

MADE SMARTER

Dyer Engineering

Using real-time data to
increase profitability

Dyer Engineering, a leading manufacturer of metal components and structures, leveraged Made Smarter grant funding to integrate Real-Time Location (RTL) tracking into its ERP system and expand Shop Floor Data Collection (SFDC) terminals. The project boosted data accuracy and decision-making, and alongside other transformative digital initiatives, helped spark a new venture, Therion Ltd - a new business focused on helping SMEs adopt modular digital systems.

Operating across two sites in County Durham, Dyer Engineering specialises in the manufacture of complex machined metal components and fabrications, serving industries including energy, defence, transport, and process. Founded nearly 50 years ago, the company employs over 180 people and generates an annual revenue of £17 million.

Supported by Made Smarter, Dyer Engineering - who have a strong culture of working 'Smarter Stronger Together' - expanded its investment in emerging Fourth Industrial Revolution (4IR) technologies - most notably through the development of 'Smart Material Movement'. This concept integrates RTL (Real-Time Location) tracking, SFDC (Shop Floor Data Collection) terminals,

and ERP (Enterprise Resource Planning) production data to move materials more efficiently and help teams make smarter, quicker decisions. The results have reshaped how the business operates and laid the foundation for the launch of Therion, which is now delivering digital solutions for industrial SMEs.

“For me, leveraging data is about facilitating human potential – giving people the tools to inform and direct decision-making.”

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The Challenge

As demand grew and work-in-progress levels increased, Dyer Engineering began to experience physical constraints on its shop floor. With limited space and no scope for expanding its facility, the challenge became clear: how could the company move more product through the same space - faster, smarter, and without compromising quality or delivery performance? The business had already invested in an IoT-based RTL asset tracking system, but it was reactive, designed to answer “where is this job?” rather than direct material flow.

“The challenge many SMEs face is justifying investment in smart technologies,” said Richard Larder, Business Improvement Director at Dyer Engineering.

“That’s why so many end up buying material processing equipment rather than digitally intelligent solutions. We recognised early on that we had to take ownership of our digital direction so we could be effective, not just efficient.”

As operations continued to scale, data accuracy, decision-making agility, and cross-team communication became even more critical. Legacy SFDC terminals were too few and poorly located, requiring operatives to leave their stations just to log labour or check specs - adding friction to the flow of both information and materials.





The Solution

After attending a series of workshops, Dyer Engineering applied for grant funding through Made Smarter to invest in consultancy and software development of a 'smart material movement' solution. By expanding its real-time location tracking and integrating this into ERP production priorities, the company could improve labour tracking and data accuracy.

"We already had the foundations in place, but they weren't connected. This project allowed us to create a joined-up system that links production intent with real-time reality on the shop floor," said Richard.

To enable better data capture and execution, the company also invested in 12 new SFDC terminals, expanding real-time labour booking and access to digital drawings, specs, and in-house applications directly at the point of use, including weld bays, CNCs, and assembly stations. These new terminals dramatically increased digital bandwidth between the office and the shop floor, reducing reliance on paperwork, walkabouts, and outdated information.

Behind the scenes, additional software development ensured that RTL signals were interpreted through the lens of ERP priorities, transforming passive location data into active production intelligence. The result: a more dynamic, agile, and data-driven manufacturing environment.

"Made Smarter has helped raise the digital maturity of the business. That has had other benefits in terms of our staff knowing Dyer Engineering is a forward-thinking company."

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The Benefits

The impact of the SFDC expansion and Smart Material Movement project has been transformational - both in terms of measurable gains and how the business now operates. Dyer Engineering has already seen significant improvements in:

- **Efficiency:** The system has dramatically reduced wasted motion and time. Operators no longer walk back and forth to locate jobs or update status. Even saving just one minute per labour clocking - across hundreds of transactions per day - has the potential to add £80,000 to the bottom line annually. That's time redirected to value-add work, not admin.
- **Flow and OTIF:** Material now moves through the facility in the right order, at the right time; leading to better on-time delivery and improved customer satisfaction.
- **Cash availability:** By reducing WIP and improving throughput, the project unlocked working capital that would otherwise have been tied up in stalled production.

- **Data confidence:** Labour tracking and shop floor visibility are now real-time and reliable, enabling better planning and performance monitoring.

"We're still scaling the system and aim to roll out up to 80 terminals across the business."

"It's not just about automating tasks - it's about empowering people to work smarter, with better information, in a more joined-up environment."

The investment also created a step-change in culture and collaboration. With improved digital access on the shop floor, employees are now more connected to the wider business and able to view their workload, submit improvement ideas, and stay up to date with operational priorities. And perhaps most importantly, the project has laid a scalable digital foundation on which Dyer Engineering can build. The integrated system is already informing wider process automation and has become the springboard for broader innovation across the business.



The Future

The success of the Smart Material Movement project didn't just improve operations at Dyer Engineering - it changed the company's outlook on what digital transformation could achieve. It became clear that the system developed in-house had far-reaching potential beyond Dyer Engineering's walls.

"We realised we hadn't just solved a manufacturing bottleneck, we'd built a blueprint that could help other SMEs unlock their own growth through smarter systems," said Richard.

That realisation led to the creation of Therion Ltd, a new venture dedicated to helping manufacturing SMEs adopt modular, scalable digital applications. Built on the same principles that transformed Dyer Engineering's shop floor - system integration, real-time data, and self-service tools - Therion is now delivering the next generation of business management software tailored for the industrial mid-market.

"We're not building tech for tech's sake, or creating another 'me too' digital solution," said Richard.

"We're tackling complexity head-on and translating it into something simple, scalable, and powerful for real businesses. Made Smarter was a turning point for us, and now, through Therion, we're helping others make that same leap."