



Workforce Upskilling for the AI Era

Tools and training for a future-ready business



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In This InfoBrief

This InfoBrief draws upon primary survey research from IDC to explore key challenges and requirements for companies as they better prepare their workers to succeed in an era of AI-enabled businesses.

- ✔ As businesses face ongoing challenges to find top talent and rely increasingly on AI and generative artificial intelligence (GenAI) to augment their workforce, they must **consider key areas of upskilling and cross-skilling, and the technologies to fully equip employees securely, simply and at scale**. This approach enables organizations achieve goals for productivity and growth.
- ✔ **To broadly attract and keep employees, organizations need to offer hardware, software and services** that deliver a parity of experience for workers across remote, field and on-site locations. This requires laptops and other hardware devices to be purpose-built for secure support of AI-enabled work practices.
- ✔ **AI and GenAI solutions inform new approaches to drive productivity and support employee upskilling and cross-skilling**. They are also driving deeper dependencies between hardware and software in a way that will be foundational for defining transformational work practices.

Artificial Intelligence and GenAI Fundamentally Change Work Practices

These technologies are enabling employees to learn new more seamless and efficient ways of working.

Enterprises already find it difficult to keep pace with the speed and complexity of modern work requirements. Now they must consider how AI and GenAI capabilities will evolve work and new skills development practices.



By 2027, **40% of current job roles** will be redefined or eliminated across G2000 organizations accelerated by GenAI adoption.



Enterprises will leverage personalized technology skills development to drive **\$1 trillion in productivity gains** by 2026, enabled by GenAI and automation everywhere.



Organizations will spend **\$346 billion on products and services** to implement GenAI from 2024 to 2027.



Among global organizations, **47% say that investments in skills and digital training of employees will be their most enduring technology** investment through 2024, followed by investments in generative AI solutions cited by 46%.



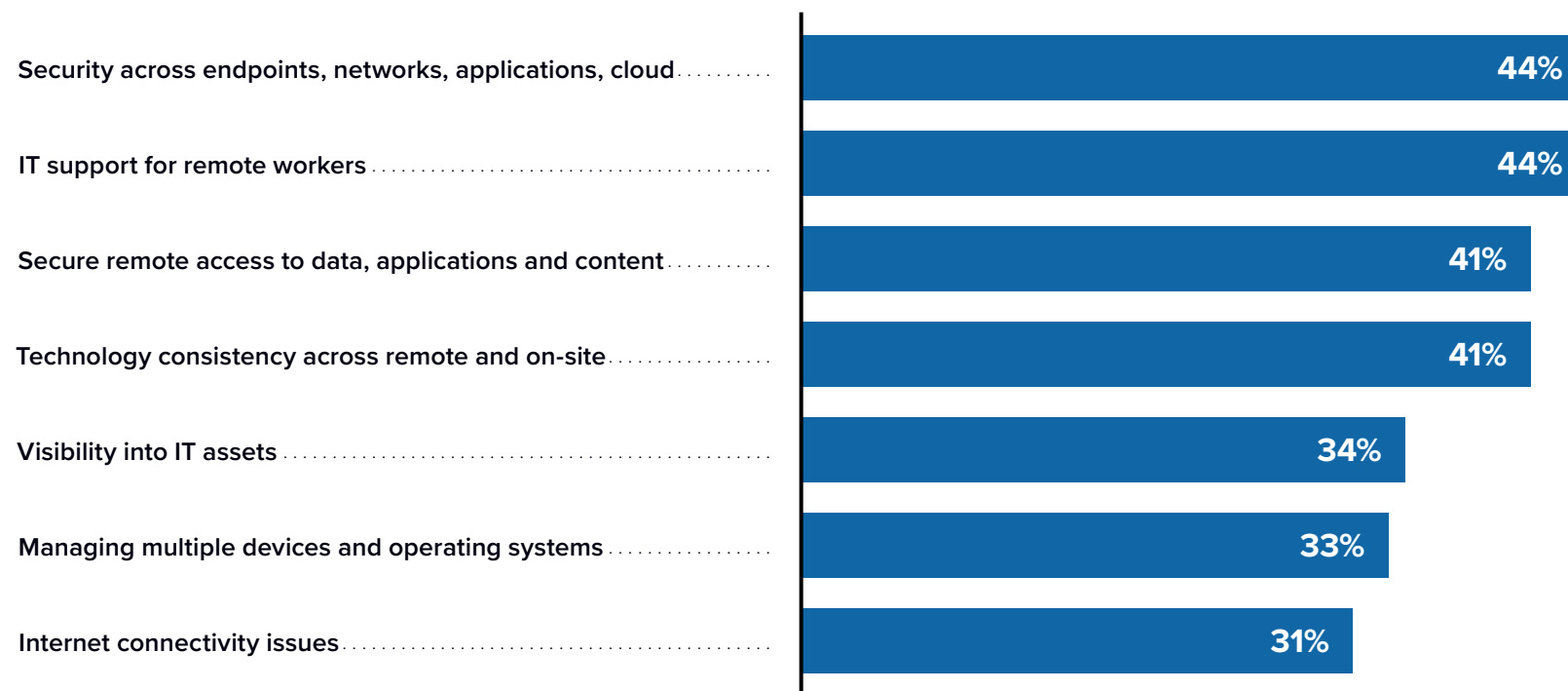
For **41% of organizations, IT training and skills development is the most important investment** for improving employee experience and productivity across their workforces.

Sources: IDC FutureScape: Worldwide Future of Work 2024; IDC's GenAI Implementation Market Outlook: Worldwide Core IT Spending for GenAI Forecast, 2023–2027; IDC Future Enterprise Resiliency and Spending Survey, Wave 5, June 2023

The Evolution of Flexible Work Models Enabled by GenAI Includes Familiar Challenges

Organizations are experimenting with different flexible work policies which all require investment in hardware and software to ensure an equity of experience for all workers across locations.

Top Technology Challenges for Organizations Deploying Flexible Work Models



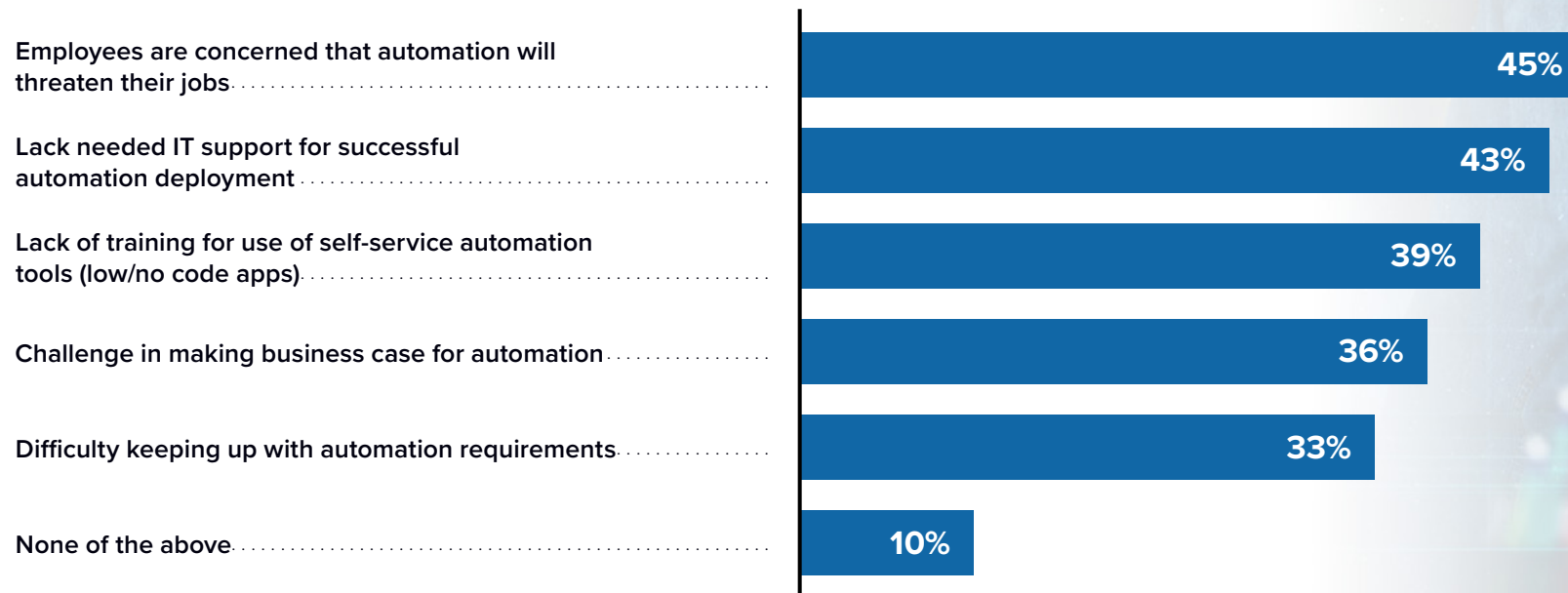
Only 6%
of organizations report
“no challenges.”

n = 1,107 (North America = 400); Source: IDC's *Global Future of Work Survey*, April 2023

Without Deployment Planning, Automation Can Be a Challenge

Lacking focus on employee communication, investment in IT support and employee training, organizations are challenged to realize the benefits of automation and they may even amplify organizational shortcomings.

Greatest Challenges to Deploying Automation Technologies



n = 1,107 (North America = 400); Source: *WW Future of Work (FoW) Survey*, IDC, April 2023

Skills Development and Automation Top the List of Enduring Work Investments

Business growth regulates technology investments and skill training to enable employees. In this way employees are better able to meet client needs across locations and devices.

Top Desired Business Outcomes



Increased operational efficiency



Improved employee productivity



Cost savings

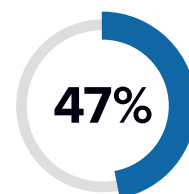


Revenue growth

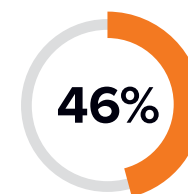


Improved customer satisfaction

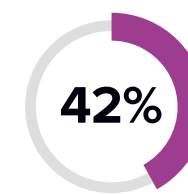
Top Enduring Work Practices and Tech Investments in North America



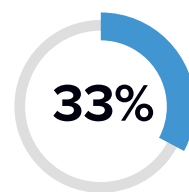
Investments in skills enhancement and digital trainings for employees



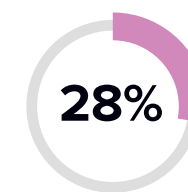
Investments in automation including generative AI



Investments in cloud-based connectivity and collaborative applications



Impact of employee experience on customer experience



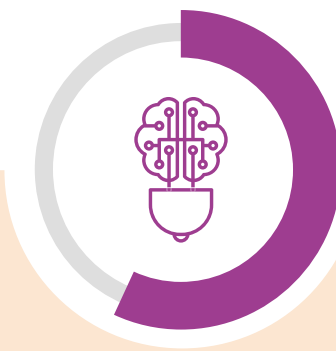
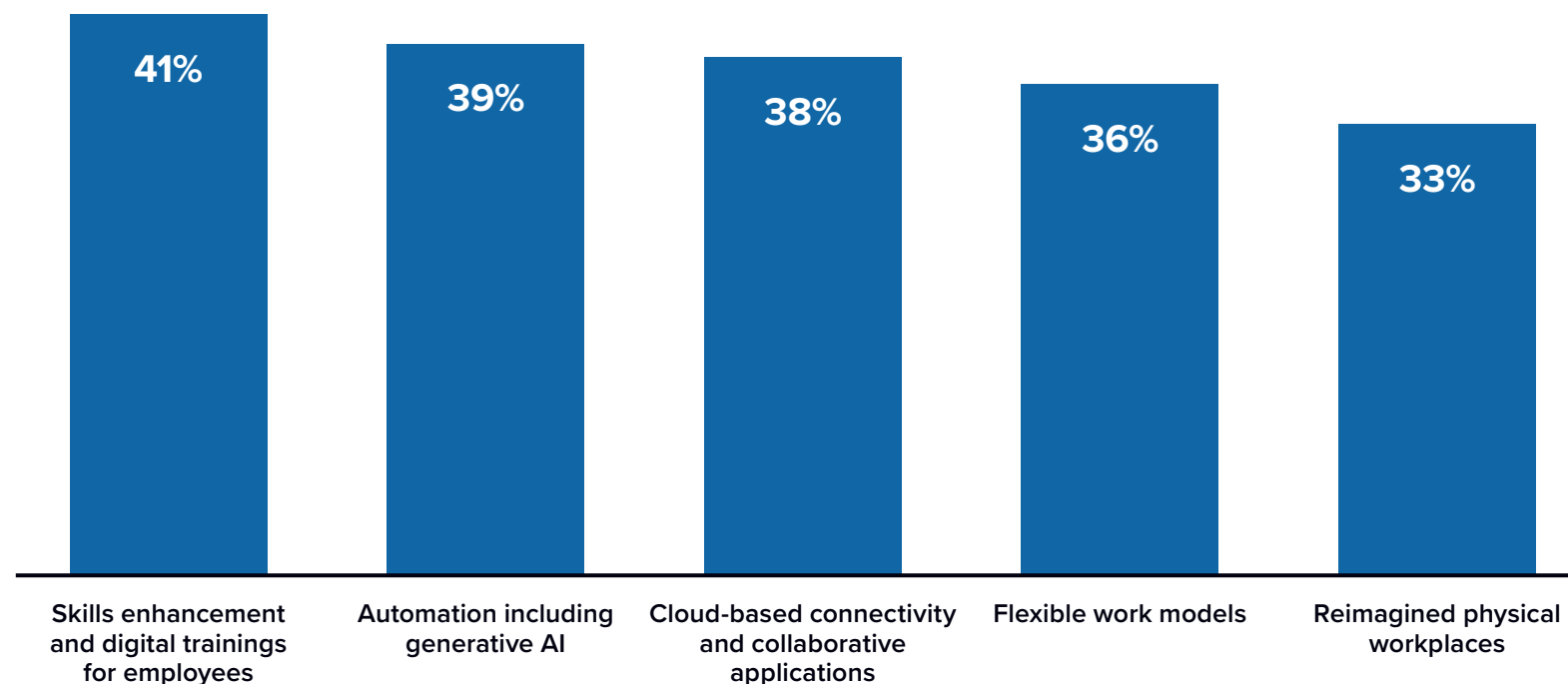
Location and device-agnostic intelligent digital workspaces

n = 1,014; Source: IDC's Future Enterprise Resiliency & Spending Survey, Wave 5, IDC, June 2023

AI-Enabled Digital Skills Training Is a Top Investment for Business Growth

Investments in automation, cloud, and new flexible work models require ongoing training for employees, and the training itself is enhanced by AI, GenAI, and automation.

Which work practices and technology investments are most relevant to business growth?



57% of organizations say skills training on codeless development is a key requirement for employees to automate their own work.

n = 952; Source: IDC's *Future Enterprise Resiliency & Spending Survey, Wave 2, March 2023*

Diverse GenAI Use Cases Will Require Skills Development Across a Broad Set of Applications

What GenAI **use cases** do you anticipate having the most promise for your organization?

Business Outcomes

52% Knowledge management applications



Workers can update their knowledge with real-time, relevant, and accurate information.

42% Marketing applications



Marketers can rapidly create written and visual marketing materials.

41% Code generation applications



Developers can auto-generate code to automate routine tasks and workflows.

39% Design applications



Designers can create customized content using natural language descriptors.

37% Conversational applications



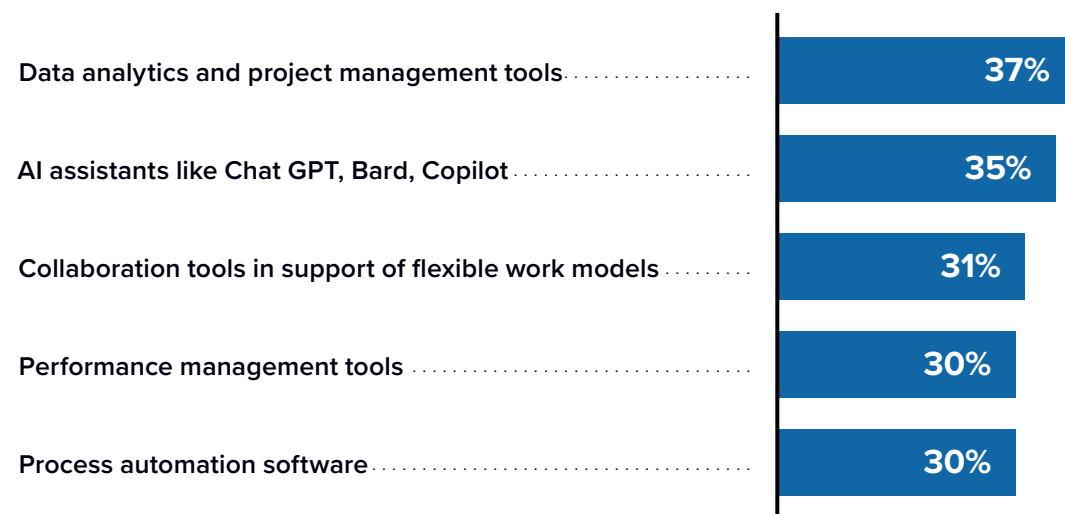
End users can rapidly access and summarize information across LLMs using conversational prompts.

n = 952; Source: IDC's *Future Enterprise Resiliency & Spending Survey, Wave 2, March 2023*

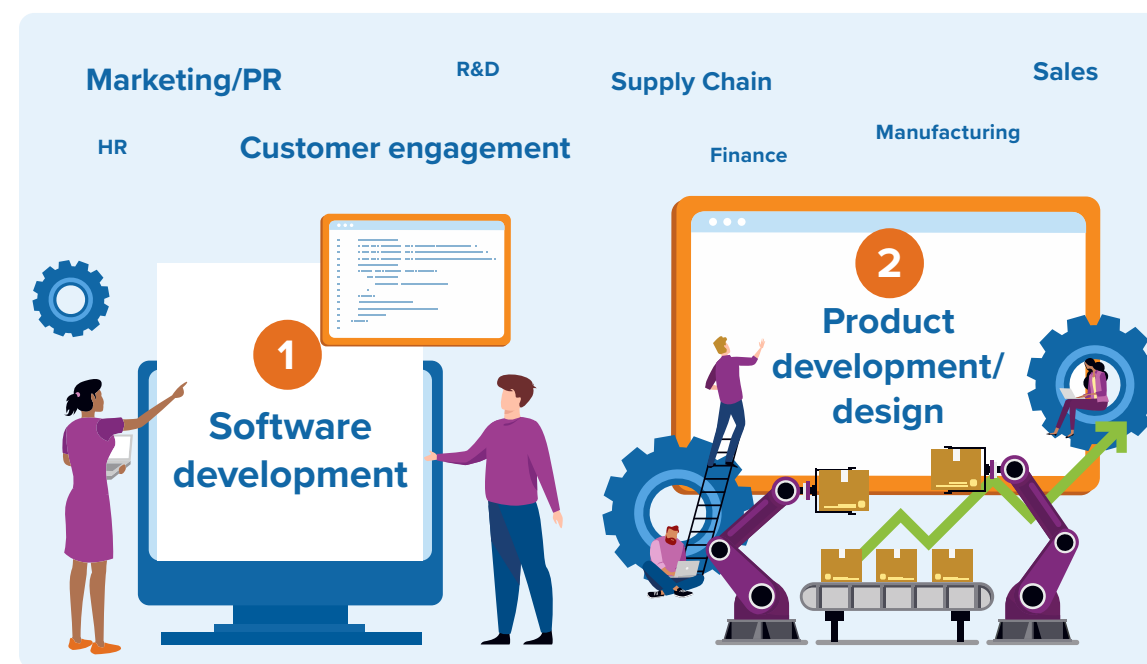
GenAI Will Impact Many Business Areas, Driving Investment in Employee Productivity

Automation, AI, and GenAI capabilities will drive speed to proficiency for new and transferred employees — especially in key areas of the business.

Top 5 Investments to Improve Employee Productivity Through 2024



In which **two business areas** do you think generative AI could make the most impact in the next 18 months?



n = 1,014; Source: IDC's Future Enterprise Resiliency & Spending Survey, Wave 5, IDC, June 2023

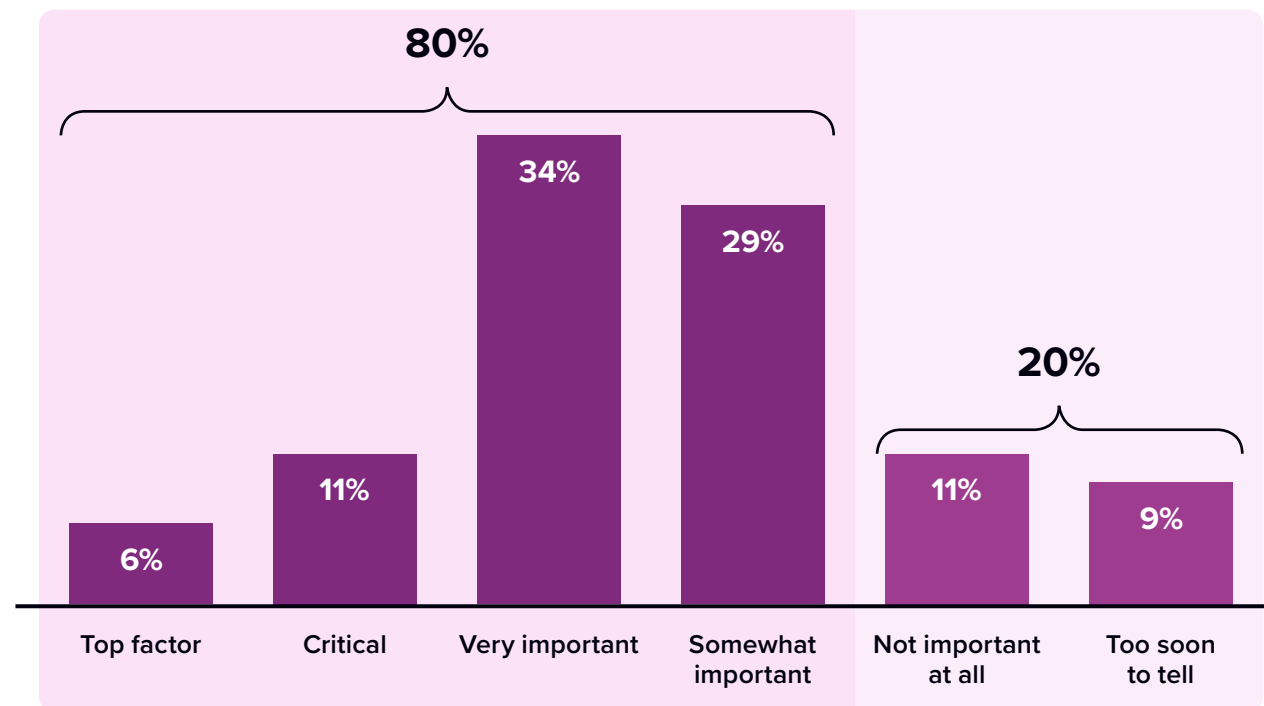
Intelligent Devices Are Vital Foundations for Enabling Access to Key Resources

AI capabilities will be a key factor in PC and peripheral purchase decision to enable organizations to realize the full benefits of digital training, access to data, people and applications.

Technologies to Support Employee Engagement

-  **45%** Investing in **training and skills** development
-  **43%** Intelligent **digital workspace** technology
-  **37%** Improved **communication and collaboration tools**
-  **36%** **Automation** technologies to simplify repetitive tasks
-  **35%** Investment in **hardware and peripheral devices** to support on-site and remote work

Importance of AI capabilities in Next PC Purchase Criteria



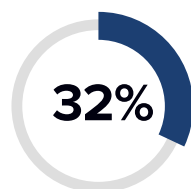
n = 1,107 (North America = 400); Source: IDC's *Global Future of Work Survey*, April 2023

n = 414; Source: IDC's *2023 Commercial PCD Survey*, August 2023

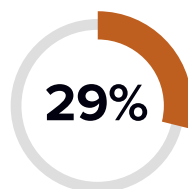
The Promise of GenAI Will Be Realized with Investment in Human and Technical Development

Training and a foundational ecosystem of intelligent software and devices will ensure organizations realize the full potential of work transformation from GenAI.

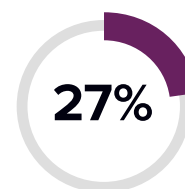
Greatest Impact of GenAI on Work Transformation



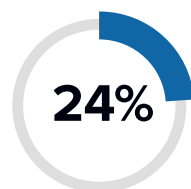
Saving employee time and **productivity gains**



Enabling **faster decision-making** and execution of repetitive tasks



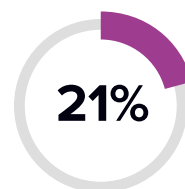
Integrating workflows — facilitate use of multiple applications, more coordinated work



Generating operational and personalized **training programs** (e.g., training/upskilling)



Improving **employee experience**



Improving **customer engagement**



Only 4% of organizations don't foresee GenAI having any impact on our work transformation.

n = 1,014; Source: IDC's *Future of Enterprise Resiliency and Spending (FERS) Survey, Wave 5, June 2023*

Essential Guidance

- 1** Examine your company's current upskilling programs and map out updates that factor in GenAI roadmap, policies, and future use cases.
- 2** Determine priority business outcomes: Conduct a Proof of Concept (POC) behind the firewall to quickly launch GenAI for target use cases and determine necessary skills training going forward.
- 3** Establish a COE or formal partnership between business and IT stakeholders to align on use cases, necessary security, training needs and top business areas for deployment.
- 4** Ensure investments target hardware, software and services and calibrate processing, latency and security requirements to hardware refresh cycles and budget planning.
- 5** Thoughtfully promote employee benefits, including improved professional proficiency, time savings, and better decision making based on integrated workflows that will give workers agency and drive engagement.

About the IDC Analysts



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Amy Loomis is Research Vice President for IDC's worldwide Future of Work market research service. In this role, Amy covers the growing influence of technologies such as artificial intelligence, data analytics, robotics, augmented and virtual reality, and intelligent process automation in changing the nature of work. Her research looks at how these technologies influence workers' skills and behaviors, organizational culture, worker experience, and how the workspace itself is enabling the future enterprise.

[More about Amy Loomis, Ph.D.](#)



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Tom manages the Device and Consumer Research Group, which covers a broad range of hardware categories, inclusive of both home and enterprise markets, as well as IDC's growing consumer research practice. The device research includes PCs, tablets, smartphones, wearables, smart home products, thin clients, displays, and virtual and augmented reality headsets. He also manages IDC's supply-side research team that tracks display and ODM production across a wide range of products. IDC's consumer practice, built upon its Consumer Technology Strategy Service, tracks numerous consumer-focused metrics utilizing frequent surveys and IDC-branded indexes. The consumer research also includes in-depth services focused on gaming and video. In his role as group vice president, he works closely with company representatives, industry contacts, and other IDC analysts to provide in-depth insight and analysis across a wide range of both commercial and consumer topics. He also oversees the collection of historical shipment data and the forecasting of shipment trends in cooperation with IDC's Tracker organization. A frequent public speaker, he travels often and enjoys the opportunity to work with colleagues and clients all over the world.

[More about Tom Mainelli](#)

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