners in the UK and Europe.

The business, which employs around 50 staff, now produces in excess of 20,000 tons of kiln-dried firewood and logs from many different UK tree species. These are sold into retail and wholesale markets achieving a turnover of £6.5m.

Logs Direct has led the industry in developing processes to produce the best quality wood products by building and adapting its own kilns. It has also been instrumental in establishing the government-backed Ready to Burn fuel certification scheme.

Driven by the government’s Clean Air Strategy and the growing demand for kiln-dried wood, Logs Direct began speaking to Made Smarter about how technology could support their ambitions.

After engaging with Made Smarter, Logs Direct embarked on

a digital transformation workshop to unpick its process, product, and people.

Central to Log Direct’s challenge was the amount of manual intervention required for monitoring the conditions of the kiln.

Stephen Talbot, Sales Director at Logs Direct, said: “Over the years we have developed innovative approaches to improve our productivity and quality, but we had come as far as we could on our own.

“We lacked the ability to quickly, and accurately, measure and control the environment inside the kiln. Our process involved someone spending up to three hours a day manually taking measurements and reporting back. Accessing the kiln would also change the environment and increase drying time. We were too reliant on guesswork, and this prevented us from being able to plan our feedstock for the production and packing teams.”

The Solution

With the support of a £20,000 grant from Made Smarter, Logs Direct invested £40,000 in a real-time kiln monitoring and heat-recovery system.

This uses sensors to measure critical parameters such as moisture in the air and report them in real-time.

Operators are then able to monitor the levels and optimise the process by adjusting boiler and fan coil systems.

The second element of the solution was an energy recovery unit, to capture excess heat from the boiler, and a proportional-

integral-derivative (PID) controller, to optimise the boiler and fan operation to reduce fuel and electricity usage.

Made Smarter also developed digital leadership skills within the business. Finance Director Liz Foulds has completed the Leading Digital Transformation programme, a fast-track course which has given the business the tools to explore how technology can support its digital strategy.

The Benefits

Logs Direct has experienced an extraordinary productivity increase. It has reduced drying times from an average of 14 days to seven, doubling its capacity to produce more.

The business has also reduced the need to use sub-contractors for drying wood offsite.

Better control of the moisture content of the logs has increased drying accuracy, resulting in a consistently high-quality product and more satisfied customers.

The increased in-house production has supported turnover growth of 15% and created five new jobs.

Real-time access to live data from the kiln has enabled the business to build an understanding of each species of wood in the kiln, the drive cycles and efficiency.

Meanwhile, digitalisation has upskilled two members of the team now charged with monitoring the kilns.

The investment has significantly reduced energy by as much as a third and supported plans to introduce new eco-friendly products.

Stephen said: “Made Smarter has been instrumental in allowing us to move forward with a greener,



more efficient and cost-effective drying process, and given us the confidence to look at the next steps of improvement.

“The demand for kiln dried wood continues to rise, and with this investment we’re able to respond to that demand.

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The Future

Logs Direct is now on a mission to continually improve the processes it has developed.

The Made Smarter-backed project has accelerated innovation with Logs Direct investing £400,000 in a ‘super-kiln’. This deploys the same technology in a facility capable of

drying up to 400 cubes per cycle, boosting the company’s output even further.

Stephen added: “Burning wood for fuel has received more than its fair share of negative press, because of concerns over air quality and the impact on the environment. However recent studies suggest that dried wood with a moisture content of less than 20% produces fewer particulates than originally thought.

“Drying the wood in our kilns - using our waste produced on site as fuel - creates a product that can stand tall and proud with its environmental credentials and provide a cost-effective solution in heating homes.”

