

The future of supply chains: Unlocking sustainability through innovation

A recent Directors' Forum, hosted by *The Manufacturer* in partnership with Microsoft and Blue Yonder, brought together industry thought leaders to look at sustainability and circularity for the future supply chain in a post-COVID world. **Rik Irons-Mclean**, Strategy Director at Microsoft UK, shares some of the insights.

As the UK emerges from the shadow of the pandemic, the need for competitiveness has never been more pivotal. Coupled with Brexit and the requirement to forge new trading relationships, as a nation we face a raft of challenges going forward.

But where there is challenge, there is also opportunity, and this is especially true when it comes to supply chain competitiveness. Fortunately, there is a raft of technology available that can play a huge role in helping UK organisations create more competitive supply chains.

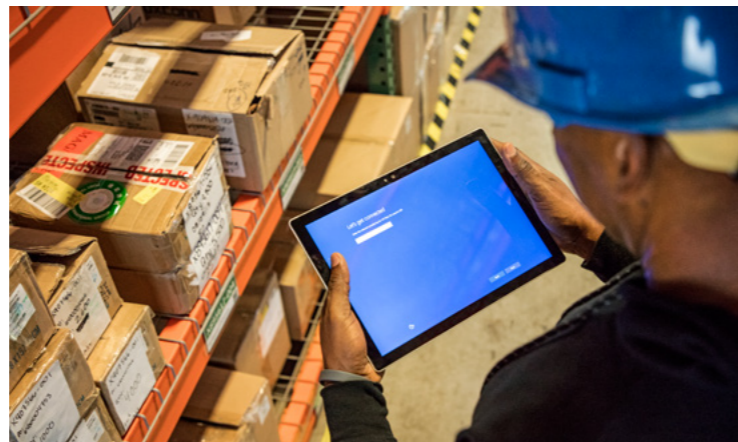
As Simon Ellis, IDC's (International Data Corporation) programme VP, Global Supply Chain Strategies, highlights: "The importance of the supply chain to business success in the modern, digital economy means transitioning from a functional area that has traditionally been viewed as a 'cost centre' to one that must be leveraged as an opportunity centre."

The green agenda has never been more prominent

As the UK manufacturing sector looks to revive production as soon as possible and the nation pursues its economic recovery ambitions, the key will be to balance risk, innovation and cost alongside sustainability.

After all, the green agenda has never been more prominent in our national debate and manufacturers are in a prime position to lead the charge.

Prime Minister Boris Johnson's 10-point plan for a Green Industrial Revolution is not only important because of the impact it will have on eradicating the UK's contribution to climate change by 2050, but also



ALL IMAGES: MICROSOFT

the fact that it is expected to create and support up to 250,000 British jobs.

This should be seen as a huge opportunity for our manufacturing sector and, as long as these ambitions are aligned to the economic recovery of the country, we could see a new era of innovation.

However, creating value within supply chains typically represents a hurdle for companies. The question is always, how can you reduce your carbon footprint while still achieving the desired return on your investment?

The sustainability and expansion of supply chains has seen a rise in the debate around reshoring, or at least near-shoring, production. Aside from the obvious reduction in transport requirements, geographically closer supply chains can more easily adopt a circular approach which can help reduce waste across the whole manufacturing

ABOVE: Increasingly, cutting-edge technology is playing a huge role in creating more competitive supply chains



ABOVE: Having an accurate overview of operations is paramount to ensure companies are data and digital ready

process. It can also provide a unified approach to technology adoption and process improvement, which can allow for significant efficiency gains.

Cross-industry collaboration is crucial to success

To achieve a long-term improvement in manufacturing supply chains, a cross-industry collaborative approach must be adopted. During the pandemic, we witnessed exactly how this could work, with the formation of the Ventilator Challenge UK consortium. At a time

when our nation needed it, businesses from across the aerospace, automotive and medical sectors came together to produce medical ventilators.

Dick Elsy, CEO of High Value Manufacturing Catapult and leader of the Ventilator Challenge UK consortium, said: "This coalition of the very best of this country's people and capability across different sectors has truly showcased the strength of the manufacturing industry in the UK. The consortium is looking to capture lessons learned and share them across the engineering community – and with Government – as key tools to help UK industry get back on its feet after the pandemic has passed."

However, with companies operating on different platforms and having obvious concerns about their own intellectual property, a uniformed approach to data is necessary.

What we saw in the ventilator challenge was 5-10 years of innovation in the space of just a few months. This was enabled by leveraging a standardised open data platform that allowed information to be shared. Fortunately, such platforms are becoming more prevalent, with providers like Microsoft and others facilitating the secure exchange of only data that organisations want to share.



The importance of the supply chain to business success in the modern, digital economy means transitioning from a functional area that has traditionally been viewed as a 'cost centre' to one that must be leveraged as an opportunity centre

Simon Ellis International Data Corporation Programme VP, Global Supply Chain Strategies



One of the real obstacles is the digital readiness of the workforce. Assessing the capability, resilience and how to integrate new systems into the supply chain is fundamental and this can only be fully realised if the digital skills of the workforce match the ambitions of the project



Rik Irons-Mclean
Strategy Director
- Manufacturing,
Energy & Resources,
Microsoft UK

Digitally ready

The adoption of digital technologies has accelerated rapidly throughout the course of the pandemic. With the rise of remote working and the need to have an accurate overview of operations, it has become paramount to ensure companies and their workforces are data and digital ready.

One of the real obstacles to achieving this is the digital readiness of the workforce. Assessing the capability, resilience and how to integrate new systems into the supply chain is fundamental and this can only be fully realised if the digital skills of the workforce match the ambitions of the project.

Nevertheless, Gartner still predicts that investment in supply chain technology is set to increase heavily. Indeed, the global research and advisory firm predicts that “through 2024, 50% of supply chain organisations will invest in applications that support artificial intelligence and advanced analytics capabilities”.

Digital skills must be developed as a key enabler of change. When companies master the basics around being able to forecast demand, schedule production and, most importantly, understand and optimise inventory through visibility throughout the organisation, that is when we can see real change.

Building the case and setting standards for sustainability

There are a multitude of different sustainability standards and accreditations but there are often no universally adopted measurement standards for individual sustainability initiatives. A standardised approach to delivery would really help to unlock this value, with larger companies helping to educate and support the less advanced elements of a supply chain to realise this goal. Software and skills go hand in hand to build the right culture where data can drive this change, along with a transparency of the data being generated.

This lack of recognised metrics makes building a business case a challenging prospect. Some businesses look at this as their moral imperative, others have leveraged the associated positive image of sustainability in marketing campaigns, while others have been able

to quantify the benefits. Whichever path you choose, or need to take, time is of the essence to keep up with your competitors, be those established or emerging, and the expectations of society.

What was clear from the conversation among those attending the Directors’ Forum virtual round table discussion was that the issue of standards is not just limited to sustainability improvement projects. According to the group, there remains a need for standards to provide consensus and interoperability across many facets of manufacturing processes, including IoT and integration layers between software protocols as well as open data initiatives.

Microsoft and Blue Yonder are collaborating to help industry overcome these challenges. They are working with customers to future proof their supply chains by providing the innovation needed to build a sustainable future for UK manufacturers to thrive.

Learn more about the sustainable and resilient circular supply chains of the future in a Microsoft/Blue Yonder whitepaper, available to download www.bit.ly/BlueYonderMicrosoft

BELOW: Keeping up with supply chain logistics

