Reimagine the factory floor for the manufacturing workforce

ServiceNow Manufacturing Connected Workforce changes how employees get work done
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Introduction

Imagine a new employee’s first week on the job at a manufacturing plant.

First comes tackling the HR checklist: completing a slew of paper documents. Throughout the week, various onboarding tasks from other departments, such as IT and Facilities, roll in—likely involving more paperwork.

Meanwhile, the employee starts the time-consuming task of figuring out how to do their job. It’s a big enough challenge under any circumstances—but even more so if that employee is replacing a long-tenured, recently retired worker. How are decades of experience and institutional knowledge transferred to the new hire? Normally it happens through a thick and daunting binder, perched on the new hire’s desk, which may or may not be complete.

Now, imagine how this transition impacts the rest of the plant. Nothing works quite as efficiently as it’s supposed to while they wait for the new hire to get up to speed on production processes and how things are supposed to work.

The approach doesn’t work well for people or production, especially when it needs to scale to hundreds or thousands of employees as a wave of retirements loom.

It’s time to reimagine how we align people and production. To maintain success, we need to give everyone the tools they need to work effectively, whether it’s their first day on the floor, or they have decades of experience.

Still, it’s not easy to change how work flows across your organization. Let’s take a closer look at three major challenges that digitization must tackle head-on.
Workforce challenges in the Industry 4.0 era

Even as smart factory advancements have led to modernization and automation in production, the manufacturing workforce still has a key role to play. In fact, as operational technology evolves, manufacturers need skilled talent who can manage and secure it.

But the workforce challenges that manufacturers are facing have evolved just as quickly as their technology.

1. Transferring knowledge from retiring workers

Industry 4.0 has ushered in the need for more digitally skilled workers just as manufacturing faces a looming talent tsunami: 2.6 million Baby Boomers are poised to retire by 2030. These trends point to an estimated 2.1 million unfilled manufacturing positions, costing the U.S. economy as much as $1 trillion, according to the 2021 Deloitte and The Manufacturing Institute Manufacturing Talent study.

These challenges are forcing manufacturers to evolve their approach to training and onboarding talent. The workforce of the future will need to bring with it skills to maintain a smart factory, while still filling the workforce gaps left by retirees. Manufacturers increasingly need employees to manage Industrial Internet of Things (IIoT) devices, review analytics, and oversee more technologically advanced operations. At the same time, even the most digitally advanced production lines need humans to keep operations flowing. To help solve for this, manufacturers should consider digital solutions that allow them to quickly and efficiently upskill and onboard talent.

2. Reducing human error

Human error continues to be the primary cause of factory downtime today. In fact, human error is the primary cause of 70-80% of downtime issues, compared with 20% that are attributed to equipment failures, according to IHS Markit. One of the main tools for combating human error is standard operating procedures (SOP)—many of which are recorded in physical or paper manuals, or otherwise manually relayed between employees. But what happens when someone misplaces a manual that guides their work? What if someone tweaks the process but fails to record it for the next person? A reliance on physical SOPs creates inconsistencies over time, which can affect plant safety. Digitally recording SOPs gives manufacturers a more reliable way to capture information, especially as things evolve, and an easier way to share it.

3. Improving safety and compliance

Since the back office is ruled by manual processes and information is stored across different systems and spreadsheets, information silos are rampant. It makes it difficult for anyone to have a true understanding of the big picture in real time—from the onboarding status of new employees to employee safety to compliance issues. Manufacturers need a better way to bring disparate data together to make smarter, faster decisions and drive continuous improvement.

Success will increasingly be influenced by a workforce that achieves more using fewer resources. Manufacturers must empower their workforce with digital and mobile tools that help them respond and adapt to fast-changing conditions.

What if one platform could help you do all of that?
Connect your workforce to the manufacturing environment

With Manufacturing Connected Workforce, manufacturers now have a way to enhance workforce productivity and streamline processes via one digital platform.

Manufacturing Connected Workforce uses a single system of action to unify your existing technology platforms. Operational silos become a thing of the past, unleashing new levels of productivity.

Bridge the gap of operational silos and manual processes to unlock efficiency and resilience.

Creating a solid foundation to digitally transform operations
The first critical step in digital transformation is understanding how everything is interconnected. A digital map of a manufacturing facility’s operations processes, systems, and relationships is created using the ISA-95 model standard. A visual guide helps employees see how people, processes, and technologies align.

Retaining critical knowledge
Employees’ prescriptive knowledge about work processes are digitally captured in a knowledge center, so one person’s departure doesn’t lead to production problems. With this information digitally recorded, manufacturers can develop updated, standardized SOPs and empower employees to rapidly adapt, collaborate and excel in fast-changing conditions. It becomes easier to train and upskill your workforce, reducing manufacturers’ reliance on the institutional knowledge of individual employees.

Streamlining operational processes
With systems, processes, and relationships digitally connected, you can better manage resources, while improving efficiencies and compliance. Employees have a single system of action through which they can easily collaborate, no matter where they sit, and digital workflows that automatically move tasks along from beginning to end. Real-time information aids decision-making, enabling the back office to troubleshoot and address workforce concerns quickly.
Conclusion

ServiceNow Manufacturing Connected Workforce gives employees a more intuitive way to get work done. Employees start their day with the tools, information, and insights they need in one place. And that makes all the difference in creating an attractive work environment for great talent.

Accelerate the modernization of your operations and lay the proper groundwork for future change with ServiceNow Manufacturing Connected Workforce. Through low-code and no-code applications, manufacturers have the flexibility to quickly build applications to fit their unique needs and improve upon a variety of manufacturing processes from incident management to asset inventory.

We help you build a more agile, flexible, and resilient operating environment that connects your entire ecosystem.

The result? With ServiceNow Manufacturing Connected Workforce in place, a new employee starts their first day on the plant floor with easy-to-use digital tools that walk them through every step of their day. Plant leaders have a clear view into processes that may be hitting roadblocks and can intervene to keep work flowing. Adding new talent is easier, so instead of worrying about worker retirements, manufacturers can celebrate (and capture) their knowledge and achievements, while getting excited about their next-generation workforce.