



# The End of the Information Economy

*(as we know it)*



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# Executive Summary

We are in the middle of a new industrial revolution for knowledge work. The implications extend beyond technology teams, reshaping productivity models, workforce structures and economic demand across industries.

**80%**

of information work is now  
automatable

**18-24 months**

expected timeline for large-  
scale disruption

**8-10×**

productivity by 2028

**2 people ≈ 20 today**

workforce compression  
enabled by AI

This shift is unfolding far faster than expected. Recent announcements at Microsoft's Ignite conference signal a fundamental acceleration in the automation of information work. While earlier projections suggested a gradual transition over the next decade, current technical capabilities indicate that the majority of information tasks can now be automated. Intelligent Automation is poised to increase overall information worker productivity in the range of 8-10x by 2028.

Organizations and individuals must act decisively. The choices made in the next 18-24 months - whether to scale, restructure, or reinvest - will determine competitiveness in an AI-driven economy.



# Accelerating Automation and Workforce Transformation

According to a September 2025 report from the consulting firm McKinsey, "45% of information work is automatable with the technology available today. This translates into a projected impact on 12 million jobs, which will be transitioned or affected by automation by 2030. However, Microsoft's recent announcements at Ignite suggest that these estimates may significantly understate both the scale and speed of change underway.



The new tools and capabilities introduced by Microsoft indicate that as much as 80% of the tasks currently performed by information workers can be automated using existing technologies. This leap in automation potential is expected to have a tremendous financial impact on companies, driving organizations to accelerate their transformation strategies. As a result, the anticipated timeline for widespread automation is likely to shorten dramatically, with the transition unfolding over the next 18 to 24 months.

*This rapid shift marks the onset of a new industrial revolution, fundamentally restructuring the information economy at a pace faster than previously imagined.*

# Microsoft's Game-Changing Announcements

At the Microsoft Ignite Conference in November, the company introduced a series of incremental changes to their product offerings that, when considered together, have the potential to radically transform the roles of information workers - those whose primary responsibilities involve computer-based tasks. When you combine the individual announcements together, these innovations are poised to significantly alter workflows, productivity expectations and the very nature of information work.

- Unified Copilot Experience Across Office Tools
- Computer Use by Agents (CUA): Expanding Automation Potential
- Copilot Studio and Agent Flows: Advancements in Process Automation
- Agent Builder: Empowering Individual Productivity
- Agent Identities: Transforming Workforce Interactions

## Unified Copilot Experience Across Office Tools

One of the most impactful advancements is the integration of Copilots across various office tools with a new "agent mode" that enables Copilot to execute actions within the Microsoft Office apps.



*For example, after concluding a Teams conference call with an assigned action item, a user can employ M365 Copilot to research answers by querying both internal company knowledge and public web data. The workflow continues in Excel, where Copilot generates a workbook populated with the relevant research data.*

*Leveraging the new code generation capabilities, the user can create charts and graphs—complete with tooltips—to visualize findings. The process then transitions to Word, where Copilot can compile a document that addresses the original questions from the Teams meeting, formatted to match company templates and style guides.*

*After a quick review and edit, the user can request Copilot in PowerPoint to assemble a slide deck for presentation or use Copilot in Outlook to draft an email to meeting participants, serving as a cover letter for the report.*

This unified Copilot experience enables the entire process to be completed in less than 10% of the time it would require to do manually.

## Computer Use by Agents (CUA): Expanding Automation Potential

Microsoft introduced Computer Use by Agents (CUA), a technical feature with far-reaching implications. CUA permits autonomous agents to connect to a cloud-based virtual machine and interact with Windows and web-based interfaces through screen analysis and simulated user actions.

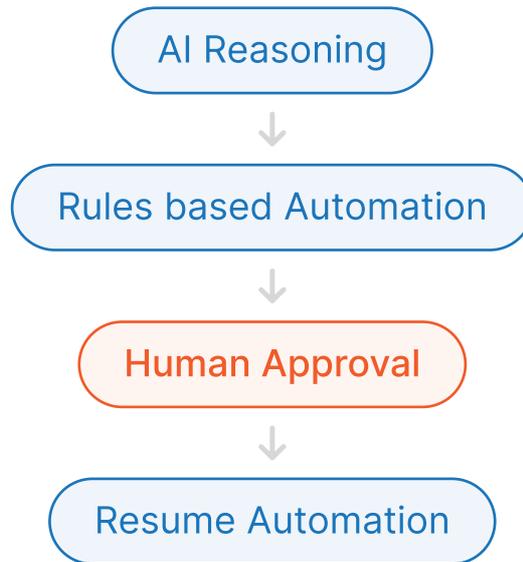
In the past, the scope of automation was restricted by the availability of software APIs or data connectors, and screen-scraping approaches were brittle and unreliable. With CUA, an agent can access a Windows VM, analyze the screen using computer vision to identify input fields, buttons, menus, and text, and then determine the appropriate actions using reasoning—mirroring human behavior.

Before CUA	With CUA
Needs APIs	No APIs needed
Brittle automation	Human-like interaction
Limited scope	Any task a human can do

The agent can use a virtual keyboard and mouse to interact with the system, enabling automation of any task a human can perform on a Windows device. This breakthrough means that if a person can be trained to do a task, it can now be automated, without the need for traditional connectors or APIs.

*CUA is the pivotal change enabling the automation of up to 80% of current information worker tasks.*

# Copilot Studio and Agent Flows: Advancements in Process Automation



Building on existing process automation tools, Microsoft has merged Robotic Process Automation (RPA) capabilities with AI-driven reasoning in a single platform. Within Copilot Studio, users can design workflows that automate information tasks and package them as agents—referred to as agent skills—that can be executed by others or triggered autonomously.



Notable new features include the ability to configure guardrails for agent behavior and establish rules for human intervention. For instance, the system can pause an automation to request human approval for transactions over a certain value, resuming once guidance is received.

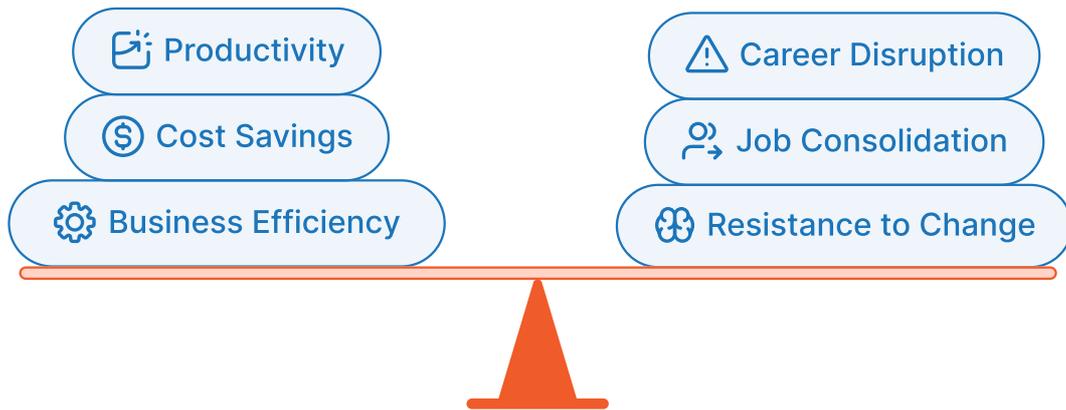
*This mirrors manual person-to-person interactions and allows agents to be orchestrated by either humans or other agents, enabling complex, collaborative workflows.*



# Agent Builder: Empowering Individual Productivity

Agent Builder, embedded within M365 Copilot, further simplifies the creation of automation tools for business and information users. This “lite” version of Copilot Studio provides end users with the means to construct simple agents that automate personal tasks.

## AI agents for Everyone: Trade-offs



These tools are not designed for widespread deployment but rather for individual productivity enhancement. Two critical implications arise: first, information workers will need to embrace automation to remain competitive, with expectations rising to 2–3 times their current output. This shift represents a significant change for workers who may already feel overextended.

Second, the very automations that boost individual performance in the near term may eventually become the tools that replace those roles altogether, as companies encourage employees to automate their own work or risk being replaced regardless.



# Agent Identities: Transforming Workforce Interactions



While not yet released, Microsoft previewed the ability to assign identities to agents using Entra, its identity platform. This will allow agents to have email addresses, permissions, and single sign-on (SSO) access to third-party applications.

Users will be able to interact with agents via email, add them to meetings, mention them in documents, and communicate through inline chat. In the future, agents may even be represented by 3D avatars with voice capabilities.

This innovation has profound implications for roles that have traditionally relied on human interaction—such as sales support, customer service, finance, IT, and HR. For example, a benefits analyst role could be filled by an agent with an email address and a virtual persona, capable of answering inquiries, researching company policies, and providing guidance.



*Soon agents will be indistinguishable from their human counterparts.*



# Announcements Impacting IT

## Deployment and Management of AI Agents

Most of the recent Microsoft announcements relevant to IT professionals have focused on the deployment and management of AI agents, specifically in areas such as security, observability, and data management.

Many IT and Information Security attendees at the event expressed uncertainty regarding how to integrate this new generation of business-centric tools into their established technology management practices. This led to discussions around two competing perspectives: controlling these tools versus enabling their use.

CONTROL	ENABLE
Central Governance	Distributed Creation
Strict Approvals	Guardrails Plus Oversight
Lower Flexibility	Faster Experimentation
Reduced Shadow IT	Risk If Unmanaged

The situation is reminiscent of previous debates about "shadow IT," but now the potential for creating IT tools extends to everyone in the organization, not just tech-forward business users. This has generated a mix of excitement and apprehension within IT circles.



# Copilot+ PCs, Windows ML and the ONNX Runtime Environment: AI Running Local

Two significant topics were highlighted, although many IT professionals at the event overlooked them. First, Windows Machine Learning (Windows ML) and Copilot + PCs now support the execution of small-scale AI tasks directly on Windows devices.

## Execution Shift Enabled By



### Windows ML

On-device model execution

On-device model execution



### ONNX Runtime

Hardware-optimized inference

Uses local CPU / GPU / NPU



### Copilot+ PCs

CPU / GPU / NPU acceleration

Low latency for real-time tasks

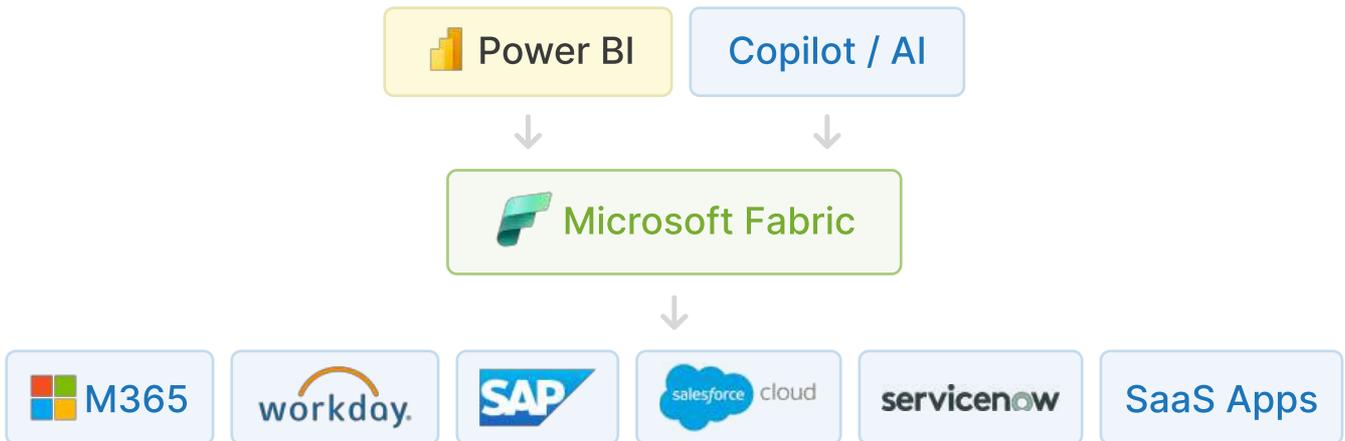
Previously, discussions were dominated by large language models (LLMs) and cloud-based AI services, which are costly for both providers and consumers. With the introduction of Windows ML and the ONNX Runtime Environment, it is now possible to recompile AI models for device-specific hardware—CPU, GPU, or NPU—allowing them to run locally on the device.

While local execution may not match the speed or capacity of cloud-based LLMs, many AI tasks can be efficiently managed with smaller models, such as Phi-3. Copilot + PCs offer built-in GPUs and NPUs tailored for AI workloads, enabling companies to run AI tasks locally at no cost, maintain data security, and eliminate the need for constant internet connectivity.

*These capabilities have the potential to reduce company expenses, lower network demand, and mitigate environmental impacts related to AI data centers, such as power and cooling requirements.*



# Microsoft Fabric and Real-Time Enterprise Data Interaction



Another area of focus is Microsoft Fabric, which is moving towards facilitating real-time interaction with enterprise data without requiring data replication. Although there were numerous smaller announcements regarding the Azure Data Platform and Microsoft Fabric, Microsoft provided limited clarity at Ignite about the long-term direction.

However, when viewed in the context of broader Microsoft strategy, it is clear that AI and Copilot use cases rely heavily on access to comprehensive enterprise data repositories. Microsoft already has access to much of this data through its first-party tools (M365, Azure, Dynamics, SQL Server), but most organizations also use non-Microsoft infrastructure or SaaS platforms.

Previously, the approach was to copy all data into the Azure data lake, monetizing storage and compute. Now, there is a shift towards enabling real-time access to operational data, driven by cost and operational considerations.

For IT staff, this means they can now integrate real-time data into Microsoft Fabric, a long-standing request. However, it is important to note that the cost savings may not be as significant as anticipated, as Microsoft has shifted its revenue model from data storage to the business intelligence and AI layers of its technology stack.

*IT is moving towards enabling real-time access to operational data, driven by cost savings and business imperatives.*

# Workforce Impacts 2025-2028

Over the next two years, the IT and information workforce will experience dramatic changes as companies adopt deep automation and artificial intelligence to drive productivity. By 2028, aggregate productivity among information workers is expected to increase by eight to ten times. Tasks that currently require twenty people will soon be accomplished by just two individuals thanks to the enhancements brought by AI and automation. This transformation marks a new industrial revolution that is unfolding at an unprecedented pace.

## Projected Workforce Reductions and Automation

### Expected Workforce Impacts



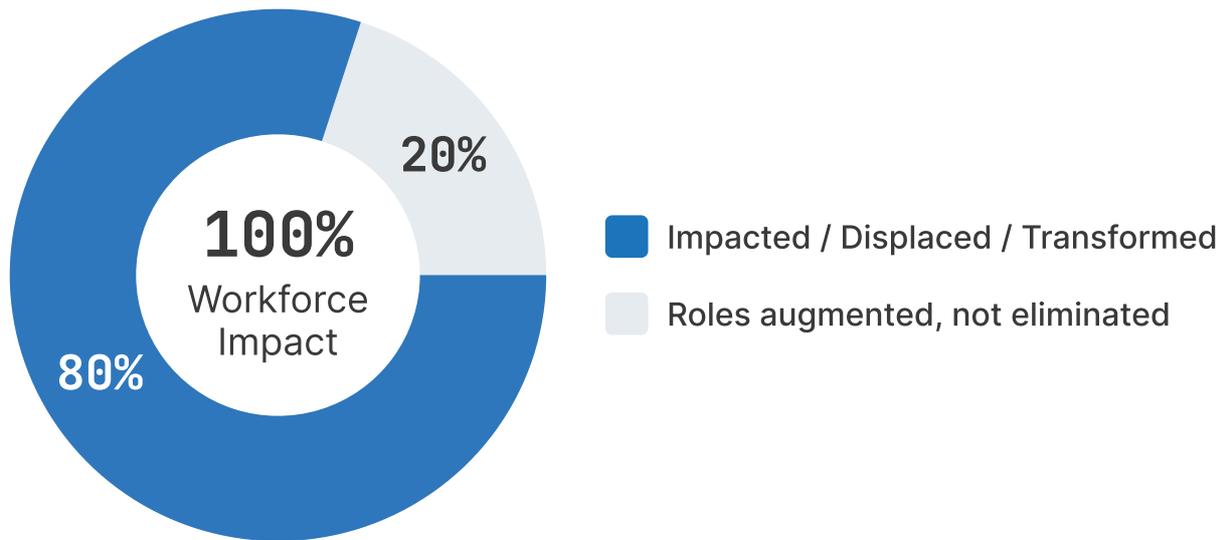
Mainstream media discussions frequently highlight concerns that AI could lead companies to reduce their workforce by 10–20%. Analyst reports from organizations such as McKinsey project that 40–50% of tasks currently performed by information workers may be automated. Forecasts from industry leaders, including Microsoft and robotics experts, suggest these figures could reach as high as 80%.



The United States is particularly vulnerable to this shift, having spent much of the last century transitioning its workforce into information-centric roles. Jobs once considered stable—such as those in human resources, finance, IT, and customer service—are now at risk and may become obsolete within the next three to five years. Other countries, like India, which followed the U.S. in the information revolution, will also be affected.



## Scale of Workforce Disruption



It is anticipated that approximately 80% of information and IT workers will be impacted and may lose their jobs in the coming years. This widespread disruption will surprise many and provoke significant frustration. The remaining 20% of workers will see their roles evolve, with daily tasks becoming highly augmented by automation rather than eliminated outright.

## Industry-Wide Transformation and Individual Impact

Nearly all companies are expected to undergo an AI-driven transformation, not only because it is financially prudent but also because it is essential for maintaining competitiveness. As information and IT workers are displaced, the majority will find it challenging to secure new positions in their current fields. Many will be compelled to either upskill, transition to new careers, exit the workforce, or pursue entrepreneurial ventures.

## Broader Economic Ripple Effects

In economies centered on information work, the disruption and uncertainty caused by workforce changes will have wider economic repercussions. Industries such as real estate, travel, food and beverage, and home improvement, which have traditionally benefited from the discretionary income of information workers, will also feel the effects as those workers navigate an evolving employment landscape.

# Preparing Companies for the AI Transformation

## Embracing Change and Strategizing Transformation

To successfully navigate the upcoming shift driven by AI and Intelligent Automation, companies must proactively adapt and embrace change. Leaders should begin by acknowledging that transformation is inevitable and take initiative to shape the process. There are two principal strategies organizations can pursue:

### Process-Based Transformation

Companies start by identifying their key business functions and processes that can be re-engineered and automated through AI and modern tools. This approach represents a top-down strategy, commonly recommended by Enterprise Architects, Consultants, Business Unit Managers, and IT Leaders. This method mirrors the historical replacement of assembly lines with robots, focusing on the largest areas of potential impact to build next-generation business processes.

Over the past two years, many companies have experimented with AI using this model. However, it carries significant risk: the process is costly, and failure can result in lost time and financial resources. Additionally, employees in affected functions may perceive that their contributions are undervalued, prompting top talent to leave.

### Individual Productivity-Based Transformation

Alternatively, companies can choose a bottom-up strategy, exemplified by the approach advocated by Microsoft. This model encourages every employee to identify at least one task that could be automated to save approximately four hours per week. By providing the necessary tools and skills, employees are empowered to handle automation independently. If implemented across the workforce, this can yield a cumulative 10% increase in capacity without causing workforce disruption...

Repeating this process several times helps employees internalize the benefits. Some will become champions of automation and stand out as high performers, while others may choose to pursue different career paths. The advantage of this approach is its low investment and risk: even if some automation efforts fail, losses are minimal.

## Strategies for Harvesting Productivity Gains

As organizations choose their path, leaders must consider what they want the future to look like, focusing on the return on investment (ROI).

There are several potential outcomes:



### Scaling Up

The company leverages productivity gains so that the same workforce achieves eight to ten times greater results.



### Becoming Lean and Efficient

The organization maintains current results with only 20% of the workforce.



### Reinvesting in Growth

Productivity improvements allow the company to streamline cost centers and invest in profit centers for further growth.



# Guidance for IT Staff

IT workers must begin by evaluating their roles within the organization to determine whether they are genuinely IT professionals or information workers operating within the IT department. Those working in positions such as helpdesk, analyst, project manager, QA, or operations manager will likely experience changes similar to those faced by information workers during the transformation. In contrast, individuals serving as developers, designers, engineers, or certain types of architects will play a pivotal role in leading the transformation, though even these positions are not immune to automation risk.

## Focus on the Data



It is important for IT professionals to revisit the fundamental definition of Information Technology. The strategic value of an organization lies in its data, which serves as a durable asset for creating value and fostering opportunity. Software and technology exist primarily to generate, manage, move, update, and analyze this data; they are ultimately replaceable. Recognizing this distinction will help IT workers identify new opportunities in the evolving landscape.

With AI being data-driven, the most effective way for IT workers to embrace the transformation is by focusing on the preparation and management of organizational data to ensure compatibility with next-generation software automation. This typically involves cleaning up complex data foundations accumulated over many years, identifying existing data, pinpointing its location, and integrating it for optimal use.



## Stop Trying to Control Everything

IT workers should also shift away from the desire for strict control and instead support democratized AI and distributed technology decision-making throughout the organization. The proliferation of shadow IT underscores that controlling tool selection is no longer feasible. Instead, IT professionals should concentrate on data governance, enabling employees to safely automate processes and boost productivity while maintaining robust access and governance policies.



## Monitor Costs Closely



Another critical aspect for IT workers to manage is cost. While business users focus on increasing efficiency, technology providers often capitalize on licensing, consumption-based billing, and data storage fees. Without vigilant oversight, these expenses can escalate rapidly. IT workers must actively monitor and manage these costs to ensure organizational sustainability.



# Guidance for Information Workers

The coming wave of AI and automation is set to dramatically reshape the industry for information workers. Estimates suggest that approximately 80% of current tasks performed by information workers may soon be automated. While the transformation itself is inevitable and largely beyond individual control, information workers do have the capacity to influence how, when, and to what extent the change affects their careers.

## Learning from History



The industrial revolution offers a valuable parallel. Assembly line workers once performed repetitive tasks, such as screwing bolts into products. The introduction of power tools enabled one worker to accomplish the work previously done by ten, resulting in job losses for the majority. Today, a similar shift is occurring as automation tools become integral to knowledge work. Information workers must now decide whether they want to be the person operating these new tools or not.

## Proactive Upskilling

For those who choose to embrace change and ride the wave of intelligent automation, rapid action is essential. Acquiring skills in building and operating AI agents to automate tasks is crucial. Demonstrating to management that, with the right tools, one person can accomplish the work of an entire team can set individuals apart. Rather than waiting for formal upskilling directives, information workers should take initiative by leveraging resources such as YouTube, online training, mentorship, and self-driven experimentation.

*Identify a routine task that can be automated to save time each week, implement the automation, and then repeat the process with other tasks. This cycle of continuous improvement not only enhances efficiency but also helps build valuable new skills.*

## Possible Outcomes

Proactive information workers may experience one of two outcomes:

- If their contributions are not valued, they may quickly secure new opportunities elsewhere.
- Recognition as a high performer, increasing the likelihood of retention during layoffs.

Conversely, those who choose not to upskill may find themselves compelled to do so by organizational initiatives or face unemployment. By anticipating these possibilities, individuals can take control of the timing and options for their next career move.

## Timing Considerations

Waiting to be laid off could result in a severance package, but it also means entering a crowded job market where competition is fierce and salaries may be lower due to supply and demand. Proactively seeking a new role may offer more control over timing, even if it means foregoing severance benefits.

## Planning the Next Step



Information workers should recognize that moving to a similar role at another company may not be feasible if their job is being automated. It is essential to consider alternative paths, such as retirement, switching careers, or starting a business to become a job creator. Planning and preparing for this shift now—while still employed—will be much easier than waiting until unemployment and financial pressures arise.



# The End of the Information Economy (as we know it)

The integration of advanced AI, Copilot and agent-based automation is not just a technological leap. It is a catalyst for profound change across industries, organizations and individual careers. The announcements and innovations unveiled at Microsoft Ignite represent a pivotal moment in the evolution of the Information Economy.

The scale and speed of this transformation are unprecedented. Companies face both the challenge and the opportunity to reimagine their business models, processes, and workforce strategies. For organizations, the imperative is clear: adapt rapidly, embrace automation, and make strategic choices about how to leverage productivity gains—whether by scaling up, becoming leaner, or reinvesting in new growth areas.

For individuals, the impact is equally significant. While automation will inevitably displace many traditional roles, it also opens doors to new possibilities. Those who proactively upskill, embrace AI, and champion automation will find themselves well-positioned for the future. The path forward is not without uncertainty, but it is rich with opportunity for those willing to innovate and adapt.

## The Opportunity Ahead

*Rather than viewing these changes with apprehension, organizations and individuals can choose to see them as the foundation for a new era of growth and creativity. The tools and technologies announced at Ignite empower everyone—from IT professionals to information workers—to become architects of their own future, driving efficiency, innovation, and value creation at an unprecedented scale.*



# About NovoCircle: Enabling a Culture of Continuous Innovation

At NovoCircle, we believe that the future belongs to organizations that foster a culture of continuous innovation. As a consulting firm, NovoCircle partners with clients to help them navigate technological change, develop new ideas, and implement modern methods. We guide organizations in building environments where emerging technologies are not feared, but embraced as the fuel for business success.

Our mission is to empower leaders and teams to turn disruption into opportunity—cultivating resilience, adaptability, and a mindset where innovation is a daily practice. With NovoCircle, your organization can confidently shape the future, leveraging new tools and approaches to achieve lasting competitive advantage.

To learn more about how we can help you prepare for the future, visit [www.novocircle.com](http://www.novocircle.com) or contact us at [sales@novocircle.com](mailto:sales@novocircle.com)



THANK YOU.