

BREAKING DOWN BARRIERS IN INDUSTRIAL AUTOMATION

Transformation is easier with an end-to-end partner who has the expertise and engineering proficiencies needed to deliver precision, productivity and scalability — no matter your industry or operations

Honeywell

AN ESSENTIAL FOR EVERY INDUSTRIAL BUSINESS

Industrial automation, at its most fundamental level, is a scalable tool of productivity for everyone within demanding, performance-driven environments. Completing repetitive tasks with speed and precision, running multiple processes in parallel, monitoring operational conditions in real time with accurate data and more — industrial automation works nonstop, improves constantly and empowers almost limitless efficiencies.

Because of its precision, productivity and scalability, industrial automation is no longer optional. Not for utilities that manage and deliver energy. Not for pharmaceutical manufacturers that make life-saving treatments accessible. Not for healthcare staff who are responsible for patient care. Not for combustion and heating operations that control product quality down to the one-hundredth of a degree.

Right now, 60% of companies and enterprises use automation tools in their workflows.¹ It's baseline to see data-driven IoT technologies deliver grid optimizations, or comprehensive gas detection solutions in hazardous environments, or performance management software in specialized plants. It's easier to feel the benefits they provide, too, like increased safety for employees and end-users. But a 60% adoption rate isn't enough; it's challenged by skilled labor shortages that persist and increasing production demands.

So, despite its proven benefits, what's holding our world's most important processes and operations from adopting and deploying industrial automation?



60%

**OF COMPANIES AND
ENTERPRISES USE AUTOMATION
TOOLS IN THEIR WORKFLOWS¹**

That adoption rate isn't enough

FIVE BARRIERS FIVE WAYS TO BREAK THROUGH THEM

Industrial automation is the means to an end that every executive, engineer and operator works toward: higher, long-lasting, always-at-its-best performance across all operations. This means automation can and should play a role in every industry at a considerable capacity. And at Honeywell, we make this happen.

Our decades of deep domain expertise and industry knowledge provide customers a powerful, personalized and effective path to autonomous operations. We break down barriers and dissolve every uncertainty about using industrial automation with trusted technologies, future-proof systems and a people-first approach that all help improve operational efficiency, optimize processes and enhance human performance. Using the top five barriers to adopting and deploying industrial automation to begin, here's how:

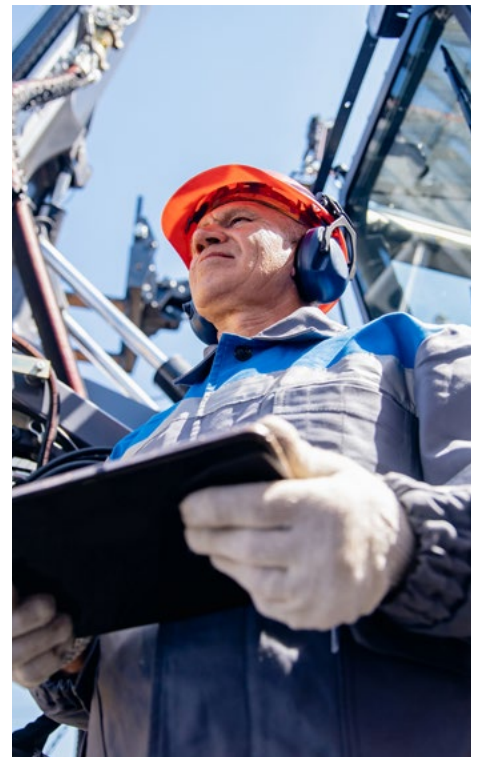
1. Not knowing where or how to start

Should you use artificial intelligence or IoT sensors? A combination of both? Are performance management platforms and smart devices the best way forward? What does integration look like once I decide?

As the landscape innovates and automation offerings increase, so does complexity in choosing systems that are most effective for your business.

A lack of understanding in implementation is one of three challenges to adopting automation, according to business leaders in a recent McKinsey survey.² Automating the wrong processes, jobs or systems because you aren't sure where or how to start may not align with your operational strategies, consider your unique challenges or deliver desired results and returns.

That's why we consult first, then prescribe (or newly engineer, when needed) outcome-driven solutions, leveraging your existing install base with actionable automation that offers tangible benefits. We have a complete portfolio to do this now — products, software and services across all demanding industries — as well as position your business for growth, adaptability and long-term health in the future. One conversation with our experts can help enhance and fast-track the trajectory of every business goal.



2. An adept yet aging workforce

When your employees are skilled, trained and experienced, with proficiencies, second natures and familiarities innate to the way your operations run, the comfortable choice is to keep things as is. If processes aren't broken, why would you add automation to them?

Here's one reason: By 2030, one in six people in the world will be 60 years or older and close to retirement.³ And here's one more that's application-specific: In the utility industry, almost half of the existing workforce will retire in the next decade.⁴ These are indisputable truths — soon, industries will lose the very expertise they are dependent on. To avoid falling behind, industries and organizations must upskill younger generations within their workforces now to fill knowledge. Adopting and deploying automation is an easy, effective way to do this.

50%

**OF THE EXISTING UTILITY
WORKFORCE WILL RETIRE
IN THE NEXT DECADE⁴**

“We’ve built tools that make your existing workforce more capable on day one,” says Meredith Winczewski, Chief Marketing Officer of Honeywell Industrial Automation. “AI-powered interfaces, data insights and real-time guidance help someone with two years of experience operate like a 20-year veteran. We’re closing the gap with smarter tech, not just more training.”

Between smart sensing solutions for critical medical applications; intuitive operational intelligence platforms for asset management; many switch types for manufacturing environments; and more, Honeywell helps reduce reliance on hard-to-find skilled labor with systems that digitalize manual tasks, simplify complex ones and strategically engage personnel. Automation can ensure business continuity without large-scale hiring and even deliver more output per employee. Automating processes and environments also shows potential candidates that they’re entering a workplace that values their time and gives them greater opportunities to foster creativity and idea exploration. Adoption is the first step; productivity gains and improved work quality will follow.



“We’ve built tools that make your existing workforce more capable on day one.”

– MEREDITH WINCZEWSKI,
CHIEF MARKETING OFFICER, HONEYWELL
INDUSTRIAL AUTOMATION

3. Initial capital expenditures

Reduced operational costs and high returns will also follow adoption. While initial investment remains a top concern for industrial leaders who weigh the pros and cons of adoption and deployment, automation quickly offers sustainable returns for the long run.

“Think about long-term value, not short-term cost,” Winczewski continues. “Automation isn’t just an investment in technology. It’s an investment in safety, efficiency, uptime and smarter, data-based decisions. ROI comes from faster operations, fewer errors and better utilization of your employees.”

Today, more than 7,500 customers deploy and trust Honeywell automation solutions at 80,000 sites worldwide. Included in this notable number are healthcare facilities that make every second of life-saving efforts count using our automated sensors in equipment for ventilation, anesthesia and dialysis. Not only do these specialized sensors adjust metrics like airflow, oxygen and pressure autonomously, but they also help track and manage patient care, delivering predictive analytics and monitoring conditions in real time. Data collection frees up medical personnel to

focus on care delivery, while predictive analytics based on historical and real-time measurements can alert staff to criticalities before they occur, potentially reducing prolonged interventions and readmission rates. In healthcare and beyond, automation is a strategic investment over time, not just a one-time tech upgrade.



7,500

CUSTOMERS DEPLOY
AND TRUST HONEYWELL
AUTOMATION SOLUTIONS AT

80,000

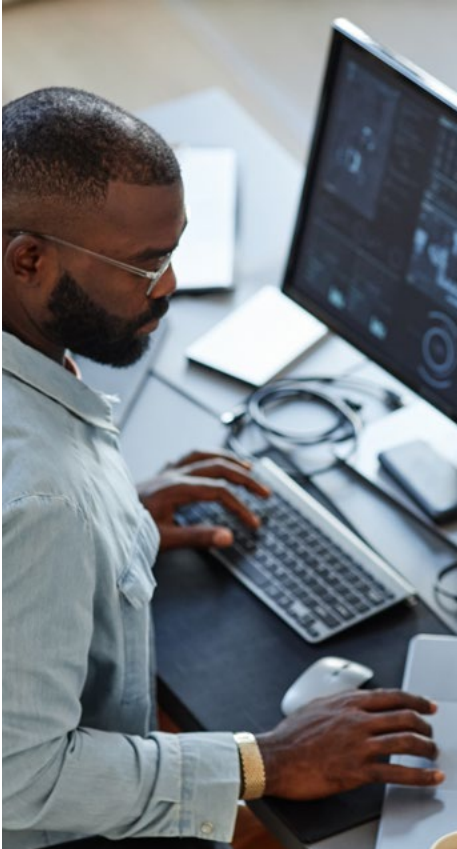
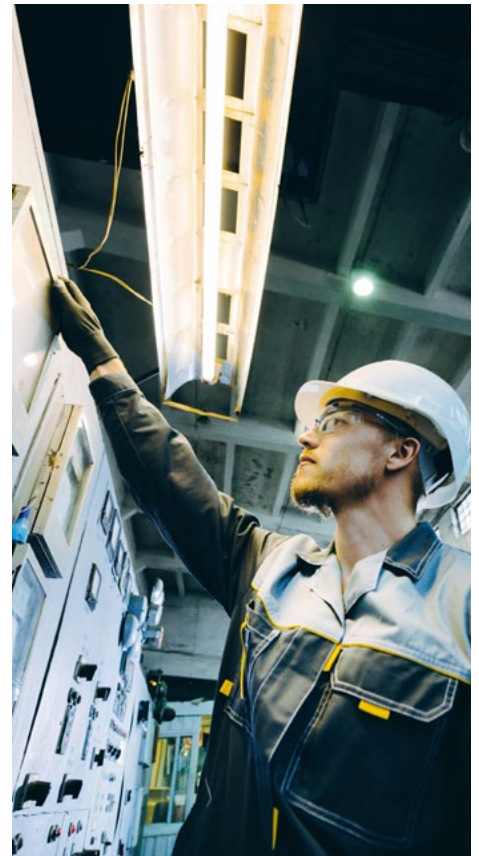
SITES WORLDWIDE

4. Outdated facilities and legacy infrastructure? You're not behind

Not even if you're working with systems from the 1990s or rely on paper-based workflows. Some of the oldest industrial processes (by equipment, infrastructure and record-keeping standards) are perfectly positioned for and ready to deploy automation. And in some of our most important industries, aging is quite evident:

- **Utilities:** The average age of U.S. power generation infrastructure is more than 30 years old, with hydroelectric plants closing in on 57 years and coal-fired plants nearing 43 years.⁵ As time passes, equipment and operations become less efficient, effective and prepared for the future.
- **Manufacturing:** Almost two-thirds of manufacturing and industrial plants use equipment that's older than 15 years, connoting more than a decade of heavy use.⁶ Built to last a long time, it's still important to evaluate how legacy production equipment can be enhanced with automation.

At Honeywell, one of our strengths is helping customers bridge the old with the new, meaning you don't need a clean slate to start. We modernize what you already have, meeting you where you are, building a roadmap and laying in the right automation in the right places. Upfitting facilities and injecting processes with automation turns legacy systems and infrastructure into high-performing, highly intelligent, future-proofed engines of progress. Our automation solutions scale and evolve as your requirements do. Any operation, process, facility or industry can start today.



5. Keeping all assets protected

When considering adoption and deployment, many of our customers share their concerns about cybersecurity's role in industrial automation. For public and environmental safety reasons, oil and gas refineries can't fail or shut down due to vulnerabilities — production disruptions can inflict serious damage, ecological impact and financial loss. Hospitals must always be fully functional — if a cyberattack compromises operating systems, the effects can be far-reaching for patient health, workflows and critical communication channels. Safety, efficiency and privacy are at risk when cybersecurity isn't a priority within automated environments.

It's true that fewer automation systems and AI-driven processes result in a reduced attack surface, meaning there are fewer entry points for hackers and ransomware that threaten the security of operations. "But cybersecurity isn't an add-on anymore," explains Winczewski. "It's essential. Every system we deploy is designed to operate securely in infrastructure-dependent environments. As threats evolve, so do we. Honeywell provides continuous OT security updates to help protect people, plants and processes."

When we integrate digital technologies into your operational systems to automate various functions and tasks, we also help protect them. Cybersecurity is at the core of every product, system and service we offer.

AUTOMATE NOW **VALUABLE OUTCOMES** **NEXT**

Automation is the way forward, the natural next step for productivity, the evolution of industry. In the forms that work best for your business goals, operating standards, infrastructure and workforce, Honeywell automation delivers nonstop intelligence and optimization.

We'll help you make the right adoption decisions, then deploy everything from world-class sensors and devices to software and controls that keep performance, safety, efficiency and returns high. And when your tools are up and running, our unified, start-to-finish automation approach will help you access one of the most important elements of any operation in any industry: actionable data that drives valuable outcomes in demanding environments.

You are at the edge of what's possible with Honeywell; it's never too early to start automating.



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**THE
FUTURE
IS
WHAT
WE
MAKE IT**

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