

Is digital technology the key to success during busy periods such as Christmas?

Plan production and capacity

Oversee and manage the workforce

Forecast demand and inventory needs

Manage stock levels and optimise picking

Automate the packaging process

Aid transport on the factory floor

Seek strategy support from Made Smarter

Use your capacity now to apply for funding

Customer habits are changing, and some people are cutting back on shopping altogether. According to data from Retail Insight Network, 60% of consumers started their 2021 Christmas shopping in October that year – compared to 40.6% in 2020.

Today's consumers are conscious of how rising inflation and the energy crisis will affect their budgets too. Yet the cost of living crisis isn't the only issue set to impact seasonal spending behaviour.

Customers are also adopting a more sustainable approach to Christmas shopping – moving away from huge corporations and choosing to support small and medium-sized businesses instead. But what does this mean for your organisation?

Efficient planning, effective inventory monitoring, and a complete view of your supply chain are all essential to meeting customer expectations in the modern age. Thankfully, there are numerous technologies you can employ to ready yourself for the seasonal surge, remain competitive, and set yourself up for success all year round.

We explore just a few game-changing digital tools in this guide.



Robotics

A robot can be a daunting investment, but robotics and automation hold a lot of potential solutions to the daily challenges faced by manufacturers – particularly during busy periods. It's just one thing that many of the makers we've supported have implemented in order to brace themselves for Christmas.

Of course, depending on when you're reading this guide, you may not be able to implement robotics before the 25th December rush. It can take some time to identify where a robot would be best placed, find the right robot for you, adopt the technology into your processes, and upskill your people to use it effectively. That being said, there are a few different ways robotics and automation can help you get ahead of Christmas – either this year or in future years:

Automation in packaging

Packaging is an incredibly laborious task that can be completed automatically with relative ease. Even automating just one element of your boxing and wrapping process – such as labelling – can prove invaluable. Not only will it lead to increased capacity throughout the entire process, but it will also give team members the opportunity to focus on value-add jobs. Simply put, by getting automation in place now, you could have a Christmas product sorted early, which will help you adjust more easily to any peaks in demand you experience later on.

Off-the-shelf products for automating packaging in select industries (for instance, brewing or food packaging) can be relatively small too. And, although costs can vary, it's possible to get something within the £20k-£50k price range with a lead time of three months. Whilst this may mean that the technology is introduced to your business during Christmas 2022, it's a one-off cost that will see you reaping the rewards for many Christmases to come (as well as all the months of production in between).

A Manchester-based maker, Seven Bro7hers Brewery, has recently had a grant approved to help them automate their packaging line. On top of the benefits already discussed, the technology will also give them a significant amount of data on production line performance, which will support their decision-making.

Automation is particularly valuable in relation to perishable products. The technology is able to pack baked goods or confectionery by picking them up with vacuum grips and then depositing them in either a box or package. This can boost capacity, productivity and quality, as well as support you in meeting demand at Christmas – even if there are staffing shortages.

Ye Olde Friars, a chocolate maker, is another company that has benefitted from automation. They replaced the manual, repetitive and incredibly time-consuming process of filling moulds with chocolate with a SELMI One Shot Depositor. They also use a continuous tempering machine to guarantee that the chocolate is the right temperature, further saving time. As a result, they can produce 700% more chocolate and respond more swiftly to larger orders.





Collaborative robots

More broadly speaking, collaborative robots (or 'cobots' for short) can be used to place boxes on pallets. They're incredibly quick and easy to set up too due to the fact that they don't involve complex programming or safety systems. This is because the motors aren't powerful enough to cause damage to people, and have the ability to detect when something is in the way.

But their uses extend far beyond this too. Cobots can be easily wheeled around the factory floor, meaning that they could assemble a product in the morning and then be packaging it somewhere else in the afternoon. In this way, they act like an additional pair of hands, helping with the shifting of products from one place to another, or loading and unloading boxes for you. This would prove particularly helpful if you had a worker off sick or isolating due to COVID-19 in the run up to Christmas.

A great example of collaborative robots in action is Empire Cartridges, who will be using a Techman Cobot to package their premium shotgun cartridges. It picks up five cartridges at a time and places them into a box, and is expected to box over one million each year.

"[The cobot's interface] meant we could get it up and running within a couple of hours of having it delivered. It's been a complete revolution for us and increased productivity by easily 50%. It really is the future of modern manufacturing in the UK."

- Andrew Bond, CEO of Empire Cartridges

Data

Such tools and technologies go beyond physical processes. They also produce vast amounts of data, and this is extremely valuable in various ways.

Traceability

Some automating packaging systems have built-in printers and can easily integrate with enterprise resource planning (ERP) systems and process management software. They make it possible to manage batch numbers or order information, enabling you to successfully track the location of products. We've delved more into traceability here, but its value in building a Christmas strategy is clear.

Workforce management

Technology can help monitor productivity and efficiency in your people, and highlight any bottlenecks in your processes. Take Fox Timber, who make timber products. They spotted a few issues with their delivery service – orders were being delivered twice. With our support, they identified software that ensures their delivery drivers have all the information they need to complete their jobs successfully.





Demand forecasting

Another way data helps is through demand forecasting. This draws on AI and machine learning to identify trends from previous years' sales and predict future customer demand. You can then anticipate seasonal fluctuations, making it easier to plan your team capacity, inventory and production for peak periods such as Christmas. It can show both demand under normal conditions and demand after a variable has been introduced (such as weather or a spike in social media activity).

Stock management

Specific software can help you take orders, automatically creating the bills of material (BOM) and saving you a considerable amount of time. You could also use it in the opposite way – to check the stock of items and place orders with your suppliers of raw materials. Pearsons Glass is one such example of a maker who has implemented stock management. They've had a grant confirmed for software that integrates with their webshop and automatically generates a pick list for the operator. It tells them where the products are kept in the stockroom, along with the most efficient route to collect them.



Strategy and planning

Both robotics and data will be key to meeting the Christmas demand this year. But first, you need to put a strategy in place. Leave your planning until the last minute, and you may face a high volume of work combined with a lack of time, and potentially even capacity issues.

That's why many of the manufacturers we help often start with a digital transformation workshop. It will give you the impartial and tailored advice you need to create a strategy for your digitalisation. You'll be able to identify which technologies can address your specific challenges or achieve your desired goals, along with the actions to take along the way to ensure your digital transformation is a success.

To find out more about how these workshops could benefit you, **get in touch** with the Made Smarter team today.

Get In Touch
with a member of
our team today

If you're interested in hearing more about the solutions discussed in this guide, or any of the support that we offer, visit our website or send us a quick email.



www.madesmarter.uk
madesmarter@growthco.uk

**MADE
SMARTER**