HOW TO:
UNDERSTANDING CHANGING SKILLS, BEHAVIOURS, RESOURCES

Introduction

Across our how-to guide series, we have so far explored what 5G is, how it can support manufacturers, and help them decide if 5G is right for their organisation. We have also detailed just how vital 5G and the adoption of digital technology is for the journey to Industry 4.0.

While we've discussed the physical and technical aspects needed to install an advanced network, we also need to consider the skills, behaviours and attitudes of your employees to drive successful adoption.

In the same way that you need the right technical infrastructure to operate an advanced 5G network to provide the right returns and benefits, it is vital to ensure that your team is also 5G-ready.

Any organisational change can be unsettling, particularly when the change involves fundamental alterations to processes and ways of working. It is key that staff are being supported throughout this process.

Ensuring a clear vision

It's important for all business leaders to own and share their well-defined vision and strategy, which links back to the use case (see our first guide on why having a well-defined use case is fundamental to the process).

One of the key fears is that greater digitalisation will mean job cuts or a reduction in workforce headcount. In reality, studies by organisations including Make UK/McKinsey have indicated that while some low-skilled roles may be given over to automation, this will be balanced by the creation of more highly skilled positions.

Having a clear vision will help you to realise the changes that need to be undertaken in your organisation and what this means for your staff in real terms. The clarity of the vision – and therefore the resulting plan – will help to identify where new roles will need to be created and undertaken.

This will help you to easily identify any skills gaps within your team, which in turn will contribute to assigning and sourcing the right training, development and – where necessary – recruitment

Alongside analysing business priorities and planning for the future, organisations should undertake a wider education piece internally to set clear expectations as to the art of the possible, and how colleagues can support this progress.

Future skills – data will be king

https://www.mckinsey.com/business-functions/operations/our-insights/building-the-vital-skills-for-the-future-of-work-in-operations

One of the enabling success factors of Industry 4.0 in manufacturing is going to be data. This could range from analytics of processes within an individual machine, to a holistic view of the supply chain.

But data doesn't do anything on its own. It requires collection, analysis, and conversion into useful, usable information to hold meaning.

Paramount among new skills and competencies, therefore, will be the handling, interpretation, and analysis of data. The manufacturer of the future will need to ensure their team possess the competencies to analyse complex data from machines, both as they operate now, and how they will in the future.

There are three key competencies that will be required:

≈ Data collection

≈ Conversion into useful information

≈ Interpretation to create intelligence and relevance

New opportunities can also come with new threats, and it is therefore essential to have someone on your team who is responsible for managing cybersecurity. With threats potentially leading to loss of production time or theft of data, it is crucial that you have someone on hand who can identify and advise on the best course of action to mitigate any threats.

While much of this may seem baffling or overwhelming, digital skills such as these will be taught as standard in classrooms of the future, ensuring that young people entering the workplace are fully equipped in these processes and the correct language.

For those who are seeking support and advice on how to prepare their teams for the needs of tomorrow now, there are a range of organisations that are meeting these upskilling demands head-on.

This includes the Made Smarter Adoption programme, which supports manufacturers to deliver the digital tools and technologies that will help boost productivity and growth. The programmes ensure that their teams have the right skills in place to meet the changing requirements of a more digitalised industry.

Broadening the scope of roles – developing generalists

Traditional recruitment is delivered in a relatively narrow scope, identifying a specific job role and often including a definitive list of associated duties.

With greater digital integration, it is likely that there will be a significantly higher number of systems working together, or in parallel. Therefore, successful future recruitment should consider more than just a single process within each role, breaking away from single-track specialisms to employ 'generalists' who understand the interoperation of these systems and can provide more of a holistic operational view.

This may seem like a difficult thing to accomplish - but by understanding the future potential of the technology, aligned to your business goals and objectives, and with the right level of professional support, it will be possible to map out a growth trajectory.

By defining your overarching vision at the earliest stages of the process, it is possible to predict which skills may be required now and which would add greatest benefit in the medium- to long-term.

Moving towards convergence

Convergence, or formerly disparate areas and operations coming together for a common solution, has been mooted as one of the human mega-trends.

While we're not quite there yet, we are moving in its general direction, with the implementation of new networks creating far greater reliance on how systems interoperate and relate. It's important to understand how this can manifest as an internal business process, and what impacts this may have on the company structure and direction.

One example of systems moving closely together is through communication with Mobile Network Operators (MNOs). Currently, MNOs approaching manufacturers are dealing with the technical side of the applications, which can be unhelpful when a manufacturer is interested in the specifics of how an advanced network can support greater growth and productivity.

Fundamental to the success, therefore, is finding the common ground and understanding. The first step to developing this understanding is to meet with the MNO and outline your vision, plan and the specific use cases. Ensure that both parties are agreed on the intended outcomes and the recommended routes to arrive there before you begin.

Are are a range of organisations that can support with 5G procurement and understanding the best tools and resources to help you support your teams as you transition to the digital future...including us!

We have recently launched Manufacturing – Your Digital Journey, a programme designed specifically to help manufactures understand how digitisation will enable them to keep up with customer demand and keep customers satisfied; grow revenue and profit in a digital-first future; and ensure that they retain a competitive edge.

With modules aligned to manufacturers' different levels of experience and expertise, our team will provide guidance to the module most closely aligned to their current knowledge and understanding.

Get in touch with us to discover how we can help you.

If you've identified an operational issue and have a desire to explore new technology, we'd love to hear from you. Contact us to begin your 5G journey:

wm5g.org.uk/contact