

# Food and drink manufacturing is changing: Here's how you can leverage technology to keep pace

Error identification and stock management

Consistency and quality control

Green manufacturing and reduced waste

Traceability and efficiency

Trend prediction and alignment

Future-proofing and adaptability

How to get started with Made Smarter's support





Digital transformation has proven to be crucial to food and drink manufacturers of all sizes. Not only can technologies help makers overcome challenges, but it can also unlock a whole host of opportunities. It's no wonder that so many in the industry have been eager to adopt these new tools.

In this guide, we share just a few of the biggest advantages that makers in the food and drink space can look forward to. We've also provided some examples of the technologies our clients are leveraging, to act as inspiration for your own transformation.

# Better infrastructure management

Interconnected ERP systems can help to ensure that customers no longer have to wait months to order an unavailable product. Infrastructure management software will give you visibility to guarantee that you don't have excessive overstock either.

An increased demand can cause issues in the production line – for instance, if there are a lot of orders but a limited number of people at the end of the line packing, then pressure can naturally result in general mistakes. Machines can be an aid across production lines and also support workforce wellbeing.

We recently worked with a brewing company who couldn't scale due to these challenges. Barcoding technology was the solution – they could see what was in each package, and so would be made aware of an error before it was sent out to the customer. This was particularly valuable to them as they often received customised orders.

## Increased control

Digital tools can further support the manufacturing process by enabling greater control over machines. Take the chocolatier Friars, who are a great example of a traditional business capitalising on the power of digital. Temperature is absolutely crucial to them – variance either way can ruin the product, and mean they have to start production all over again. They use technology to ensure this consistency, leading to less waste and fewer costs.

The Industrial Internet of Things (IIoT) can help manage variables such as consistency and quality. Sensors are a key application of this, conducting everything from freshness evaluations to contaminant detections. You could also use the IIoT to identify ways of diversifying or enhancing your products through new product development.





## Reduced waste and boosted sustainability

We recently carried out a virtual digital transformation workshop, where our client was able to put on smart glasses and walk us through their factory, showing us exactly what things looked like and how they worked. At the end of the workshop, we had a much better idea of what was happening on the factory floor, and could tailor our advice and recommendations based on the issues and opportunities we saw.

The client in question makes a product for people whose bodies can't break down protein. It's extremely important that this powder is compliant with regulations, but the process often results in a significant amount of wasted material. Robotics and process control technologies help reduce waste by improving reliability and repeatability. At the same time, they can boost productivity and capacity – which, of course, has an impact on your business' bottom line.



# Enhanced traceability

In an industry with extremely tight standards, traceability has always been critical. But its importance to both consumers and suppliers is rising – it has become an expectation now that it's easier to implement through digital technologies.

Today, it's possible to automate data collection points and create a line of traceability. Any issues you have can then be traced back to a very specific point and resolved sooner. Some makers opt for basic systems to carry this out, whereas others integrate full-blown ERP solutions so they have oversight at every point. That's often the beauty of technology: small investments can still make a big difference.

Of course, this level of traceability is difficult without digital tools – the amount of paperwork alone is prohibitive. Not only can technologies make this process more efficient, but they can also identify opportunities to optimise and reduce waste in other areas to enable green manufacturing. What's more, it will boost customer trust – you can use traceability as a USP, showing each stage of an order as it happens, rather than just as a remedial measure.

## Ability to hit new trends

The data that can be gathered, analysed and utilised by technology opens up food and drink makers to a variety of opportunities. For instance, they can align with new trends and niches they identify (like vegan goods), which in turn could result in lucrative income streams. Plus, they can even forecast fresh trends themselves through the likes of AI tracking.

The adaptability and agility that these digital tools give can help you increase demand (by pivoting into new areas), as well as enhance your visibility over your operations to figure out whether you can fulfil that demand (by analysing capacity and productivity).

This was the case for a client of ours, a meat manufacturer working for supermarkets. They have very short lead times, but it's always traditionally been difficult to gauge an idea of demand – especially without a CRM. Through data and systems, they can better plan for fluctuations by using historic information to inform decision-making.

## The pandemic effect

At no time was the benefit of increased productivity more keenly felt than during the coronavirus pandemic; as many employees were forced to self-isolate or shield, MRP software stepped in to rejig and reschedule jobs quickly and remote accessibility helped managers virtually oversee the factory floor. The events of 2020 proved to be the perfect reason why organisations of all shapes and sizes need to future-proof themselves in this way.

There have been so many businesses who managed to not only react to fluctuating demand, but succeed in these difficult times. Take Nutree Life, who experienced a sudden upsurge at the beginning of the first lockdown. As they had adopted a bespoke solution to upgrade their production line earlier in the year, they were primed to fulfil this demand through high volume, high speed and more precise production.







## Getting started with digital technologies

Applied Nutrition is another business that could react more readily to the COVID-19 crisis, after receiving our digital investment funding support for a project. They used a digital transformation workshop to figure out how to increase their production capacity, and we identified solutions such as robotics and process control automation.

For many of our food and drink manufacturing clients, a digital transformation workshop is the ideal first step, helping them determine the route to take. Plus, we can offer grant funding to those who are ready to adopt technology projects so that they can get their digital transformation off the ground. We'd be happy to talk you through your options. Contact us today, and one of our specialist advisers will arrange an informal chat.

# Food for thought: case studies

## Flavourfresh Salads

Flavourfresh Salads was previously grounded in tradition, and depended on paper-based processes. Now they have a quality control system in place through digital technologies, which has allowed them to increase productivity and reduce waste by 3%. This shows just how important it is to connect all systems and digitalise the entire supply chain.

## Len Wright Salads

Despite being a modern manufacturer, Len Wright Salads leveraged our support to help them link parts of its manufacturing process together through technology. Such system and data integration will require less energy and produce less waste. Ultimately, they're expected to cut £25,000 per year from their energy bill, and boost sales by 0.5%.

## Blends Holdings

Blends Holdings has used digital tools to free up time and keep errors to an absolute minimum. Their new ERP software system will replace their existing, disparate systems to manage all recipes, production, supply chain, traceability and reporting. As a result, they'll have the additional capacity required for significant business growth.

## Bury Black Pudding Company

Bury Black Pudding Company is creating the world's first smart black pudding factory through data and systems integration, analytics and automation. Whilst they're a traditional business, they're still managing to benefit from digital and preserve their values. They'll be enhancing the precision of their weight and filling process, reducing product giveaway by 1% to save around 750kg for a 60-ton production run.