



The next revolution is now

How to ease the Industry 4.0
journey by empowering your
frontline manufacturing workers





Table of contents

- 1 Each industrial revolution is defined by innovation
- 2 From the shop floor to the customer door
- 3 Enable real-time communications and collaboration across manufacturing
- 4 Automate manufacturing processes and workflows
- 5 Upskill your workforce for the future of manufacturing
- 6 Manufacture a sustainable future now

Each industrial revolution is defined by innovation

Throughout the history of manufacturing from steam power to electric to digital, the through line is the same: how can I maximize productivity and profit with people and machines?

The reality of Industry 4.0 is now in full force with capabilities further evolving and integrating across all manufacturing assets and functions. Many started the journey before there was even a name for it through AI, cloud computing, IoT and AR. And if it truly is a revolution, Industry 4.0 will completely change the nature of manufacturing from how we produce goods to how we work.

While the pandemic acted as a catalyst to accelerate Industry 4.0 transformation, supply chain issues and more immediate, short-term priorities demanded business leader attention. But at the frontline the skills gap is still growing, and workers need help bridging the gap. Thirty-six percent of frontline manufacturing workers feel like they don't have the right technology or tools to do their jobs.¹ More than half feel like they have been learning on the fly with no formal training.² The majority think that leadership doesn't prioritize strong workplace culture and that communication gets lost or doesn't reach them.³ So while many manufacturers are transforming key parts of their business, the lion's share of the workforce (your frontline) is still living in a paper-based world.

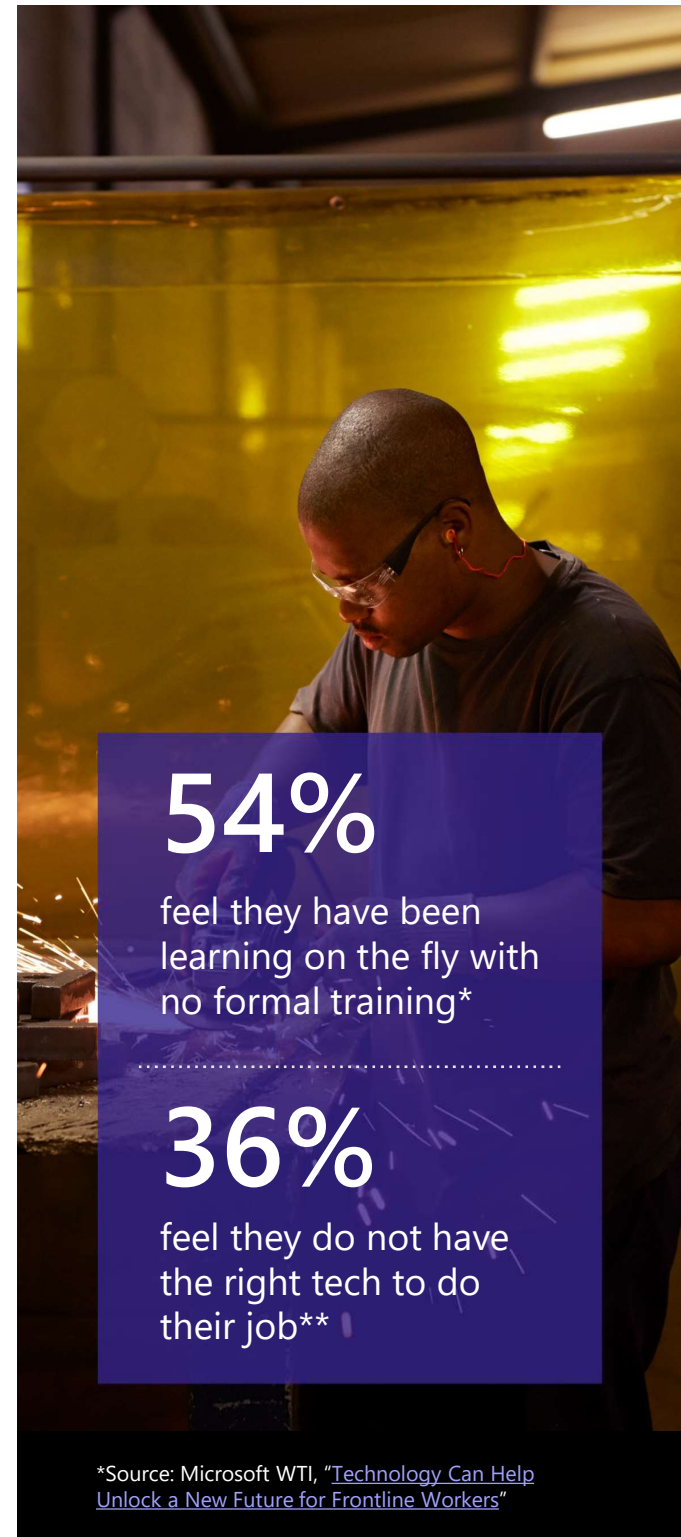
Digital tools can help all frontline manufacturing workers from the basic level of improving communications and collaboration, to more advanced features like automating routine tasks and workflows. Those same tools can help employers offset a labor shortage where it's predicted that in the US alone, 2.1 million jobs will go unfilled in the coming years due to inadequate skills⁴. Digital tools can also help employers attract, develop, and retain talent in a competitive job market where everyone wants to be the employer of choice.

At Microsoft, we think these are the key ingredients for success for manufacturers of all sizes. And we offer these capabilities in one place with Microsoft Teams.

If the complete vision of Industry 4.0 is about connecting and integrating your enterprise, people are an essential part of that equation. Throughout history they are the through line that provides the goods and services we all rely upon every day. And it's time we moved them from clipboards and plot printers to the digital age.

¹ ² ³ Microsoft Work Trends Impact report, January 2022.

⁴ Deloitte and The Manufacturing Institute, May 2021



54%

feel they have been learning on the fly with no formal training*

36%

feel they do not have the right tech to do their job**

*Source: Microsoft WTI, "[Technology Can Help Unlock a New Future for Frontline Workers](#)"

From the shop floor to the customer door

The frontline manufacturing worker is anyone who makes, maintains, services or sells your product. The roles vary greatly but share common needs: basic communications and collaboration tools, more automated workflows to help improve scheduling and task management, and better access to training and development.

Operations

Want better training to develop new skills

Want clear instruction on work expectations

Want better communications tools

Management

Antiquated, disparate tools for managing schedules

Over-reliance on paper-based processes

Manual workflows impeding productivity

Service and Sales

Want faster access to information and resources

Want better tools for remote assistance

Want more interconnectivity between resources



1

Enable real-time communications and collaboration across manufacturing

Start by laying the foundation for your frontline with the modern communication and collaboration tools they need to feel more connected to their co-workers, customers and company.

62%

say messages or communication from leadership often gets lost and does not reach them effectively*

Here are a few ways Microsoft's modern work solutions for manufacturers enable real-time communications and collaboration:



Consolidated corporate communications



Real-time troubleshooting



Hands-free communications



Shift-aware tagging



Chat, video and call features



Priority notifications



Knowledge sharing and community building



Improved shift handovers



Push-to-talk functionality

2

Automate manufacturing processes and workflows

Build upon a solid foundation of communications and collaboration by combining process and workflow automation to help managers and workers optimize production and profitability.

46%

say that tech tools would help reduce work-related stress*

Here are a few ways Microsoft's modern work solutions for manufacturers can help automate manufacturing processes and workflows:



Consolidate workflows for managerial functions



Simplify clocking in and out



Create, update, and distribute schedules digitally



Digitize manual, paper-based processes

*Source: Microsoft WTI, "Technology Can Help Unlock a New Future for Frontline Workers"

3



Upskill your workforce for the future of manufacturing

Scale your people’s capabilities for the future with a workforce culture where everyone has the right skills and training and can balance productivity with personal wellbeing.

63%

say they are excited about all the job opportunities that technology is bringing to the industry*

Here are a few ways Microsoft’s modern work solutions for manufacturers can help upskill your workforce for the future:



Digitize paper-based processes used for task instruction and training



Document and share knowledge with an easily customizable platform



Enable in-context learning and re-skilling with role-based learning paths



Drive employee engagement, retention and inclusion



Facilitate growth and development



Help ensure employees balance productivity with wellbeing

*Source: Microsoft WTI, [“Technology Can Help Unlock a New Future for Frontline Workers”](#)

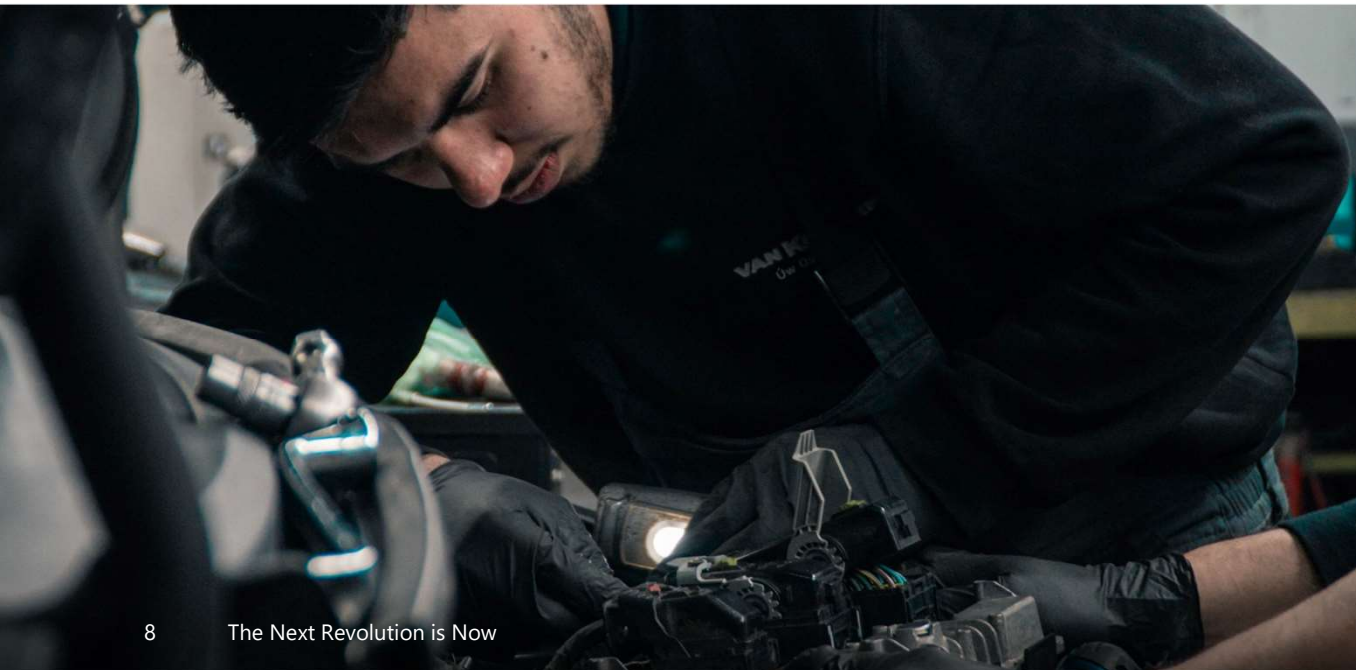
Manufacture a sustainable future now

Empowering your workforce is just one part of a broader transformation to Industry 4.0. Although many manufacturers are moving to digital solutions, few report their factories are “fully digitized.” Demands for remote monitoring and services—and for more agile factories and supply chains—are driving the need for increased connectivity and mobility.

Manufacturing is one of the largest industries on the planet, touching nearly every aspect of every person’s everyday life.

Microsoft empowers manufacturers to achieve more by bringing our technology and products together into experiences that unlock value for our customers.

By focusing on trust, innovation, security, and compliance, Microsoft can enable your manufacturing business’s digital transformation and help organizations like yours manufacture a more resilient and sustainable future.



1

Enable frontline workers with new tools to drive productivity

2

Gain greater awareness of underutilized data across the entire workplace

3

Microsoft Industry Cloud



Microsoft Cloud for Manufacturing

Learn more

No matter where we live and work, the pandemic surfaced our reliance on the manufacturing industry that provides us with the goods and products we need. And there isn't a trend in manufacturing that doesn't begin and end with the industry's frontline worker. They are the first and last line in industry and organization-wide modernization efforts. And as frontline workers upskill and reskill, their roles become increasingly vital to the business.

To learn more about how Microsoft's modern work solutions can empower your organization, check out [Microsoft Teams for Frontline Workers](#) or [Microsoft Cloud for Manufacturing](#).

