

# Creating your road map to smarter manufacturing



**verizon**  
business



Smart technology is revolutionizing the manufacturing industry. But how can you make it work for your business? And how can you ensure a successful transition to Industry 4.0?

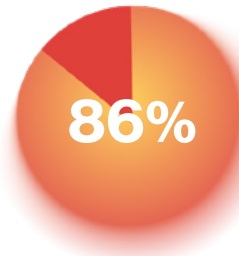


## The move to smart manufacturing is underway.

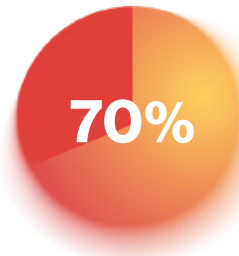
Manufacturers have been quick to embrace smart technology. As they realize the promise of Industry 4.0, we're seeing a dramatic resurgence of investment. And manufacturing companies are exploring the latest innovations to intelligently connect their processes; break down silos; and create a smarter, streamlined approach to production.

This is helping them drive greater efficiency, enhance productivity, reduce costs and improve sustainability in their operations. However, while individual organizations are committed to change, there's still work to do for the sector to realize the vision of a fully connected, digitalized industry.

## Deloitte survey



86% of surveyed manufacturers believed that smart factory solutions would be the primary drivers of competitiveness in the next five years.<sup>1</sup>



70% have already woven technologies such as data analytics and cloud computing into their processes.<sup>1</sup>

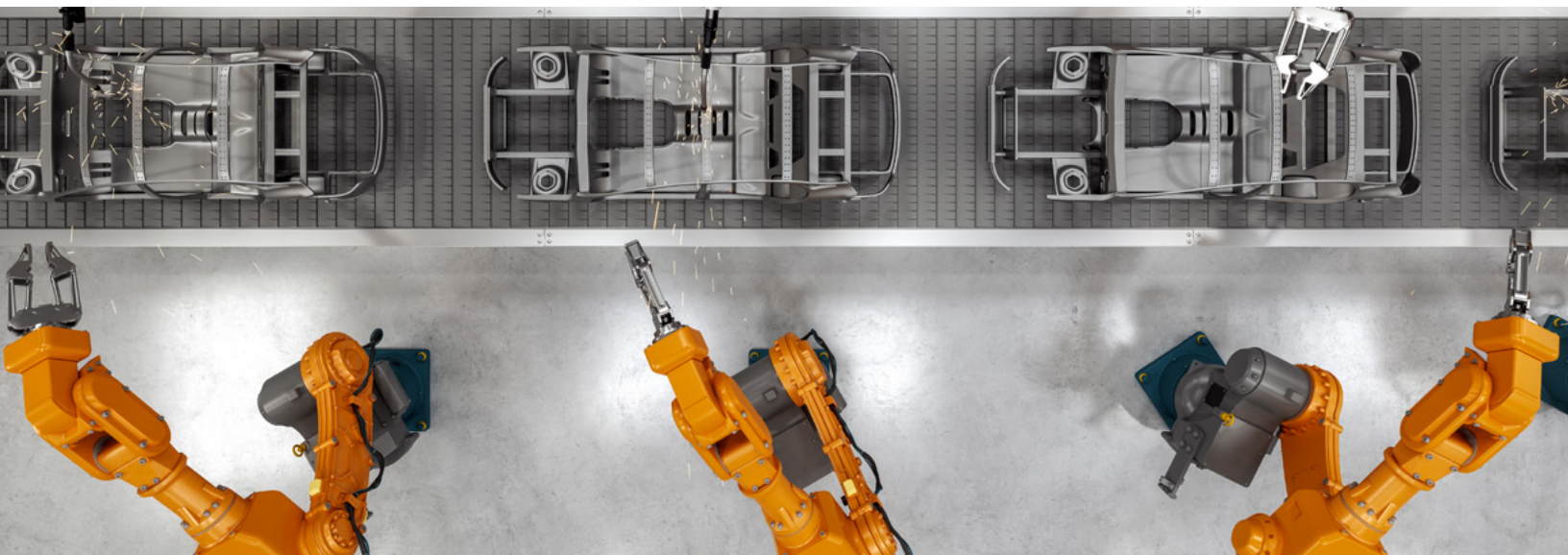
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Virtually every manufacturer we speak to is on a journey. They're all at very different stages on that journey, but they are committed to it.”

**Henry Anson**

Publisher of The Manufacturer

1. “2024 manufacturing industry outlook” Deloitte, Oct 30, 2023. <https://www2.deloitte.com/us/en/insights/industry/manufacturing/manufacturing-industry-outlook-2024.html>



## Getting smarter all the time

Every day, manufacturers are finding new ways to make their operations even smarter. They're using automation in their factories to streamline processes and boost production. Autonomous mobile robots (AMRs) move materials through the warehouses and production lines quickly and efficiently. Smart cameras and sensors – as part of the Industrial Internet of Things (IIoT) – enable close monitoring of production lines to help detect problems and ensure product quality. And with artificial intelligence (AI) and machine learning (ML) to analyze the large amounts of data collected, manufacturers can make more informed decisions and react with greater agility.

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Lots of automation is already in place. Now companies are trying to standardize across their global footprint.”

**Sundeep Samra**

Verizon Business's Manufacturing Client Partner



## It's time to scale things up.

To really benefit from Industry 4.0, however, manufacturers need to think beyond a single smart factory and create a fully connected, end-to-end enterprise. With every element of their business linked and communicating, manufacturers get increased visibility of their whole supply chain.

They can see what consumers are buying and how they're using the products, and they can get a better overview of global supply availability – and potential disruption. Meaning they can respond quickly to changing market conditions, using AI and ML to make informed decisions everywhere, enhancing sustainability and regulatory compliance in their supply chains. But embracing digitalization on this scale takes time, investment and new ways of working. And it means companies need to build a positive culture of change and collaboration.

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It's not just putting a wire between factories because [they're] all connected to a network. It's how they share live data and information across factories so they can make intelligent decisions around production, demand, supply chain [and] logistics and make the best decision to increase the productivity and reduce the cost.”

**Sundeep Samra**

Verizon Business's Manufacturing Client Partner







## Creating a successful transition

Transitioning to smarter manufacturing is complex, with lots of moving parts that need to be delicately aligned. For example, with digitalization running throughout the whole factory, operational technology (OT) needs to work more closely with IT, sharing responsibilities to keep machines running and protected from cyberattacks. Organizations that are already on their paths have realized the need to create a carefully planned road map for integration – with buy-in from all areas of the business. This helps them avoid getting stuck in dreaded pilot purgatory, where they don't progress beyond the pilot phase. They're also seeing the benefit of introducing change agents to help align teams on a shared goal.

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It's that Director of Digital Transformation whose role is to try and pull these silos together. Make sure they're operating with common interests.”

**Henry Anson**

Publisher of The Manufacturer



## Unexpected consequences

No matter how prepared they are and how closely they follow best practices, as with adopting any new innovation, manufacturers will always face unexpected risks and challenges. Because they'll store and process much larger amounts of data, and because more machines are connected to the internet, companies open themselves up to greater potential for attacks by cybercriminals. Therefore, they need to heighten their cyberresiliency.

New ways of working also mean businesses need to address cultural shifts internally. From aligning previously disparate teams and functions to changing operational practices and embracing new technologies, manufacturers need to promote a culture of openness and improvement. This is why collaborating with a partner that has experience in these kinds of projects and change processes is of paramount importance.

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Many manufacturers assume their current cybersecurity measures are sufficient, but this is often not the case.”

**Henry Anson**

Publisher of The Manufacturer

# Why Verizon Business

At Verizon Business, we work with organizations to help them build and operate the foundational network infrastructures that support smart manufacturing. And we've helped countless clients embrace the power and potential of Industry 4.0.

## Cybersecurity experts

With our expertise in cybersecurity, we're perfectly placed to help manufacturers understand the risks and bolster their defenses. We offer leading solutions in cyberresiliency, and our team helps businesses of all sizes in all industries protect their operations from threats. We also produce our annual Data Breach Investigations Report. It contains the insights that our unique global perspective gives us. And it helps organizations keep up to date with the latest trends in real-world security incidents and breaches.

## Global footprint

We work with manufacturers all around the world, offering outcome-led network transformation solutions with integrated network and cloud security. Our global network acts as a key enabler for Industry 4.0, supporting the critical infrastructure needed to develop agile, connected factories and production ecosystems. We help manufacturers optimize connectivity across all systems, ensuring they have the right network for the right task.







## Recognized by Gartner®

Verizon has been recognized as a Leader in the Gartner Magic Quadrant™ for Global WAN Services for the 19th consecutive time.<sup>2</sup>

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The vision is to have fully autonomous factories. This is why I frequently discuss self-driving IT and autonomous factories. We aren't there yet; it's probably more than a decade away. But at Verizon Business, we have a clear understanding of the trajectory and the steps needed to reach this goal.”

**Philip Horn**

Verizon Business's Head of Digital Transformation and Innovation

2. “Magic Quadrant for Global WAN Services,” Gartner, Mar 24, 2025. <https://www.gartner.com/en/documents/6285483>

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# How we help you make manufacturing even smarter

We'll work with you to design and deliver the kind of network transformation that supports Industry 4.0 and enables you to embrace smart production processes. We'll help you deploy IoT devices so you can boost productivity, enhance quality, improve efficiency and create a robust digital supply network.

Our industrial network offers you the connectivity you need for real-time visibility across all device types – at scale – so you can see how your production lines are performing and react quickly. With 5G mobile edge computing (MEC) giving you the power to exploit edge computing's possibilities, you can extract high-value insights from your data with ease and at speed. This means you can make more informed decisions on production lines, costs and shipping. Plus, with our enterprise-grade security, you can feel confident that all your sensitive customer data and confidential product information remain protected from cybercriminals.



## **Get the network transformation you need.**

Industry 4.0 requires the management, sharing and analysis of incredibly large amounts of data. And for a fully connected global enterprise, that data needs to be available in real time throughout your whole production operation around the world. So you need a network that's faster, bigger and more robust. That's where our Network as a Service (NaaS) Solutions come in.

We offer all the network solutions you need to support your smart manufacturing operations. All your virtual services, resources and applications sit in the cloud. Even better, it's fully scalable. So as your business grows or you integrate more smart manufacturing innovations, you can adapt your network to meet your requirements.

## **Keep everything safe and secure.**

You also need to make sure all your connected factories are secure and protected from cyberthreats. And we have you covered there, too. With secure access service edge (SASE), you get software-defined wide area network (SD WAN) and managed cloud security services that help protect your enterprise. So you can boost your cyberresilience, increase your agility and enable more effective digital transformation.

Learn more about why [Verizon Business could be your perfect partner.](#)



# Working with us

We believe cocreation and collaboration are the keys to success. So we'll partner with you to understand more about your business, your goals and your own expertise. That will help us determine your exact needs and how we can help you meet your smart manufacturing ambitions. During this initial contact, we may even redefine your initial request for proposal (RFP) and build a new scope of work together. But we think that's the way to get things right.

We'll carry out an assessment of your current network infrastructure and security capabilities. Once we know more about you and what you want to achieve, we'll create a network and security architecture that aligns technology and services to your business needs, along with a detailed road map for your transformation, with the least possible risk. And, of course, we'll agree on performance service levels and key performance indicators (KPIs).

Finally, we'll work with you to design, build and deploy network solutions with our proven methodology that enables smarter production processes. Then we'll be on hand for all the setup, rollout and support – however you want it.

## Pathway to transformation

This diagram represents an example of the kinds of actions taken in helping define and implement the network transformation required to support smart manufacturing. As each project has its own individual requirements, not every point listed will be needed for every job.



Collaborate to understand the scope of the project.



Evaluate cybersecurity requirements.



Assess existing technology and capabilities.



Help align stakeholders on outcomes and KPIs.



Create a road map for transformation.



Share knowledge and advice to make technology decisions.



Design and deploy network and security solutions.



Help align business functions (OT and IT).



Help with onboarding and cultural change.



Provide life-cycle management for continual improvement.

## Get in touch.

Find out more about how we can help you make manufacturing even smarter at [verizon.com/manufacturing](https://verizon.com/manufacturing).

