

# DIGITAL TECHNOLOGY HELPS MANUFACTURING WORK BETTER IN ALL ENVIRONMENTS.

By Tom Adams



**USING AI, MACHINE LEARNING AND VIRTUAL ASSISTANTS FOR ROUTINE TASKS MANUFACTURERS CAN INCREASE WORKER ENGAGEMENT AND PRODUCTIVITY.**

## Modern IT Addresses the Talent Gap and Drives Efficiency, Engagement and Financial Results

Fortunes can change quickly in business. And manufacturing is no exception.

Just last year industry analysts and media proclaimed that manufacturing was alive and well – very well, in fact. The Brookings Institution wrote that “[manufacturing is enjoying a resurgence in the United States.](#)” And Deloitte, in its “[2019 Industrial Manufacturing Industry Outlook,](#)” said the sector “is firing on all cylinders,” with output humming, capacity utilization up, and many manufacturers delivering solid performance and shareholder returns.

But, as Deloitte notes in its “[2020 Manufacturing Industry Outlook,](#)” the sector is now slowing due to the growing risk of a downturn in global manufacturing. In August the U.S. global purchasing manager’s index (PMI) dropped to 49.1 – its first below-50 reading in more than three years. As a result, Deloitte adjusted its growth forecast downward.

Despite this change, recent reports indicate [the skills gap is an even bigger and more immediate problem for manufacturing.](#) The National Association of Manufacturers said there were a record 522,000 jobs open in the sector as of September. The tight labor market and difficulty in attracting young workers make talent both a near- and long-term challenge for manufacturing.

Digital technology – Brookings, Deloitte and others agree – can help manufacturers address the talent challenge. Such technology also can lead to higher-quality solutions, lessen human error, improve processes, increase productivity and contribute to greater growth. That’s true on the production line, in maintenance, research and development, and office service and support.

## Using Outdated Technology Is a Business Killer

Meanwhile, relying on outdated technology can really gum up the works. It can adversely affect manufacturing employees’ experience, productivity and safety. Plus, it can limit manufacturers’ efficiency and ability to hire and retain the most qualified employees.

[Research indicates](#) 44% of workers at technology laggards are frustrated with their employers because of technology. Those workers also are more than 500% more likely to be frustrated. Actively [disengaged employees cost the U.S. \\$483-\\$605 billion annually](#) in lost productivity.

Some workers become so frustrated with their technology-laggard employers that they quit. Our research with Loudhouse indicates that [employees who work with outdated technology are 600% more likely to consider quitting.](#) Another survey suggests that [10% of workers have left a job over technology frustrations.](#)



## AS PER BROOKINGS INSTITUTIONS, AI AND AUTOMATION CAN REVOLUTIONIZE MANUFACTURING.

Employee turnover can be costly for manufacturers. Every time a business replaces a salaried employee, it costs six to nine months' salary on average. And finding suitable replacements can be challenging with today's low employment.

### Modern Digital Solutions Improve Worker Engagement and Pride

The extent to which businesses adopt leading technology has “a deep and lasting impact” on productivity and employee attitudes and emotions. Research shows that:

- 88% of employees at technology leader organizations feel positive about their jobs
- These individuals say they are proud to work for their employers
- Just 18% of workers at technology adoption laggards feel that way

With the right technology – and company culture and processes – in place, manufacturers can enjoy improved business outcomes, including higher employee retention and responsiveness, so that business moves faster. The Brookings Institution also notes that the development and diffusion of technology in the manufacturing sector leads to the creation of higher-paying jobs and workers with more developed skills.

### Workstream Collaboration Delivers Better Results for Employees and Customers

One technology solution that forward-thinking manufacturers are embracing is workstream collaboration. This type of solution allows workers to collaborate more easily with colleagues. And it enables manufacturing employees to access and share data quickly and securely.

That creates less friction for employees. It ensures manufacturing workers can securely access task-critical resources anywhere. And it fosters better engagement through analytics.

### AI- and ML-Based Virtual Assistants Can Help Workers and Employers, Too

Manufacturers may also want to expand their investments in artificial intelligence and machine learning to increase worker engagement and productivity. Using virtual assistants for routine tasks is one winning strategy on this front.

Employing speech-to-text and text-to-speech services can enhance chatbots and virtual assistants. With these capabilities, employees can work faster and more effectively. And manufacturers can control costs, keep the lights on, and expand and grow.

Whatever the solution, manufacturers should be sure the technologies they select are secure and offer ease-of-use. For example, solutions should provide consistent and safe experiences across all devices and locations. Such solutions help protect manufacturers and their employees from risk. They help ensure optimal use new technology. And they enable manufacturers to get the greatest possible return on technology investments.

### Here's How Organizations Are Benefitting from Digital Workplace Services Today

Nutreco is using Unisys Digital Workplace and Infrastructure Transformation services to expand its global leadership in animal nutrition and aquafeed. This engagement includes application support, network services, and service desk and service management. It supports 8,000 end users in 15 languages, two global data centers and more than 1,500 Wintel servers.



## THE INDUSTRY IS MOVING TOWARDS NEXT GENERATION MANUFACTURING WITH MODERN DIGITAL TECHNOLOGY WHICH MAKES IT COLLABORATIVE, INNOVATIVE, INTEGRATED AND CONNECTED.

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That has enabled Nutreco to secure the scalable infrastructure needed to support nutritional and economic models using big data to optimize feed, enabling farmers to be more profitable. It provides Nutreco with the ability to enjoy the same high-quality IT services across more than 35 countries and a dozen languages. It also allows for the smooth onboarding of acquired companies in countries where there was no previous company presence.

Meanwhile, a manufacturer of high-end champagne, wine and spirits has employed Unisys Digital Workplace Services to maintain its market leadership in key segments and expand its presence in others. Unisys supports 4,000 users throughout Europe and the U.S. and more than 10,000 devices globally.

This engagement includes desk-side support (campus, dispatch and proactive visits), distributed server management, end user productivity services, and service desk. As a result, this business enjoys enhanced employee productivity and distributor experience by reducing problem resolution. It has gained the ability to consistently, efficiently and effectively support sales and distribution of multiple brands. And it can deliver a globally consistent end user experience.

### Early Adopters of Modern Digital Technology Are Best Positioned for Success

All signs indicate that manufacturing is moving to modern digital technology.

In “The Future of Manufacturing” podcast, McKinsey senior partner Katy George says manufacturing is a winner-take-all environment. In this world, she adds, [early adopters of digital technology get the financial spoils](#).

The Brookings Institution says companies that use artificial intelligence and automation can revolutionize manufacturing – from design to product creation to delivery. Deloitte believes digital technology “is likely to be decisive in determining the fate of industrial manufacturing companies in the months and years to come.”

And The Manufacturing Leadership Council [released a blueprint](#) in August, 2019 for the next phase of manufacturing digitization. This effort by the council, a division of the National Association of Manufacturers, talks about next-generation manufacturing leadership and the changing workforce. And it notes the importance of establishing Manufacturing 4.0 cultures that are collaborative, innovative, integrated and connected.

**To learn more about how your manufacturing business can capture the financial, productivity and talent-related benefits of modern digital workplace technology visit: [www.unisys.com/industries/commercial](http://www.unisys.com/industries/commercial).**



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