

HOW TO: Continue to innovate

Introduction

Across this series, we have explored what 5G is, the ways in which it can support manufacturers, and how to identify if 5G is the right fit for your organisation.

We have outlined the fundamental role that digital and 5G technologies will play in the journey to increased productivity as we embrace Industry 4.0 and discussed how organisations can deploy 5G and overcome barriers to connectivity.

In this guide, we look to the future and explore how connectivity will develop as manufacturers undergo digitalisation and use their current skills and knowledge going forward.

Why is connectivity important to business?

Across history, businesses have had to continue to innovate to survive. The first industrial revolution used water and steam power to mechanise production. The second used electric power to produce on mass, and the third used electronics and IT to automate production.

As with all previous revolutions, those who did not innovate were simply left behind. All of the emerging technologies were considered niche initially and with increasing adoption, drove operations as we know them today.

Now we are in the fourth industrial revolution (known as Industry 4.0), which conceptualises the rapid change to technology, industries, and processes due to increasing interconnectivity and smart automation (i.e automation that responds to real life scenarios). Advanced connectivity is the key to innovation. New technologies, such as 5G, are key to achieving a greater level of connectivity with its inherent capabilities such as faster speeds, low latency and massive machine type communications. Bringing 5G connectivity into factories will be pivotal for manufacturers, allowing them to work more quickly and efficiently, driving true productivity.

What skills does the workforce need?

The integration of digital technologies such as automation in businesses around the world over the next ten years will affect 50% of the global workforce, with workers adapting to working alongside new inventions and machinery. With it forecast that 9 out of 10 jobs in the future will require some degree of digital expertise, it is essential that workers learn new skills to pursue these jobs and are able to adapt to changes and growth within the sector

To prepare for the shift to a more digitally oriented future, manufacturers must educate employees with the knowledge needed to ensure they're comfortable and confident in using the new technology. Key to this is the introduction of a digital culture – to find out how your business can manage this transition, please get in touch to request a copy of our 4th How-To guide.

Do we need to change the way we work to support digitalisation?

A significant number of people are generally hesitant about embracing change or transformation and for many the adoption of digital technology can seem a daunting prospect. A change in mindset is needed to encourage new ways of working, with processes put in place to ensure that new technology can be used correctly to boost productivity within manufacturing.

The responsibility lies both with the leaders to make sure their workers are properly upskilled, and with the employees who should feel motivated, positive and ready to embrace new ways of working. For tips to support your workers in integrating digital technology, get in touch to for a copy of the 5th How-To guide.

What technology needs to be in place?

Private 5G is the latest mobile technology which the UK's network operators have been rolling out since 2019. The benefits of 5G have already been demonstrated through innovative use cases that have brought great value to enterprises across a range of sectors, including manufacturing.

WM5Gs Manufacturing – The Digital Journey is in place to support manufacturers wanting to incorporate digital technology within their operations to deliver better results for their customers. If you'd like to get involved, please get in touch with: Riccardo.weber@wm5g.org. uk.

List of resources

Make UK: https://www.makeuk.org/ Made Smarter: https://www.madesmarter.uk/get-involved/ Ericsson: https://www.ericsson.com/en BT: https://www.bt.com/help/mobile/what-is-5g-on-bt UK5G: https://uk5g.org/discover/testbeds-and-trials/ GSMA: https://www.gsma.com/iot/manufacturing/



What are the leaders in connectivity doing, and what can they teach us?

Major leaders in UK connectivity are 5G groups and stakeholders such as BT, Ericsson, and Make UK. They work in partnership with local organisations to trial, prove and communicate the benefits of 5G with the aim of advancing rollout and availability. At WM5G, we work to support the deployment of 5G across the West Midlands through a barrier busting approach, sharing the benefits of 5G for organisations.

Our library of use cases includes establishing a private 5G network at The Manufacturing Technology Centre in Coventry, and you can read all about it in our first How-To guide. The network supports manufacturing organisations of all sizes access to an advanced 5G-connected facility to drive local productivity and support post-pandemic economic recovery.

You can read more about our manufacturing use cases <u>here.</u>

How to find out more

Manufacturers can learn from the experiences of leaders like WM5G, gained through setting up the UK's largest region-wide 5G testbed in the West Midlands. Once you have read all of our How To guides, you should be ready and equipped with the knowledge to begin the first step of your digitalisation journey.

Manufacturing – Your Digital Journey will help SMEs and larger-scale manufacturers to understand how they can integrate digital technologies to drive productivity within their business, and work towards post-pandemic recovery

Contact us to find out how we can support you:

www.wm5g.org.uk/contact